A THEORY OF CLITICS

by

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Thesis Committee: Noam Chomsky, Kenneth Hale and Joan Bresnan
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Submitted to the Department of Linguistics and Philosophy on August 22, 1977, in partial fulfillment of the requirements for the Degree of Doctor of Philosophy

ABSTRACT

The purpose of this thesis is the study of the behavior of Clitic Pronouns in Romance Languages in the framework of the Extended Standard Theory of Generative Grammar.

The main topics discussed in this work follow:

Clitics and NPs are generated in the Base by Phrase-Structure Rules. Particular values of case, person, number and gender are assigned by means of features by a class of rules called Extension Rules.

A rule of Case Matching checks if the sentence has the right number of objects according to the subcategorization of the verb, and if the objects have the right case or preposition.

A rule of CL/NP Agreement checks if CLs and NPs agree in case, person, number and gender. It is one of the basic assertions in this work that each object NP marked for case must have a corresponding matching CL. Subject NPs can optionally have a matching CL, and the presence of the CL is interpreted in different ways.

Once CLs and NPs have been paired, all syntactic processes apply, maintaining the CL/NP pairs throughout the syntactic derivations. The basic syntactic processes that take place then are common to the Romance languages.

These basic syntactic processes, central to CL behavior in complex structures are:
The rule of Verb Adjunction, that adjoins the verb of the embedded sentence to the verb of the matrix sentence, restructuring the complements of both sentences.

The rule of Clitic Gliding, that takes a CL attached to a verb and moves it to the left, so that it will be attached to an adjacent verb, if both verbs are adjoined.

The rule of CL Attraction, that makes a CL attached to a matrix verb attract a CL attached to an embedded verb, under certain conditions.

After all the syntactic processes have been applied, a last rule of CL/NP Deletion takes each pair of CL and NP, and deletes either the CL, or the NP, or none of them. While the syntactic processes described above are invariable for the Romance languages, this last rule of CL/NP Deletion is idiosyncratically language-and-dialect dependent.

Along with the analysis of the syntactic processes, two principles are enunciated: The principle of Bisen-tentiality and the Principle of Superposition of Structures.

The Theory of Autonomous Systems is enhanced: in particular, the Autonomy of Syntax and the Autonomy of the Lexicon. The syntactic component generates freely all the possible syntactic structures of the language. The Lexicon provides the subcategorization of verbs that acts as a filter to the syntactic structures. The grammatical sentences of the language are those sentences that are generated by the syntactic component and that match the patterns provided by the Lexicon through the process of subcategorization.

Besides the introductory Chapter 1; Chapter 2 is a formalization of features, categories, and rules; Chapter 3 presents the Clitics and their generation; Chapter 4 deals with the syntactic processes in simple sentences, and their interaction with the Lexicon; and Chapter 5 consists of the study of structures with an embedded infinitival clause, focused in the behavior of Clitics and their interaction with the central syntactic processes.
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This thesis is dedicated to my father, my mother, my sister and my aunts.
The purpose of this thesis is the study of the behavior of Clitic Pronouns in Romance Languages. Spanish is used throughout as the language for basic data and examples. The basic framework is the Extended Standard Theory of Generative Grammar.

A great deal of effort has been dedicated to the study of Clitics. The most important reason for doing so is not the study of Clitics itself, but the fact that in order to account for the behavior of Clitics, it is necessary to analyze the grammar of the languages involved in great depth, and to reach profound levels of syntactic structure. Another important reason is to discover the general properties of language and the universal principles that can be established through the study of Clitics.

An outline of the main topics discussed in this thesis follows:

Clitics and NPs are generated in the Base by Phrase-Structure Rules with particular values for case, person, number and gender. The assignment of case, person, number and gender is done with the use of features by a class of rules called Extension Rules.

A rule of Case Matching checks if the sentence has the right number of objects according to the subcategorization of
the verb, and if the objects have the right case or preposition. If this is not the case, the sentence is eliminated.

A rule of CL/NP Agreement checks if CIs and NPs agree in case, person, number and gender. It also checks whether each object NP has a matching CL. It is one of the basic assertions in this work that each object NP marked for case must have a corresponding matching CL. When this is not so, the sentence is eliminated. Subject NPs can optionally have a matching CL, and the presence of the CL is interpreted in different ways.

Once CLs and NPs have been paired, all syntactic processes apply, maintaining the CL/NP pairs throughout the syntactic derivations. The basic syntactic processes that take place then are common to the Romance languages. The basic syntactic processes central to CL behavior in complex structures are the following:

The rule of Verb Adjunction, that adjoins the verb of the embedded sentence to the verb of the matrix sentence, restructuring the complements of both sentences.

The rule of Clitic Gliding, that takes a CL attached to a verb and moves it to the left, so that it will be attached to an adjacent verb, if both verbs are adjoined.

The rule of CL Attraction, that makes a CL attached to a matrix verb attract a CL attached to an embedded verb, under certain conditions.
After all the syntactic processes have been applied, a last rule of CL/NP Deletion takes each pair of CL and NP, and deletes either the CL, or the NP, or none of them. While the syntactic processes described above are invariable for the Romance languages, this last rule of CL/NP Deletion is idiosyncratically language-and-dialect dependent.

Along with the analysis of the syntactic processes, two principles are tentatively enunciated:

The Principle of Bisententiality: It establishes that all structures consisting of a matrix clause and a superficially subjectless infinitival embedded clause have a bisentential deep structure. To derive the surface structure from the deep structure, there has to be some procedure by which the subject of the embedded clause is eliminated.

The Principle of Superposition of Structures: It establishes that whenever a bisentential structure is reduced to a simple sentence, constituents attached to a node A in the embedded sentence will be attacked to the same node A in the matrix sentence. When constituents are attached to a node that already has its own constituents, the underlying linear order is preserved.
The contents of the chapters is the following: Chapter 2 is a formalization of features, grammatical categories, and the rules that relate them. Chapter 3 presents the Clitics and their generation. Chapter 4 deals with the syntactic processes that take place in a simple sentence, and their interaction with the Lexicon. Chapter 5 consists of the study of structures with an embedded infinitival clause, focused on the behaviour of Clitics and their interaction with the central syntactic processes.
CHAPTER 2: FEATURES

Chapter 2 presents a formal definition of features (2.2), grammatical categories (2.3), and a way of including features in a Phrase-Structure Grammar (2.1).

It also defines two kinds of rules that involve features, grammatical categories, and their relationship:

i) Definition Rules, that define a category in terms of features (2.4), and

ii) Extension Rules, that extend a set of features in terms of another feature (2.5).

Phrase-Structure Rules, that rewrite a category as a concatenation of categories, are also defined (2.6).

The notions of feature, grammatical category, and phrase-structure rule used here are the intuitive notions that a linguist already has, so that this chapter can be skipped if desired, and used as a reference when necessary.
2.1 **Phrase-Structure Grammar**

A Phrase-Structure Grammar is a set of the form

\[(2.1.1) \quad G = \{ F, K, D, E, P, S \} \]

where

- **F** is a set of basic entities called features;
- **K** is a set of categories defined in terms of features;
- **D** is a set of Definition Rules that define a category in terms of features;
- **E** is a set of Extension Rules that extend a set of features in terms of another feature;
- **P** is a set of Phrase-Structure Rules that rewrite a category as a concatenation of categories; and
- **S** is an initial category to which the Phrase-Structure Rules begin to apply.

**Definition of the language generated by G.**

Let
- \( a = A_1A_2\ldots A_m \), with \( A_i \in K \) for \( i = 1,2,\ldots,m \)
- \( b = B_1B_2\ldots B_n \), with \( B_i \in K \) for \( i = 1,2,\ldots,n \)
- \( F \in K \)
- \( g = G_1G_2\ldots G_p \), with \( G_i \in K \) for \( i = 1,2,\ldots,p \)
then, if \( F \rightarrow g \) is a rule \( P \in P \)

\[ aFb \Rightarrow agd. \]

We say that the rule \( P \) is applied to the string \( aFb \) to obtain \( agd \). The symbol \( \Rightarrow \) then relates two strings when the second is obtained from the first by the application of a rule.

Let \( a_1, a_2, \ldots, a_m \) be strings, that is,

\[ a_i = \prod_{j=1}^{m_i} K_j^{i} \mid K_j \in K, \text{ for } j = 1, 2, \ldots, m_i, \text{ } i=1,2\ldots,m \]

and \( a_1 \Rightarrow a_2, a_2 \Rightarrow a_3, \ldots, a_{m-1} \Rightarrow a_m \).

Then \( a_1 \Rightarrow^* a_m \).

We say for two strings \( a \) and \( b \) that \( a \Rightarrow^* b \), if we can obtain \( b \) from \( a \) by the application of some number of rules of \( P \).

We define the language generated by \( G \), denoted \( L(G) \), to be

\[ \{x \mid x \in K \text{ and } S \Rightarrow^* x\}. \]

That is, a string \( a \) is in \( L(G) \) if

i) the string \( a \) consists solely of categories \( K \in K \),

ii) the string \( a \) can be derived from \( S \).
2.2 Features and States

A feature is an entity $F \in F$ that can be in a certain number of states. The number of states that a particular feature can be in is an attribute of the feature.

A feature $F$ is defined as a pair of elements $(f,n)$, where $f$ is the name of the feature, and $n$ is an integer $\geq 1$ that represents the number of states that the feature $F$ can be in.

The set $F$ is defined as follows:

\[(2.2.1) \quad F = \{F_1, F_2, \ldots, F_m\}, \]

where $F_i = (f_i, n_i)$, for $i = 1, 2, \ldots, m$, such that for each $f_i$ there exist one and only one $n_i$.

A particular state in which a feature $F = (f,n)$ can be in is denoted as follows:

$kf$, where $k = 1, 2, \ldots, n$.

Then the states that the feature $F$ can be in are

$1f, 2f, \ldots, nf$

and are denoted as follows:
(2.2.2) STATES (F) = \{lf, 2f, \ldots, nf\}

The state of a feature will also be called a feature value.

For clarity and simplicity of exposition, the following notational variants are available:

i) The set \{1, 2, \ldots, n\} that represents the state that a feature F = (f,n) is in can be changed to any other set \{s_1, s_2, \ldots, s_n\} by means of the notation

(2.2.3) SYMBOLS (F) = \{s_1, s_2, \ldots, s_n\}

Example: 1

For a feature F_{gender} = (GEND,3), the set \{1, 2, 3\} can be made equivalent to the set \{m, f, n\} by the notation

(2.2.4) SYMBOLS (F_{gender}) = \{m, f, n\}

Then the states of F_{gender}

1 GEND, 2 GEND, 3 GEND

can now be represented by

m GEND, f GEND, n GEND
ii) If a feature has 2 states, that is, $F = (f, 2)$, then the set \{1, 2\} is automatically made equivalent to the set \{+, -\}. That is, for any $F = (f, 2)$, the notation 

$$(2.2.5) \quad \text{SYMBOLS} (F) = \{+, -\}$$

is automatically assumed.

Example:

For a feature $F_{\text{number}} = (\text{PLUR}, 2)$ the states of $F_{\text{number}}$

1 PLUR, 2 PLUR

are automatically represented by

+ PLUR, - PLUR

iii) If a feature has 2 states, that is, $F = (f, 2)$, then the notation $[+ f]$ is equivalent to $F$, that is,

$F$, $(f, 2)$, and $[+ f]$ 

are different ways of referring to the same entity.
Example:
For the feature $F_{\text{number}} = (\text{PLUR}, 2)$,

$F_{\text{number}}$, (PLUR, 2), and [+ PLUR]

are three ways of referring to the same feature.

iv) The particular states of a feature $F = (f, n)$, namely,

$1f, 2f, \ldots, nf$

can be given individual names, namely,

$a_1, a_2, \ldots, a_n$

by means of the notation

$\text{STATES} (F) = \{a_1, a_2, \ldots, a_n\}$

Example:
For the feature $F_{\text{gender}} = (\text{GEND}, 3)$, the states

$1 \text{ GEND, 2 GEND, 3 GEND}$
can be named

masc, fem, neut

by the notation

\[ \text{STATES } (F_{\text{gender}}) = \{\text{masc, fem, neut}\} \]

N.B. Note the difference between replacing the set 
\{1, 2, \ldots, n\} of a feature \(F = (f,n)\) with new symbols, and 
replacing the set \{1f, 2f, \ldots, nf\} with new names.

For the feature \(F_{\text{gender}} = (\text{GEND},3)\), we have then the 
notations

a) \[ \text{SYMBOLS } (F_{\text{gender}}) = \{m, f, n\} \]
giving the states

m \; \text{GEND}, \; f \; \text{GEND}, \; n \; \text{GEND}

and b) \[ \text{STATES } (F_{\text{gender}}) = \{\text{masc, fem, neut}\} \]
giving the states

masc, fem, neut
2.3 Categories

A category is an entity $K \in K$ that represents a set of features.

A category $K$ is defined as an unordered set of states of features

\begin{equation}
\{k_1 f_1, k_2 f_2, \ldots, k_m f_m\}
\end{equation}

where, for every $i$, $i = 1, 2, \ldots, m$, there exists an $n_i$ such that $(f_i, n_i) = F_i \in F$, and $k_i < n_i$, with the condition that for every $i$ and $j$, $i = 1, 2, \ldots, m$, $j = 1, 2, \ldots, m$, $i \neq j$ implies $F_i \neq F_j$.

This condition establishes that only one state of a feature can be part of the definition of a category.

When a category is defined in terms of features, the following notation is used:

\begin{equation}
K = \begin{bmatrix}
k_1 f_1 \\
k_2 f_2 \\
\vdots \\
k_m f_m
\end{bmatrix}
\end{equation}

Example:

Examples of categories are the major syntactic categories noun (N), verb (V), adjective (ADJ), adverb (ADV).

i) One way of defining these categories in terms of
features will be to use two features: one feature to distinguish N, V, ADJ and ADV from other categories; and another feature to distinguish one from the other:

\[(2.3.3).a\] \[F_{\text{major}} = (\text{MAJ,2})\]

\[.b\] \[F_{\text{category}} = (\text{CATEG,4})\]

The states of \(F_{\text{major}}\) are [+MAJ] and [-MAJ] by automatic definition. The states of \(F_{\text{category}}\) can be defined by

\[(2.3.4)\] \[\text{SYMBOLS (}F_{\text{category}}\text{)} = \{\text{n, v, adj, adv}\}\]

The major categories would then be defined by

\[(2.3.5)\] \[
\begin{align*}
N &= \begin{bmatrix} + \text{MAJ} \\ \text{n CATEG} \end{bmatrix}, & V &= \begin{bmatrix} + \text{MAJ} \\ \text{v CATEG} \end{bmatrix}, \\
\text{ADJ} &= \begin{bmatrix} + \text{MAG} \\ \text{adj CATEG} \end{bmatrix}, & \text{ADV} &= \begin{bmatrix} + \text{MAJ} \\ \text{adv CATEG} \end{bmatrix}.
\end{align*}
\]

The other categories would be of the form

\[(2.3.6)\] \[K = \begin{bmatrix} - \text{MAJ} \\ \vdots \\ \vdots \end{bmatrix}\]

\[\text{ii) Another way of defining these four major syntactic categories, so that certain similarities between} \]

them can be captured, would be to use two binary features instead of one four-valued feature.

Jackendoff (1972) suggested the features verb and adverb with the values shown in the following table:

<table>
<thead>
<tr>
<th>N</th>
<th>V</th>
<th>ADJ</th>
<th>ADV</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2.3.7)</td>
<td>verb</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>adverb</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

We will redefine the features that characterize, N, V, ADJ and ADV as shown in the following table:

<table>
<thead>
<tr>
<th>N</th>
<th>V</th>
<th>ADJ</th>
<th>ADV</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2.3.8)</td>
<td>noun</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>verb</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

The three features would then be

(2.3.9).a $F_{major} = (MAJ,2) = [+ MAJ]

.b $F_{noun} = (N,2) = [+ N]

.c $F_{verb} = (V,2) = [+ V]

The major categories would be defined by

(2.3.10) $N = \begin{bmatrix} + MAJ \\ + N \\ - V \end{bmatrix}, \quad V = \begin{bmatrix} + MAJ \\ - N \\ + V \end{bmatrix},$

$ADJ = \begin{bmatrix} + MAJ \\ + N \\ + V \end{bmatrix}, \quad ADV = \begin{bmatrix} + MAJ \\ - N \\ - V \end{bmatrix}.$
2.4 Definition Rules

A Definition Rule is an entity \( D \in \mathcal{D} \) that defines a category in terms of features.

A Definition Rule \( D \) is of the form

\[
\text{DEF: } [k_1 f_1, k_2 f_2, \ldots, k_m f_m] + K
\]

where \( K \in K \) is a category, and for every \( i, i = 1, 2, \ldots, m \), there exists an \( n_i \) such that \( (f_i, n_i) = F_i \in \mathcal{F} \) are features, and \( k_i \leq n_i \), with the condition that for every \( i \) and \( j \), \( i = 1, 2, \ldots, m \), \( j = 1, 2, \ldots, m \), \( i \neq j \) implies \( F_i \neq F_j \).

Therefore, for every Definition Rule

\[
\text{DEF: } [k_1 f_1, k_2 f_2, \ldots, k_m f_m] + K
\]

a category

\[
K = \begin{bmatrix}
k_1 f_1 \\
k_2 f_2 \\
\ldots \\
k_m f_m
\end{bmatrix}
\]

will be created.

Example:

The Definition Rules that will create the categories \( N, V, \text{ADJ} \) and \( \text{ADV} \) defined in Example 2.3.i would be
The Definition Rules for Example 2.3.ii would be

(2.4.4) DEF: [ + MAJ, n CATEG] → N
DEF: [ + MAJ, v CATEG] → V
DEF: [ + MAJ, adj CATEG] → ADJ
DEF: [ + MAJ, adv CATEG] → ADV

(2.4.5) DEF: [ + MAJ, + N, - V] → N
DEF: [ + MAJ, - N, + V] → V
DEF: [ + MAJ, + N, + V] → ADJ
DEF: [ + MAJ, - N, - V] → ADV
2.5 Extension Rules

An Extension Rule is an entity $E \in E$ that extends a set of feature states by adding each possible state of a given feature.

An Extension Rule $E$ is of the form

\[(2.5.1)\quad \text{EXT: } [a_1 f_1, a_2 f_2, \ldots, a_r f_r] + F\]

where for $i = 1, 2, \ldots, r$, $(f_i, m_i) = F$ with $a_i < m_i$, and $F = (f, n)$ with states $1f, 2f, \ldots, nf$; and $f \neq f_i$ for $i = 1, 2, \ldots, r$.

If we have a set of feature states

\[(2.5.2)\quad \begin{bmatrix}
\ldots \\
a_1 f_1 \\
a_2 f_2 \\
\vdots \\
a_r f_r \\
\ldots 
\end{bmatrix}\]

and Extension Rule (2.5.1), each one of the states of $F$ will be added to the set (2.5.2) giving the $n$ following new sets of feature states:
Example:

If we want to add the feature \textit{number} to the category \textit{noun}, using the definition for noun given in (2.4.5), and the feature $F_{\text{number}} = (\text{PLUR}, 2) = [+ \text{ PLUR}]$, we will do it by means of the Extension Rule

\[(2.5.4) \quad \text{EXT: } [+ \text{ MAJ}, + \text{ N}, - \text{ V}] \rightarrow F_{\text{number}}.\]

The following two new sets of feature values will be obtained:

\[(2.5.5) \quad \begin{bmatrix} + \text{ MAJ} \\ + \text{ N} \\ - \text{ V} \\ - \text{ PLUR} \end{bmatrix}, \quad \begin{bmatrix} + \text{ MAJ} \\ + \text{ N} \\ - \text{ V} \\ + \text{ PLUR} \end{bmatrix}.\]

Notational Convention:

If a subset of the feature states in the left-hand side of an Extension Rule represents a category, then the category can be written in the Extension Rule instead of the subset of features states.
Example:

If we want to define \( N \) using the definition given in (2.4.5), that is,

(2.5.6) \( \text{EF: } [+ \text{MAJ}, + N, - V] + N, \)

then Extension Rule (2.5.4) can be written as

(2.5.7) \( \text{EXT: } N \rightarrow F_{\text{number}}. \)
2.6 Phrase-Structure Rules

A Phrase-Structure Rule is an entity $P \in P$ that rewrites a category as a concatenation of categories. A Phrase-Structure Rule is of the form

(2.6.1) \hspace{1cm} \text{PHS: } K_0 \rightarrow K_1K_2...K_n

where $K_i \in K$ is a category, and $i = 1, 2, ..., n$.

Application of rule (2.6.1) to category $K_0$ will produce string $K_1K_2...K_n$. That is, if $a$ and $b$ are strings of categories,

(2.6.2) \hspace{1cm} aK_0b \Rightarrow aK_1...K_nb

Notational Convention.

If $K$ is a category, the following notations are available.

- $K_0$ implies either $\emptyset$ or $K$.
- $K^n$ implies a string formed by concatenating $K$ $n$ times with itself.
- $K_m^n$, with $0 \leq m < n$, implies $K^m$ or $K^{m+1}$ or ... or $K^n$.
- $K^*$ implies $\emptyset$ or $K$ or $K^2$ or $K^3$ or ... \hspace{1cm} .2$

The Component that generates strings by the application of Phrase-Structure Rules is called the Base.
Footnotes to Chapter 2

1 The examples in this chapter are to be taken merely as examples. No actual definitions are proposed here.

2 The notation $K^*$ implies an infinite number of Phrase-Structure Rules. This is not desirable of a Phrase-Structure Grammar. Nevertheless, we will use the notation for convenience.
Chapter 3 consists of a description of CLs in several Romance languages (3.1), the mechanism by which CLs are generated by Phrase-Structure Rules (3.2), the way in which case is assigned to CLs by Extension Rules (3.3), the attachment of CLs to verbs (3.4), and the type of rules that involve sequences of CLs (3.5).

In the interaction with CLs, two kinds of NPs will be distinguished: pronominal NPs and non-pronominal NPs. Pronominal NPs are NPs which are Full Pronouns (F Pron). Non-pronominal NPs are NPs which are not Full Pronouns (NprNP).
3.1 Classification of Clitics

Clitics can be classified according to case into accusative (acc) CLs, dative (dat) CLs, reflexive (refl) CLs and prepositional (prep) CLs.

In what follows, CLs will be presented for different Romance languages, followed by their distribution in surface structure with respect to the NPs they are construed with.

FRENCH

Accusative Clitics

Acc CLs are coreferential with acc NPs. In general they have different forms according to person, number and gender.

<table>
<thead>
<tr>
<th></th>
<th>sing</th>
<th>plur</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 pers</td>
<td>me</td>
<td>nous</td>
</tr>
<tr>
<td>2 pers</td>
<td>te</td>
<td>vous</td>
</tr>
<tr>
<td>3 pers</td>
<td>masc</td>
<td>le</td>
</tr>
<tr>
<td></td>
<td>fem</td>
<td>la</td>
</tr>
</tbody>
</table>

In surface structure, CL and NP cannot coexist.
-- If the NP is a NprNP, then only the NP appears, and the CL is deleted.
-- If the NP is a F Pron, then only the CL appears, and the F Pron is deleted.
Examples:

(3.1.2).a je connais Marie 'I know Mary
 .b *je la connais Marie id.
 .c *je connais elle 'I know her'
 .d *je la connais elle id.
 .e je la connais id.

Dative Clitics

Dat CLs are coreferential with dat NPs. In general they have different forms according to person and number.

<table>
<thead>
<tr>
<th></th>
<th>sing</th>
<th>plur</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 pers</td>
<td>me</td>
<td>nous</td>
</tr>
<tr>
<td>2 pers</td>
<td>te</td>
<td>vous</td>
</tr>
<tr>
<td>3 pers</td>
<td>lui</td>
<td>leur</td>
</tr>
</tbody>
</table>

(3.1.3)

The surface-structure distribution of dat CLs and NPs is the same as for acc CLs and NPs.

Examples:

(3.1.4).a je parle à Marie 'I speak to Mary'
 .b *je lui parle à Marie id.
 .c *je parle à elle 'I speak to her'
 .d *je lui parle à elle id.
 .e je lui parle id.
Reflexive Clitics

Refl CLs are coreferential with nom NPs. In general they have different forms according to person and number.

The presence of the CL indicates some specific function that will be described in what follows. In this case the CL must appear.

If the NP is a FPron, ti can be deleted under no emphasis.\textsuperscript{1}

\begin{center}
\begin{tabular}{ccc}
 & sing & plur \\
1 pers & me & nous \\
2 pers & te & vous \\
3 pers & se & \\
\end{tabular}
\end{center}

Example:

\begin{align*}
(3.1.6) & \quad \text{je me lave} & \quad 'I wash myself' \\
\end{align*}

Verbs can be classified according to the function they assign to the refl CLs in the following way:

1. Pronominal (prnal) Verbs.

They take an obligatory refl CL. The CL provides no meaning. This kind of CL is called a pronominal reflexive CL.

Example:
Some verbs in this class have the prnal refl CL optional.

2. Non-pronominal (non-prnal) Verbs.

They do not take prnal refl CLs. If a verb in this class takes a refl CL, the CL can be interpreted as acc refl, dat refl, or benefactive refl, according to the subcategorization of the verb, and the number of NPs present in the sentence. A rule of Interpretation of refl CLs will be first enunciated in 4.1, and completed after the analysis of benefactive CLs, in 4.10.

**Prepositional Clitics**

Prep CLs are coreferential with PPs. They are invariable with respect to person, number or gender.

There are only two types of PPs that can have CLs. These two types correspond approximately to the English PPs to NP (directional), and from NP.
In surface structure, CL and NP cannot coexist.

Examples:

(3.1.9).a  il va à Paris  'he goes to Paris'
.b  *il y va à Paris  id.
.c  il y va  'he goes there'
.d  elle a des amis  'she has friends'
.e  *elle en a des amis  id.
.f  elle en a  'she has (of) them'

CANADIAN FRENCH

Accusative Clitics

The form of the CLs is the same as in French. Their distribution is the same, except that if the NP is a FPron, the NP may appear instead of the CL, that is,

-- If the NP is a NprNP, then only the NP appears, and the CL is deleted.
-- If the NP is a FPron, then preferably the CL appears, and then the NP is deleted; but also the NP may appear, and then the CL is deleted.

Examples:
Dative Clitics

The form of the CLs is the same as in French. Their distribution is the same as that of the acc CLs and NPs.

Examples:

(3.1.10).a    je    connais Marie    'I know Mary'
   .b    *je la connais Marie    id.
   .c    je    connais elle    'I know her'
   .d    *je la connais elle    id.
   .e    je la connais    id.

Reflexive and Prepositional Clitics

The form and distribution of the refl and prep CLs is the same as in French.
SPANISH

Accusative Clitics

<table>
<thead>
<tr>
<th></th>
<th>sing</th>
<th>plur</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 pers</td>
<td>me</td>
<td>nos</td>
</tr>
<tr>
<td>2 pers</td>
<td>te</td>
<td>os</td>
</tr>
<tr>
<td>masc</td>
<td>lo</td>
<td>los</td>
</tr>
<tr>
<td>fem</td>
<td>la</td>
<td>las</td>
</tr>
</tbody>
</table>

-- If the NP is a NprNP, then only the NP appears, and the CL is deleted.

-- If the NP is a FPrón, then, under no emphasis only the CL appears, and the NP is deleted; under emphasis both NP and CL must remain.

Examples:

(3.1.13).a     conozco a María      'I know Mary'
    .b       *la conozco a María   id.
    .c       * conozco a ella    'I know her'
    .d       la conozco a ella   id.
    .e       la conozco            id.
Dative Clitics

<table>
<thead>
<tr>
<th></th>
<th>sing</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1 pers</td>
<td>me</td>
<td>nos</td>
</tr>
<tr>
<td>2 pers</td>
<td>te</td>
<td>os</td>
</tr>
<tr>
<td>3 pers</td>
<td>le</td>
<td>les</td>
</tr>
</tbody>
</table>

(3.1.14)

The CL must always be present in surface structure.

-- If the NP is a NprNP, then both CL and NP appear.
-- If the NP is a F Pron, then under no emphasis only the CL appears, and the NP is deleted; under emphasis both CL and NP remain.

Examples:

(3.1.15).a  * hablo a María  'I speak to Mary'
    .b  le hablo a María  id.
    .c  * hablo a ella  'I speak to her'
    .d  le hablo a ella  id.
    .e  le hablo  id.

Under certain circumstances, and only with a certain class of verbs, if the NP is a NprNP the CL can be deleted.

Example:
(3.1.16).a entregué una carta a María
  .b le entregué una carta a María
  'I delivered a letter to Mary'

Reflexive Clitics

<table>
<thead>
<tr>
<th></th>
<th>sing</th>
<th>plur</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 pers</td>
<td>me</td>
<td>nos</td>
</tr>
<tr>
<td>2 pers</td>
<td>te</td>
<td>os</td>
</tr>
<tr>
<td>3 pers</td>
<td>se</td>
<td></td>
</tr>
</tbody>
</table>

Example:

(3.1.18) me lavo 'I wash myself'

Prepositional Clitics

There are no prep CLs in Spanish.

PLATENSE SPANISH

Accusative Clitics

The form of the CLs is the same as in Spanish. Their distribution is the same, except that if the NprNP is animate, both CL and NP must appear, that is,

-- If the NP is a NprNP, then if the NP is not animate, only the NP appears, and the clitic is deleted; while if the NP is
animate, both CL and NP must appear.

If the NP is a a F Pron, then under no emphasis only the CL appears, and the NP is deleted; under emphasis both NP and CL must remain.

Examples:

(3.1.19).

<table>
<thead>
<tr>
<th></th>
<th>conozco esta poesía</th>
<th>'I know this poem'</th>
</tr>
</thead>
<tbody>
<tr>
<td>.b</td>
<td>*la conozco esta poesía</td>
<td>id.</td>
</tr>
<tr>
<td>.c</td>
<td>* conozco a María</td>
<td>'I know Mary'</td>
</tr>
<tr>
<td>.d</td>
<td>la conozco a María</td>
<td>id.</td>
</tr>
<tr>
<td>.e</td>
<td>* conozco a ella</td>
<td>'I know her'</td>
</tr>
<tr>
<td>.f</td>
<td>la conozco a ella</td>
<td>id.</td>
</tr>
<tr>
<td>.g</td>
<td>la conozco</td>
<td>id.</td>
</tr>
</tbody>
</table>

Dative, Reflexive and Prepositional Clitics

The form and distribution of the dat and refl CLs is the same as in Spanish. Also, there are no prep CLs.
3.2 **Clitic Generation**

CLs are generated in the Base by the Phrase-Structure Rule.

\[(3.2.1) \quad \text{PHS: } V + \overline{CL} \overset{\circ}{V}\]

\(\overline{CL}\) is a Superclitic node that dominates the individual CLs. \(V\) is a Superverb generated in place of the V in the expansion of the VP.

The rule that generates the VP, for the purpose of CL generation, is the following:

\[(3.2.2) \quad \text{PHS: } VP \rightarrow \overline{V} NP^2 PP^*\]

Each CL is generated under \(\overline{CL}\) with a feature of *case*. If this feature is defined as

\[(3.2.3) \quad F_{\text{case}} = (\text{CASE}, n)\]

then the rule that generates the individual CLs would be

\[(3.2.4) \quad \overline{CL} + [_{\alpha}^{\text{CL}} \alpha \text{CASE}]^*, \text{ with } 1 \leq \alpha \leq n,\]

where \(\alpha\) takes one particular value for each instance of application of the rule.
This rule is equivalent to a Phrase-Structure rule that generates the CL nodes and an Extension rule that assigns case to CLs, as follows:

(3.2.5) PHS: CL + CL*

(3.2.6) EXT: CL → F_{case}

Strozer (1976) has also proposed the generation of CLs in the Base. She uses, however, different Phrase-Structure rules than the rules used in this work. CLs and NPs are generated with the case that they will have in surface structure, that is, dat acc for CLs, and acc dat for NPs.

All other previous works on CLs, as for example, Kayne (1969 and 1975), Aissen (1974), Bordelois (1974), Quicoli (1975 and 1976), Aissen and Perlmutter (1976), assume a rule of CL-Placement that takes a Pronoun generated in place of the object NP and moves it to the verb.

For French, Kayne rejects the generation of CLs in preverbal position by PHS rules - without the generation of coreferential NPs - on empirical grounds. He furthermore states that he favors the CL-Placement analysis on formal grounds over a hypothesis in which CLs are generated in preverbal position by PHS rules, together with coreferential
NPs. The arguments that Kayne gives in favor of CL-Placement and against CL Base generation are:

  i) CL Base generation involves a considerable extension of the PHS rules, without a corresponding simplification of the transformational component.

  ii) CL Base generation requires a complicated filtering device to exclude surface CL/NP pairs.

  iii) Unless a lexical redundancy rule is introduced, one will also generate sentences like *Marie nous part 'Mary departs us', *Marie leur aime 'Mary loves to them'.

The extension of the PHS rule is not considerable. We need only the rule that generates the CLs attached to the verb. When dealing with benefactive CLs, in 4.10, and with impersonal sentences, in 4.11, we will see that there are CLs that do not have an NP origin, so that a rule that generates the CL attached to the verb is necessary.

As seen in 3.1, in some Romance languages, like Spanish, there are situations in which CL and NP coexist in the surface, so that a mechanism that accounts for the three possibilities: only CL, only NP, or both, is necessary.

Sentences like *Marie nous part, and *Marie leur aime, will be excluded by the same subcategorization and agreement rules that exclude sentences like *Marie part tous les hommes, and *Marie aime à tous les hommes.
3.3 Assignment of Case

The assignment of case is done in the following way.

We can define the feature $\text{case}$ as follows:

\[(3.3.1).a\] $F_{\text{case}} = (\text{CASE}, 3)$

\[(3.3.1).b\] $\text{STATES}(F_{\text{case}}) = \{\text{refl, acc, dat}\}$

Then rule (3.2.6) will generate either one of the following forms:

\[\frac{\text{CL}}{1 \text{ CASE}} = [\text{CL}]_{\text{refl}},\]

\[\frac{\text{CL}}{2 \text{ CASE}} = [\text{CL}]_{\text{acc}},\]

\[\frac{\text{CL}}{3 \text{ CASE}} = [\text{CL}]_{\text{dat}}.\]

Instead of using the feature $\text{CASE}$ with three values, it is possible to use two binary features. This will allow us to capture certain generalizations about the behaviour of the cases. In order to do this, we consider first a division of the CLs in reflexive and nonreflexive, and then a subdivision of the nonreflexive CLs in accusative and dative, as shown in the following diagram:
In terms of features, this can be done as follows: Extension rule (3.2.6) is rewritten as rules (3.3.4).

\[
(3.3.4) \quad \text{a} \quad \text{CL} \rightarrow \text{F_{refl}}, \quad \text{F_{refl}} = (\text{REFL}, 2) = [+ \text{REFL}]
\]

\[
\quad \text{b} \quad [- \text{REFL}] \rightarrow \text{F_{acc/dat}}, \quad \text{F_{acc/dat}} = (\text{ACC}, 2) = [+ \text{ACC}]
\]

Rules (3.3.4) will then generate each of the following forms:

\[
(3.3.5) \quad [+ \text{CL}, [+ \text{CL}], [- \text{CL}], [- \text{CL}]]
\]

Note that the form \([+ \text{CL}]\) is underdetermined with respect to the feature \(\text{F_{acc/dat}}\), since rule (3.3.4).b defines the feature \(\text{F_{acc/dat}}\) only for the state \([- \text{REFL}]\).

The case system defined by rules (3.3.4) will be the system to be used in this work.

Furthermore, each CL will be generated with a particular configuration of values of the features person, number and gender, as follows:
(3.3.6).a \[ CL \rightarrow F_{\text{person}}, \quad F_{\text{person}} = (\text{PERS},3) \]

.b \[ CL \rightarrow F_{\text{number}}, \quad F_{\text{number}} = (\text{PLUR},2) = [+ \text{PLUR}] \]

.c \[ CL \rightarrow F_{\text{gender}}, \quad F_{\text{gender}} = (\text{FEM},2) = [+ \text{FEM}] \]

Instead of using the feature \text{person} with three values, it can be more convenient again to use two binary features. We will show here two alternative possibilities.

1. A first subdivision of the CLs in 3rd-person and non-3rd-person, and then a subdivision of the non-3rd-person CLs in 1st-person and 2nd-person. In terms of features this can be done rewriting rule (3.3.6).a as rule (3.3.7).

(3.3.7).a \[ CL \rightarrow F_{3\text{-pers}}, \quad F_{3\text{-pers}} = (3P,2) = [+ 3P] \]

.b \[ [- 3P] \rightarrow F_{1\text{-pers}}, \quad F_{1\text{-pers}} = (1P,2) = [+ 1P] \]

Note that the form \[ CL \rightarrow [+ 3P] \] is undertermined with respect to the feature \text{F}_{1\text{-pers}}.

2. CLs are subdivided according to two features, \text{1-pers} and \text{2-pers}, as shown in the following table.
In terms of features this can be done rewriting rule (3.3.6).a as rule (3.3.8).

\[(3.3.8).a\]
\[\begin{array}{cccc}
1\text{-pers} & 2\text{-pers} & 3\text{-pers} & (1\text{-pers-incl}) \\
1\text{-pers} & + & - & - & + \\
2\text{-pers} & - & + & - & + \\
\end{array}\]

Since we do not have to choose any particular set of features for person in this study, we will refer only to the feature \(F_{\text{person}}\) without deciding between alternatives 1 or 2.
3.4 Clitic Placement

CLs are placed either before the verb or after the verb. This position depends mainly on the tense of the verb.

Spanish:

CLs are placed before the verb, except in the imperative, infinitive and gerund forms.

Example:

(3.4.1).a  lo canto 'I sing it'
   .b  lo canté 'I sang it'
   .c  lo cantaré 'I will sing it'
   etc.
   .d  cántalo 'sing it'
   .e  cantarlo 'to sing it'
   .f  cantándolo 'singing it'

In Spanish orthography, CLs which are placed before the verb are written as separate orthographic words. CLs which are placed after the verb are written as forming one orthographic word with the verb.

Example:

(3.4.2).a  lo canto 'I sing it'
   .b  te lo canto 'I sing it to you'
cdntalo

cántamelo

'I sing it
'sing it to me'

Phonetically, CLs are always unstressed, except in one case. When a CL, placed after the verb, is the last syllable of the word, and the main stress is not in the syllable preceding the CL, then the CL has an optionally secondary stress.

Examples:

(3.4.3).a cantárlo 'to sing it'
       .b cantártelo 'to sing it to you'
       .c cantándoló 'singing it'
       .d cantándotelo 'singing it to you'

In literary and journalistic Spanish, CLs that are placed before the verb can be placed after the verb under certain stylistic conditions. This can be done with all forms of the verb, except with the subjunctive mode.

Examples:

(3.4.4) Reunióse el presidente con los ministros 'the president met with the secretaries'

French:

CLs are placed before the verb, except in the imperative
form.

Example:

(3.4.5).a  je le chante  'I sing it'
.b  je le chanterai  'I will sing it'
.c  le chanter  'to sing it'
.d  le chantant  'singing it'
    etc.
.e  chante-le  'sing it'

In French orthography, CLs which are placed before the verb are written as separate orthographic words. CLs which are placed after the verb are separated from it with a hyphen.
3.5 Clitic Rules

When some combinations of CLs occur, the surface form of some CLs changes. Mostly the change occurs in 3rd person CLs, and the type of change is one of the following:

i) one CL is respelled as another CL,
ii) a CL is spelled in a slightly different way,
iii) the order of CLs is inverted.

We will present the main rules of CL changes in what follows.

3.5.1 The Spurious-SE Rule

There is a rule in Spanish, called the Spurious-SE Rule,\(^4\) that respells the 3rd-person dat CLs, \textit{le} and \textit{les}, as the 3rd-person refl CL \textit{se}, whenever a 3rd-person acc CL, \textit{lo}, \textit{la}, \textit{los} or \textit{las}, follows. That is,

\[
(3.5.1) \begin{align*}
\{ \text{le} \} & \quad \{ \text{lo} \} \\
\{ \text{les} \} & \quad \{ \text{la} \} \\
1 & \quad \{ \text{los} \} \\
2 & \quad \{ \text{las} \} 
\end{align*}
\]

Using the feature system defined by rules (3.3.4) we can rewrite this rule as follows:
Even if the 3rd-person dat and acc CLs are [- REFL], we do not need to specify that feature value in the rule because CLs that have a value for the feature [+ ACC] are [- REFL] by definition. Also, in the structural change of the rule, by specifying the feature value [+ REFL] in element 1, the feature value [- ACC] is automatically removed because [+ REFL] constituents are indetermined with respect to the feature [+ ACC] by definition.

3.5.2 The Imperative-Inversion Rule

There is a rule in French, that will be called the Imperative-Inversion Rule, that inverts the order of the CLs when they are placed after the verb. In French, CLs are placed after the verb only when the verb is in the imperative form, as seen in (3.4.5).

Example:

(3.5.3).a vous me le donnez
    'you give it to me'
   
   .b donnez-le-moi
    'give it to me'

The rule can be written as
However, if both CLs are 3rd person, there is no inversion.

Example:

(3.5.5).a  vous **le lui** donnez
           'you give it to him'

   .b  donnez-**le-lui**
             'give it to him'

This can be expressed as

(3.5.6)  \[
\begin{array}{c}
\{\text{le} & \{\text{lui}\} \rightarrow 1 & 2 \\
\{\text{la} & \{\text{leur}\} \\
\{\text{les} & 1 & 2 \\
\{\text{me} & \\
\{\text{te} & \\
\{\text{nous} & \\
\{\text{vous} & \\
\end{array}
\]

We observe that the CLs in (3.5.4) before inversion are in the order dat acc, while the CLs in (3.5.6) are in the order acc dat. After inversion, the order is always acc dat.

We will see in 4.4 and 4.9 that the surface order for CLs in Romance languages is dat acc, so that the order for French 3rd person CLs, as in (3.5.6) would be an exception. Third person CLs would also be an exception to the Imperative-
Inversion Rule.

If we say that the underlying order of CLs is dat acc, and there is a rule that inverts the order of the CLs when both of them are 3rd person, then the Imperative-Inversion Rule will be valid for all CLs, and the universality of underlying order of CLs for Romance languages will be preserved. The rule can be expressed as follows.

3.5.3 The 3rd-Person-CL Metathesis

In French, a sequence of 3rd person dat CL-3rd person acc CL is inverted, that is,

(3.5.7) \[
\begin{array}{c}
\text{CL} \\
+ 3P \\
- \text{ACC}
\end{array}
\] \quad \begin{array}{c}
\text{CL} \\
+ 3P \\
+ \text{ACC}
\end{array} \rightarrow 2 \quad 1
\]
Footnotes to Chapter 3

1 French is an exception in the Romance languages to the deletion of subject pronouns. This is because subject pronouns in French are cliticized to the verb. French subject pronouns will be treated in 4.15.

2 à is not the only preposition; sur in certain cases can also be used.

3 There are historical reasons to believe that there was a tendency to place CLs in second position in the sentence, as it is in some Slavic languages, Australian languages, etc., today. Then, imperatives, infinitives and gerunds do not have in general a subject, and second position would be after the verb; while all other forms have a subject, and second position would be before the verb. In the literary and journalistic language, one of the stylistic situations in which a CL is sometimes placed after the verb is when the subject of the sentence appears after the verb also. However, there is no synchronic evidence of this process, and the rules of CL placement depend strictly in the tense of the verb. This observation was referred to me by Ken Hale.

See also Fiengo (1974) and Emonds (1975) for an attempt to transformational analyses of the French CLs without output
constraints.

4 This rule was defined in Perlmutter (1971). For further discussion see García (1975) and Aissen and Rivas (1975).

5 When the CL is attached after the verb, it receives stress. A stressed CL that ends in a schwa, [ə], takes a strong form, as follows:

me [mə] + moi, te [tə] + toi
le [lə] + le [løə]

6 In 4.9 a CL Filter dat acc will be proposed.
CHAPTER 4: PROCESSES

Chapter 4 consists of a mechanism for the description of the subcategorization of verbs (4.1), the processes of case marking and case matching in nouns (4.2 and 4.8), the generation of case for nouns (4.3 and 4.7), and the agreement between CLs and NPs (4.4 and 4.9), a definition of agreement rules (4.5), the treatment of pronominal verbs (4.6), a study of benefactive CLs, their interpretation, and the interpretation of reflexive CLs (4.10), a definition of impersonal sentences (4.11), the processes of agreement between the verb and the subject (4.12), and between the verb and the object in impersonal sentences (4.13), the rule of deletion of a member of the CL/NP pair (4.14), and a study of clitic subject pronouns (4.15).

In this chapter, the Theory of Autonomous Systems will be enhanced. In particular, the Autonomy of Syntax and the Autonomy of the Lexicon will be stressed. The syntactic component generates freely all the possible syntactic structures of the language. The Lexicon provides the subcategorization of verbs that acts as a filter to the syntactic structures. The grammatical sentences of the language are those sentences that are generated by the syntactic component and that match the patterns provided by the Lexicon through the process of subcategorization.
4.1 Subcategorization of Verbs

Verbs are subcategorized in the Lexicon for different types of objects. Objects can be NPs, PPs, or sentences.

NPs can be either acc NPs or dat NPs. Acc NPs are defined as those NPs that pronominalize to an acc CL. Dat NPs are defined as those NPs that pronominalize to a dat CL.

PPs are objects of the form (Prep) NP which do not pronominalize to either an acc CL or a dat CL.

In Chapter 4 the only objects that will be considered are NPs and PPs. Sentential objects will be introduced in Chapter 5.

Examples in Spanish:

(4.1.1).a acc NP escribo la carta

'I write the letter'

because la carta pronominalizes to an acc CL, i.e.,

.b la escribo

'I write it'

(4.1.2).a dat NP le escribo a Diana

'I write to Diane'

because a Diana pronominalizes to a dat CL, i.e.,

.b le escribo

'I write to her'
(4.1.3).a  \[
\text{PP} \rightarrow \text{Prep NP} \quad \text{escribo con el lápiz}
\]
'I write with the pencil'

because it does not pronominalize to either an acc CL or a dat CL, i.e.,

\[*\{_{1O}^{le}\} \text{ escribo (con)}\]

(4.1.4).a  \[
\text{PP} \rightarrow \emptyset \text{ NP} \quad \text{escribo toda la noche}
\]
'I write the whole night'

because it does not pronominalize to either an acc CL or a dat CL, i.e.,

\[*\{_{1a}^{le}\} \text{ escribo}\]

The subcategorization can be done in the Lexicon in the following way.

Each verb specifies what type of object or objects it subcategorizes, and whether the objects are obligatory or optional. For the purpose of writing the Lexicon, acc objects are specified with the symbol + (from +ACC), dat objects are specified with the symbol - (from -ACC), prepositional objects are specified with the subcategorized preposition, and optionality is indicated writing the symbol or preposition between parentheses.

Examples in Spanish:\(^2\)
salir 'go out'
poner 'put' +
saludar 'greet' (+)
pegar 'hit' -
hablar 'speak' (-)
arreglar 'fix' (+) (-)
escribir 'write' (+) (-)
soñar 'dream (of)' (con)
arrojar 'throw in' + en

It is important to distinguish between two types of verbs with respect to optional objects.

i) Verbs that have the same meaning, whether the optional object is present in the sentence or not.

Example:

escribir 'write'

(4.1.6).a escribo
'I write'
.b escribo una carta
'I write a letter'
.c le escribo a María
'I write to Mary'
.d le escribo una carta a María
'I write a letter to Mary'
ii) Verbs that have different meaning when the optional object is present or absent.

Example:

\[
\text{hablar} \quad \text{'speak'}
\]

(4.1.7).a Juan habló
'John spoke up'

.b Juan le habló a Maria
'John talked to Mary'

Verbs of type (i) will be entered as one verb in the Lexicon, marking the optionality of the objects. Verbs of type (ii) will be entered as two verbs in the Lexicon, each with its own meaning; one having no object, the other one having an obligatory object.

Example:

\[
\begin{align*}
\text{escribir} & \quad \text{'write'} & (+) & (-) \\
(4.1.8) \quad \text{hablar}_1 & \quad \text{'speak up'} \\
\text{hablar}_2 & \quad \text{'talk to'} & -
\end{align*}
\]

The importance of this distinction will be seen when dealing with benefactive CLs in 4.10.

This analysis is missing a generalization. It is the fact that the majority of the verbs with one object have an
acc object, and the majority of verbs with two objects have an acc object as the first object, and a dat object as the second object.

We would like to say that there is an unmarked situation in which, if there is only one subcategorized object, this will be an acc object; and if there are two subcategorized objects, these will be an acc object and a dat object. This information should not be stated in the Lexicon. Any other situation that does not follow this rule should be stated in the Lexicon. For the purpose of writing the Lexicon, the presence of an object with the unmarked case is specified with the symbol =.

Example (4.1.5) can be rewritten as (4.1.9).

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>1st Object</th>
<th>2nd Object</th>
</tr>
</thead>
<tbody>
<tr>
<td>salir</td>
<td>'go out'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>poner</td>
<td>'put'</td>
<td></td>
<td>=</td>
</tr>
<tr>
<td>saludar</td>
<td>'greet'</td>
<td></td>
<td>(=)</td>
</tr>
<tr>
<td>pegar</td>
<td>'hit'</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>hablar₁</td>
<td>'speak up'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hablar₂</td>
<td>'talk to'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>arreglar</td>
<td>'fix'</td>
<td></td>
<td>= (=)</td>
</tr>
<tr>
<td>escribir</td>
<td>'write'</td>
<td></td>
<td>(=) (=)</td>
</tr>
<tr>
<td>soñar</td>
<td>'dream (of)'</td>
<td></td>
<td>(con)</td>
</tr>
<tr>
<td>arrojar</td>
<td>'throw in'</td>
<td></td>
<td>en</td>
</tr>
</tbody>
</table>
We have used the terms acc and dat referred to CLs in a strictly syntactic way. We have assumed that if a verb subcategorizes an acc object, the acc CL construed with the object is interpreted as acc; and if a verb subcategorizes a dat object, the dat CL construed with the object is interpreted as dat.

Refl CLs, however, can be interpreted in different ways. The interpretation rule establishes that a refl CL is interpreted with the case of an obligatory object if the object is not present in the sentence. A first enunciation of the rule follows.

Rule of Interpretation of refl CLs:
1. A refl CL attached to a pronominal verb has not interpretation.
2. A refl CL attached to a non-pronominal verb is interpreted as:
   i) acc refl: if the verb subcategorizes obligatorily an acc object, and there is no acc object present in the sentence
   ii) dat refl: if the verb subcategorizes obligatorily a dat object, and there is no dat object present in the sentence

Examples:

(4.1.10).a María besó a José (acc)
'Mary kissed Joseph'
The rule of Interpretation of refl CLs will be reformulated after the analysis of benefactive CLs, in 4.10.
4.2 **Case Marking**

The assignment of the right cases to the objects of a verb can be done by a rule of Case Marking.

The rule of Case Marking would do the following:

-- It scans a sentence from the verb to the right.
-- It checks if the number of objects present in the sentence agrees with the number of objects that the particular verb can have, considering whether an object is subcategorized optionally or obligatorily.
-- If the particular verb requires special case markings, it assigns those cases to the objects.
-- If the particular verb does not require special case markings, it assigns the cases acc to the first object, and dat to the second object.

Examples in Spanish:

LEX: entregar  'to submit' = (=)

(4.2.1)  

\[
\text{entregué una carta María} \\
'\text{I submitted a letter Mary'}
\]

subcategorization: = (=)

i.e.: acc (dat)

Case Marking: acc dat
LEX: pegar 'to hit'

(4.2.2)

<table>
<thead>
<tr>
<th>VP</th>
</tr>
</thead>
<tbody>
<tr>
<td>V</td>
</tr>
<tr>
<td>NP</td>
</tr>
</tbody>
</table>

pegue Juan
'I hit' 'John'

subcategory(i.e.):
dat

Case Marking:
dat

Bordelois (1974) and Quicoli (1975) have also proposed a rule of Case Marking that marks the first NP after the verb as acc, and the second NP as dat.

We assume here that acc and dat nonsentential objects are NPs and not PPs.

In French, the Prep. à is inserted before a dat NP;
no Prep. is inserted before an acc NP.

In Spanish, the Prep. a is inserted before a dat NP;
before an acc NP, in general, if the NP is animate, the Prep. a is inserted, otherwise no Prep. is inserted. For a more detailed analysis of this case, see Isenberg (1968) and Rivas (1974).
4.3 Case Generation

In this framework, however, cases are not assigned by a rule of Case Marking. NPs are generated with case, and a rule of Case Matching checks whether the object NPs have the cases required by the subcategorization of the verb. For object PPs this rule checks whether the PP has the preposition required by the verb.

The NPs are generated inside the VP by rule (3.2.2), repeated here.

\[ V \rightarrow V N P^2_0 P P^* \]

Object NPs receive the feature \( F_{\text{case}} \) by the rules

\[ (4.3.2).a \quad \text{EXT: } N P \rightarrow F_{\text{case}} \]

\[ .b \quad F_{\text{case}} = (A C C, 2) = [+A C C] \]

Acc NPs will then be [+ACC], while dat NPs will be [-ACC].

Rules (4.3.2) will generate either of the following constituents:

\[ \text{NP}^\text{-ACC}, \quad \text{NP}^\text{-ACC} \]

and the different combinations of NPs generated by rules
(4.3.1) and (4.3.2) will be

\[ \emptyset, [+\text{NP}], [-\text{NP}], [+\text{NP}][-\text{NP}], [+\text{NP}][-\text{NP}], [-\text{NP}][-\text{NP}] \]

Furthermore, NPs are generated with a particular configuration of values of the features that represent person, number and gender. This is done using the same features that were used for CLs in (3.3.6), that is:

\[
\begin{align*}
(4.3.5).a \quad &\text{NP} + F_{\text{person}}, F_{\text{person}} = (\text{PERS},3)^3 \\
(4.3.5).b \quad &\text{NP} + F_{\text{number}}, F_{\text{number}} = (\text{PLUR},2) = [+\text{PLUR}] \\
(4.3.5).c \quad &\text{NP} + F_{\text{gender}}, F_{\text{gender}} = (\text{FEM},2) = [+\text{FEM}] \\
\end{align*}
\]

The rule of Case Matching can now have a first formulation.

The rule of Case Matching will do the following:

-- It scans a sentence from the verb to the right.
-- It checks if the number of objects present in the sentence agrees with the number of objects that the verb can have, considering whether an object is subcategorized optionally or obligatorily.
-- If the particular verb requires special case markings, it checks whether the object NPs have the required case, and
the object PPs have the required preposition.

-- If the particular verb does not require special case marking, it checks whether the first object is an acc NP, and the second object is a dat NP, that is, whether the first NP is [+ACC], and the second NP is [-ACC].

-- If any of these checkings fail, the sentence is eliminated.

This rule will be reformulated later in 4.8, and again, after Causative Constructions are introduced, in 5.6.

Examples in Spanish:

LEX: entregar  'to submit'  = (4.3.6)

i)

V       VP       NP
  |       |       NP
  entregué  una carta  María

[-ACC]    [+ACC]

'I submitted'  'a letter'  'Mary'

subcategory:  = (4.3.6)

i.e.:

[+ACC]   ([-ACC])

Case Matching:  fails  fails  

Sentence is eliminated

ii)

V       VP       NP
  |       |       NP
  entregué  una carta  María

[+ACC]    [-ACC]

'I submitted'  'a letter'  'Mary'
subcategorization:
  i.e.: [+ACC] \([-\text{ACC}]\)

Case Matching: OK OK

Sentence goes through.

LEX: pegar 'to hit' dat (4.3.7)

i)

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

pegué Juan [+ACC]

'I hit' 'John'

subcategorization:
  i.e.: dat [-ACC]

Case Matching: fails

Sentence is eliminated

ii)

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

pegué Juan [-ACC]

'I hit' 'John'

subcategorization:
  i.e.: dat [-ACC]

Case Matching: OK

Sentence goes through
Case Matching differs from the previous proposals of Case Marking by Bordelois and Quicoli in the fact that it acts as a Case Filter, checking whether the objects in the sentence have the cases that the verb subcategorizes. The notion of the Case Filter will be introduced in 4.8.
4.4 CL/NP Agreement

After the rule of Case Matching has applied, the structure of a VP is as follows:

\[
\text{VP} \rightarrow \text{V (NP (NP))} \\
\text{V} \rightarrow \text{CL V} \\
\text{CL} \rightarrow \text{CL ... (CL) ...} \\
\text{NP} \rightarrow \text{case case}
\]

At this point the rule of CL/NP Agreement applies.

The rule of CL/NP Agreement checks whether one CL and one NP agree in case, person, number and gender. All NPs that are marked for case must have a corresponding CL. If this does not occur, then the sentence is eliminated. The opposite is not true. There can be CLs which do not match any NP. This case will be considered when benefactive CLs, in 4.10, and impersonal sentences, in 4.11, are treated.

The Phase-Structure Rule (4.3.1) generates at most two object NPs. The case of the NPs is generated freely by the Extension Rules (4.7.4). However, the rule of Case Matching allows only the linear order required by the subcategorization of the verb.

In Romance languages there is no special subcategorization that requires the linear order *dat* acc. Then, the
only possible linear order for two object NPs is the unmarked order given by the rule of Case Matching in 4.3, that is, acc dat.

The Phrase-Structure Rule (3.2.5) generates any number of CLs. The case of the CLs is generated freely by the Extension Rules (3.3.4). However, only one linear order is found in actual sentences. The order is dat acc. 4

Therefore, we have the following configurations:

(4.4.2).a * CL CL V NP NP
   acc dat acc dat

   .b ok CL CL V NP NP
   dat acc acc dat

There are two possible ways of accounting for these facts:
1. There is a CL filter that allows only one possible order among CLs, namely, dat acc.
   Example:

(4.4.3).a CL CL V NP NP
   acc dat acc dat

Filter dat acc

Sentence is eliminated
2. When the matching is done, a line is drawn between the CL and the NP that agrees with it. There is a principle that establishes that:

'Lines that bind matching CL/NP pairs cannot cross.'

Example:

(4.4.4).a

<table>
<thead>
<tr>
<th>CL</th>
<th>CL</th>
<th>V</th>
<th>NP</th>
<th>NP</th>
</tr>
</thead>
<tbody>
<tr>
<td>acc</td>
<td>dat</td>
<td>acc</td>
<td>dat</td>
<td></td>
</tr>
</tbody>
</table>

Principle: \[\ne\]

Sentence is eliminated

In 4.9 these two alternatives will be considered again, when subject NPs and refl CLs are analyzed. Then, a comparison of the two alternatives will be made.

Strozer (1976), instead of a rule of CL/NP Agreement, has a Base Condition that checks whether CLs and NPs agree.
If a sentence does not satisfy the Base Condition, then the sentence is ill-formed. This analysis has the problem that if a CL or an NP are moved from a lower sentence to an upper sentence, the conditions for a CL/NP Agreement rule can be created, and then the rule should apply; while a Base Condition would then be inapplicable. This will be treated with more detail when Causative Constructions are analyzed in 5.6.

One of the objections that have been presented to the generation of CLs in the base is that if CLs are base-generated there cannot be a Passive Transformation. This is so because the acc object of the active sentence must have a coreferential CL attached to the verb, while in the corresponding passive sentence the CL is not present. For example:

(4.4.5).a ella lo ama a él
'she loves him'

.b *él lo es amado por ella
'he is loved by her'

.c él es amado por ella
id.

We propose a Passive Construction with the following structure:
and two rules:

1. An Agent Postposing Rule that moves the subject of the lower sentence, NP₂, to the NP in the por-PP, NP₄,

2. An NP Deletion Rule that makes the subject of the upper sentence, NP₁, delete the lower acc object, NP₃.

Since the lower acc object is an empty node, we can make the CL/NP Agreement Rule sensitive to this, so that an empty NP does not match a CL. Since this acc object does not have a coreferential CL, then, the objection to the base-generation of CLs with respect to the Passive Transformation vanishes.

The rule that has been called Tough-Movement or Complement Object Deletion,⁶ that relates a sentence like

\[
\text{(4.4.7).a es difícil convencer a los niños}
\]

'it is difficult to convince the children'
to a sentence like

\[(4.4.7).b\] los nihos son dificiles de convencer

'\textit{the children are difficult to convince}'

constitutes another objection to the generation of CLs in the base. The objection arises because in sentence (4.4.7).a an acc CL is generated attached to the verb \textit{convencer}, due to the presence of the acc NP \textit{a los ninos}. This CL surfaces if the acc NP is a FPron, or in Platense Spanish, where animate acc NPs require a coreferential CL attached to the verb. For example:

\[(4.4.8)\] es dificil convencerlos a ellos

'\textit{it is difficult to convince them}'

However, in sentences (4.4.7).b there is no CL attached to the verb \textit{convencer}. For example, the following sentence is ungrammatical:

\[(4.4.9)\] *{ellos los ninos} son dificiles de convencerlos

'\textit{\{they the children\} are difficult to convince (them)}'

We propose for this construction a structure like the following:
The Complement Object Deletion Rule makes NP₁ delete the lower acc object NP₃. Since the lower acc object is an empty node, the empty NP does not match a CL. Again, since this acc object does not have a coreferential CL, there is no objection to the base-generation of CLs.
4.5 Agreement Rules

A rule of Agreement is a rule that matches values of features in particular constituents. If any of these matchings fail, the sentence is eliminated.

There are three elements in a rule of Agreement:
1. The environment in which the rule applies.
2. The particular constituents that have to be checked.
3. The features whose values have to be matched.

The rule can be interpreted as a filter that lets a sentence go through only if it matches the pattern in the filter. The filter would be of the following form:

\[(4.5.1) \quad [A \ C_1 \ C_2 \ ... \ C_n]_A \]
\[
\begin{bmatrix}
\alpha_1 F_1 \\
... \\
\alpha_m F_m
\end{bmatrix}
\begin{bmatrix}
\alpha_1 F_1 \\
... \\
\alpha_m F_m
\end{bmatrix}
\begin{bmatrix}
\alpha_1 F_1 \\
... \\
\alpha_m F_m
\end{bmatrix}
\]

where A is a category that represents the environment where the rule applies; C₁, C₂, ..., Cₙ are the constituents that have to be checked; and F₁, ..., Fₘ are the features whose values have to be matched.

Since this rule has a particular form, it can be written in a simplified way, where only the relevant parts of the rule are specified. The form of the rule would be the following:
(4.5.2) MATCH (environment / constituents / features)

that is,

(4.5.3) MATCH (A / C₁, C₂, ..., Cₙ / F₁, F₂, ..., Fₘ)

Then, the constituents C₁, C₂, ..., Cₙ under the category A are checked for the features F₁, F₂, ..., Fₘ. If all the feature values match, then the sentence goes through. If any of the matchings fail, then the sentence is eliminated.

Examples:

i) Constituents in an NP, in particular determiners, nouns and adjectives, must agree in number and gender. The rule of Agreement is:

(4.5.4) MATCH (NP / DET, N, ADJ / F_number', F_gender)

ii) The rule of CL/NP Agreement.

CLs and NPs must agree in case, person, number and gender. The rule of Agreement is:

(4.5.5) MATCH (S / CL, NP / F_nom', F_acc/dat', F_person', F_number', F_gender)
An Agreement rule as formulated in (4.5.3) does not specify what constituents \(C_1, C_2, \ldots, C_n\) to choose under the category A, since there could be more than one instance of a \(C_i\) dominated by A. We need a way of selecting the right constituents without having to specify it in the rule.

Chomsky's A/A Principle is clearly obeyed by this type of rule, since whenever there is a node C that dominates another node C, the Agreement rule will choose the upper node.

In the same line of reasoning we want to use the Grossest Constituent Analysis and the Variable Interpretation Convention, as defined by W. Wilkins (1977), to select the higher constituent sequence that satisfies the description \(C_1, C_2, \ldots, C_n\) under A.

The Grossest Constituent Analysis defines a proper path through a Phrase-Marker in such a way that among all possible paths that satisfy the structural description of the rule, the path with the fewest number of constituents is selected.
4.6 Pronominal Verbs

As seen in 3.1.3, some verbs require a pronominal reflexive CL. We call pronominal (prnal) verbs the verbs that require a prnal refl CL, and non-pronominal (non-prnal) verbs the verbs that do not have a prnal refl CL.

The fact that a verb is prnal or non-prnal is an attribute of the verb. For example, if we take two verbs in two Romance languages with the same meaning, one can be a prnal verb and the other a non-prnal verb:

(4.6.1).a Spanish: quedarse 'to stay' (prnal verb)
   yo me quedo 'I stay'
   .b French: rester 'to stay' (non-prnal verb)
   je reste 'I stay'

(4.6.2).a Spanish: perjurar 'to perjure' (non-prnal verb)
   yo perjuro 'I perjure myself'
   .b French: se perjurer 'to perjure' (prnal verb)
   je me perjure 'I perjure myself'

To incorporate this information in the Lexicon, verbs are also subcategorized according to whether they take a prnal refl CL or not. This is indicated in the Lexicon with the letter p in front of the information for subcategorization of objects. If the verb is pronominal optionally, the p is
written in parentheses.

Examples in Spanish:

<table>
<thead>
<tr>
<th>Spanish</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>salir</td>
<td>'go out'</td>
</tr>
<tr>
<td>arrodillar</td>
<td>'kneel down'  p</td>
</tr>
<tr>
<td>caer</td>
<td>'fall down' (p)</td>
</tr>
<tr>
<td>escribir</td>
<td>'write' (=) (=)</td>
</tr>
</tbody>
</table>
4.7 Reformulation of Case Generation

Since the prnial refl CL agrees with the subject NP, and since any other refl CL agrees also with the subject NP, we want to extend the rule of CL/NP Agreement to cover this case.

In order to deal with subject NPs, we also want to extend the generation of case for NPs so that subject NPs have a different case than object NPs.

Subject NPs do not pronominalize to either acc or dat CLs, therefore they are not acc or dat NPs. Furthermore they do not have any preposition. We will call them nominative (nom) NPs. NPs can then have three cases: nom, acc, and dat.

We define a feature

\[(4.7.1) \quad F_{\text{nom}} = (\text{NOM,2}) = [+\text{NOM}]\]

in such a way that subject NPs are [+NOM], and object NPs are [-NOM]. Among the [-NOM] NPs, we define the feature

\[(4.7.2) \quad F_{\text{acc/dat}} = (\text{ACC,2}) = [+\text{ACC}]\]

in such a way that acc NPs are [+ACC], and dat NPs are [-ACC]. This can be shown in the following diagram.
The rules that generate these cases are the following:

(4.7.4) a  \[ NP + F_{nom}', \quad F_{nom} = (NOM,2) = [+NOM] \]

b  \[ [-NOM] + F_{acc/dat}', \quad F_{acc/dat} = (ACC,2) = [+ACC] \]

Rules (4.7.4) will generate either one of the following forms:

(4.7.5)  \[ NP', \quad [-NOM], \quad [-NOM]. \]

\[ +ACC \quad -ACC \]

This description of the cases of an NP is perfectly equivalent to the description of the cases of a CL given in (3.3.4), if we make the CL feature [+REFL] equivalent to the NP feature [+NOM].

The difference is only then a matter of the name of a feature. We will call both of them [+NOM]. The diagram is the following:
Rules (3.3.4) and (4.7.4) can then be combined as follows:

(4.7.7).a  $\{NP\} + F_{\text{nom}}$  \hspace{1cm} $F_{\text{nom}} = (\text{NOM},2) = [+\text{NOM}]$

(4.7.7).b  $[-\text{NOM}] + F_{\text{acc/dat}}$  \hspace{1cm} $F_{\text{acc/dat}} = (\text{ACC},2) = [+\text{ACC}]$
4.8 Case Matching

The rule of Case Matching can now be reformulated.

The rule of Case Matching will do the following:

-- It checks if the NP to the left of the verb is [+NOM].
-- It checks if the NPs to the right of the verb are [-NOM].
-- It checks if the number of objects agrees with the number of objects that the verb can have, considering whether an object is subcategorized optionally or obligatorily.
-- If the particular verb requires special case markings, it checks whether the object NPs have the required case, and the object PPs have the required preposition.
-- If the particular verb does not require special case marking, it checks whether the first object is a [+ACC] NP, and the second object is a [-ACC] NP.
-- If any of these checkings fail, the sentence is eliminated.

After Causative Constructions are introduced, this rule will be reformulated in 5.6.

This rule can be visualized as a Case Filter in the following way.

Suppose the subcategorization information that a verb has in the Lexicon is given as a template with as many windows as possible NPs it subcategorizes. If the case of the NPs is the standard one, nothing else is given. If the case of the NPs is a special one, then this case is given instead of the window. Object PPs are treated as special
cases for which the preposition is given.

Examples in Spanish:

<table>
<thead>
<tr>
<th>Spanish</th>
<th>English</th>
<th>Subcategorization</th>
</tr>
</thead>
<tbody>
<tr>
<td>salir</td>
<td>'go out'</td>
<td>+NOM</td>
</tr>
<tr>
<td>poner</td>
<td>'put'</td>
<td>-NOM</td>
</tr>
<tr>
<td>saludar</td>
<td>'greet'</td>
<td>(=)</td>
</tr>
<tr>
<td>pegar</td>
<td>'hit'</td>
<td>-ACC</td>
</tr>
<tr>
<td>escribir</td>
<td>'write'</td>
<td>(=)(=)</td>
</tr>
<tr>
<td>arrojar</td>
<td>'throw in'</td>
<td>= en</td>
</tr>
</tbody>
</table>

Suppose there is a Filter Template that looks as follows:

(4.8.2) \[ +\text{NOM} \quad \text{V} \quad \begin{array}{c} \text{-NOM} \\ \text{+ACC} \\ \text{-ACC} \end{array} \quad \text{V} \quad \begin{array}{c} \text{-NOM} \\ \text{-NOM} \end{array} \]

The template taken from the Lexicon for a particular verb is superimposed to the Filter Template on the dotted lines, that is, on the part of the template where the standard subcategorization (+ACC, -ACC) for the objects is given.

Then this composite template is matched with the actual sentence. If the verb subcategorizes a standard case, there should be a window in the template corresponding to the verb, and the standard cases will show up in the composite template. If the verb subcategorizes a special case and/or a preposition, these will appear in the template corresponding
to the verb, and they will show up in the composite template. Parentheses on the template indicate that the presence of the object is optional.

If the template and the actual sentence do not match, the sentence is eliminated.
4.9 Reformulation of CL/NP Agreement

Since nom NPs and refl CLs will agree in case, person and number, the rule of CL/NP Agreement can now be extended to cover the agreement between nom NPs and refl CLs.

The rule of CL/NP Agreement checks whether one CL and one NP agree in case, person, number and gender.

When we were dealing only with object NPs, it was required that all NPs marked for case must have a corresponding CL. NPs marked for case were acc and dat NPs. These NPs can now be grouped as [-NOM] NPs. The requirement is then that [-NOM] NPs must have a corresponding CL.

Subject NPs, that is, [+NOM] NPs, do not require an obligatory CL. The presence of the CL in interpreted by the rule of Interpretation of refl CLs, formulated in 4.1. This rule will be reformulated after the analysis of benefactive CLs, in 4.10.

As seen in 4.4, even if NPs are freely generated with any case, there is only one possible linear order for object NPs with respect to case. This order is acc dat.

Since, in underlying structure, the subject NP is always to the left of the verb, and the object NPs are always to the right of the verb, the only possible linear order for NPs with respect to case is

(4.9.1)  NP  V  NP  NP
         nom  acc  dat
Even if some Romance language were a V.S.O. language,\(^7\) as suggested for Spanish by Bordelois (1974) and later Rivas (1974), the subject NP will always be to the left of the object NPs.

CLs are also freely generated with any case. However, only one linear order is found in actual sentences: refl dat acc.

CLs and NPs have then the following linear order with respect to case

\[
\begin{align*}
(4.9.2) & \quad \text{NP, CL, CL, CL, V, NP, NP, } \\
& \quad \text{nom, refl, dat, acc, acc, dat}
\end{align*}
\]

That is,

\[
\begin{align*}
(4.9.3) & \quad [\text{NP} \quad \text{CL} \quad \text{CL} \quad \text{CL} \quad \text{V} \quad \text{NP} \quad \text{NP}]
\end{align*}
\]

As in 4.4, there are two possible ways of accounting for these facts.

1. There is a CL Filter that allows only one possible linear order among CLs, namely, refl dat acc. (In what follows, instead of calling refl a refl CL, we will call it nom, since it is a [+ NOM] CL, to stress the fact that it agrees with a nom NP.)
Example:

(4.9.4) \[ \text{NP CL CL CL V NP NP} \]

\[ \text{nom nom dat acc acc dat} \]

Filter: nom dat acc

Sentence goes through

For any other order of CLs, the filter will not match the CL pattern in the sentence, and the sentence will be eliminated.

2. When the matching is done, a line is drawn between the CL and the NP that agrees with it. There is a principle that establishes that 'Lines that bind matching CL/NP pairs cannot cross.'

Example:

(4.9.5) \[ \text{NP CL CL CL V NP NP} \]

\[ \text{nom nom dat acc acc dat} \]

Principle: 

Sentence goes through

For any other order of CLs, there will be at least one crossing. The following are all the possible combinations of orders of CLs:
Any of these sentences is then eliminated.

Both alternatives account for the facts presented here. The non-crossing principle seems to be an interesting observation. Prep CLs in French, however, seem not to obey this principle. For example,

(4.9.7).a  j'ai mis mon chat sur la table
'I put my cat on the table'

pronominates to

.b  je l'y ai mis
'I put it there'
The corresponding pattern will be

\[(4.9.8) \quad \text{CL CL V NP PP} \]
\[\text{acc prep acc prep} \]

which shows that the principle is violated.

However, a CL Filter of the form

\[(4.9.9) \quad \text{refl dat acc prep} \]

will produce the correct configurations.

Filters seem to be one of the basic elements of Linguistic Theory, so that we will choose alternative 1 for the rest of this study.
4.10 **Benefactive CLs**

Dat CLs in certain situations are not interpreted as semantically dat. In these cases, the function of the dat CL is to make the action of the verb to be somehow related to the pronoun to which the CL is construed.

This relationship between the pronoun and the verb varies with the verb. It can be such that the action of the verb is performed in benefit of the pronoun, or on behalf of the pronoun, or in spite of the pronoun, or in detriment of the pronoun, etc. The exact type of relationship, however, has no syntactic consequence.

Examples:

(4.10.1).a Diana le pintó la casa

'Diane painted the house for him'

.b le llovió finito

'it rained sharply on him'

We will call these dat CLs that have this special relationship to the verb benefactive (ben) CLs. In what follows, to distinguish dat CLs that have the ben function from dat CLs that are interpreted as dat, we will call the former ben CLs, and the latter true dat CLs.

A ben CL can be coreferential to an NP. The case of the NP is dat, since it has to agree with the CL. We will
call these NPs ben NPs.

Ben NPs must always have a coreferential ben CL. If the NP is a FPron, it is deleted, unless there is emphasis on the pronoun.

Examples in Spanish:

(4.10.2).a le comiste la torta a Juan
'you ate the cake on John'

.b ¿me comiste la torta a mí?
'did you ate the cake on me?'

.c me comiste la torta
'you ate the cake on me'

Ben CLs and NPs are syntactically dat CLs and NPs, and even if their interpretation is ben, they are syntactically indistinguishable from dat CLs or NPs. For example, in Spanish, the sentence

me escribiste una carta

means i) 'you wrote a letter to me' (dat interpretation), and ii) 'you wrote a letter for me' (ben interpretation).

There are some cases, however, in which a ben CL and a true dat CL coexist.

Examples in Spanish:

(4.10.3).a le escribiste una carta
'you wrote a letter to her'

\[ \text{.b me le escribiste una carta} \]

'you wrote a letter to her for me'

In this case, if there is a dat NP, it is interpreted as coreferential with the true dat CL, not with the ben CL. That is, if the dat NP agrees with the true dat CL, it is interpreted as coreferential with the true dat CL; while if the dat NP agrees with the ben CL, it cannot be interpreted as coreferential with the ben CL, and the sentence is eliminated.

Examples in Spanish:

(4.10.4).a \[ \underline{\text{me le}} \text{ escribiste una carta a } \underline{\text{María}} \]

'you wrote a letter to Mary for me'

\[ \text{.b } *\underline{\text{me le}} \text{ escribiste una carta a } \underline{\text{mi}} \]

'you wrote a letter to her for me'

A sentence with a ben CL and a true dat CL cannot have two dat NPs either.

Examples in Spanish:

(4.10.5).a \[ *\underline{\text{me le}} \text{ escribiste una carta a } \underline{\text{María}}, \underline{\text{mi}} \]

'you wrote a letter to Mary for me'

\[ \text{.b } *\underline{\text{me le}} \text{ escribiste una carta a } \underline{\text{mi}}, \underline{\text{María}} \]

'you wrote a letter to her for me'
Then, when a ben CL and a true dat CL coexist, only the true dat CL can have a coreferential NP.

There are two possibilities, then, to account for these facts.

1. Ben CLs are generated as different from true dat CLs, that is, ben CLs will have a case different from the dat case. Both ben CLs and dat CLs have coreferential NPs. If the NP is a Fpron, it can be deleted under no emphasis, as any other NP which is a Fpron.

   Just in case a ben CL and a dat CL coexist, then the ben NP coreferential with the ben CL has to be a Fpron, and has to be obligatorily deleted.

   Schematically, the possible configurations would be:

   i) CL V (NP)  
      ben ben

   ii) CL V (NP)  
       dat dat

   iii) CL CL V (NP)  
        ben dat dat

2. Only syntactically dat CLs are generated. That is, there is no ben case.

   Only one dat NP can be generated.
i) If the verb does not subcategorize a dat NP, then there can be only one dat CL, and it is interpreted as ben.

A coreferential NP is interpreted as ben.

If the verb does subcategorize a dat NP, then

ii) if there is one dat CL and the object is optional, the CL is interpreted as either ben or dat;

iii) if there is one dat CL and the object is obligatory, the CL is interpreted as dat;

iv) if there are two dat CLs, the first one is interpreted as ben, the second one is interpreted as dat; and if there is a dat NP, it has to be coreferential with the dat CL interpreted as dat, that is, the second dat CL.

Schematically, the possible configurations would be:

i) \[
\begin{array}{cccc}
\text{CL} & \text{V} & (\text{NP}) & \text{V is not subcategorized for dat NP} \\
\text{dat} & \text{dat} & \text{dat} & \\
\text{interpretation:} & \downarrow & \downarrow & \\
\text{ben} & \text{ben} & \\
\end{array}
\]

ii) \[
\begin{array}{cccc}
\text{CL} & \text{V} & (\text{NP}) & \text{V is optionally subcategorized for dat NP} \\
\text{dat} & \text{dat} & \text{dat} & \\
\text{interpretation:} & \downarrow & \downarrow & \\
\text{ben/dat} & \text{ben/dat} & \\
\end{array}
\]

iii) \[
\begin{array}{cccc}
\text{CL} & \text{V} & (\text{NP}) & \text{V is obligatorily subcategorized for dat NP} \\
\text{dat} & \text{dat} & \text{dat} & \\
\text{interpretation:} & \downarrow & \downarrow & \\
\text{dat} & \text{dat} & \\
\end{array}
\]
iv) \[ \text{CL} \quad \text{CL} \quad \text{V} \quad (NP) \quad \text{V} \text{ has to be subcategorized for } \text{dat} \text{ NP} \]

interpretation: \[ \downarrow \quad \downarrow \quad \downarrow \quad \downarrow \]
\[ \text{ben} \quad \text{dat}_i \quad \text{dat}_i \quad \text{dat}_i \]

Examples:

(4.10.6).a case (i) \[ \text{le caminé cinco cuadras} \]
'I walked five blocks for him' (ben)

.b case (ii) \[ \text{le escribí una carta} \]
'I wrote a letter\{to\} for him' (dat) ben

c case (iii) \[ \text{le pegué una paliza} \]
'I gave him a spank' (dat)

d case (iv) \[ \text{te le escribí una carta (a María)} \]
'I wrote a letter to her (to Mary) for you'

It is interesting to note that if we consider a verb like hablar 'speak' that has two different meanings according to whether it subcategorizes an obligatory dat object or not, cf. (4.1.8), then we can observe how the dat CL is interpreted for the two meanings. The two verbs hablar are:
Then, the corresponding sentences and their interpretations are as follows:

(4.10.8).a case (i) le hablé₁ 'I spoke up for him'  (ben)
    .b case (iii) le hablé₂ 'I talked to him'  (dat)

While a verb that subcategorizes an optionally dat object with the same meaning is represented by the following sentence:

(4.10.9) case (ii) le escribí una carta
        'I wrote a letter to him'  dat
                         ben

Alternative 1 requires a new case: benefactive. This is not desirable because while nom, acc and dat have different syntactic properties, ben is syntactically similar to dat, and is different only in a functional way. Furthermore, if a ben CL and a true dat CL coexist, the ben NP cannot be a NprNP, which means that it has to be a F Pron, obligatorily deleted.

Alternative 2 requires no new syntactic machinery.
It only needs a rule of interpretation to determine when a dat CL, and possibly coreferential NP, is interpreted as ben.

Alternative 2 enhances the Theory of Autonomous Systems, as proposed by Hale, Masayesva-Jeanne and Platero (1976). The syntactic component generates CLs and NPs freely. The subcategorization of verbs establishes when a dat CL/NP has to be a true dat or not. A rule of interpretation determines under what conditions a dat CL/NP can be interpreted as dat or as ben.

Rule of Interpretation of dat CLs.

A dat CL can be interpreted as
i) dat if the verb subcategorizes a dat object,
ii) ben if the verb does not subcategorize a dat object, or if it subcategorizes a dat object optionally.

We have to specify that all CLs must have an interpretation.

The examples in (4.10.6) will be processed as follows:

(4.10.10).a  subcat.    case (i)       no interpretation
             no dat          le caminé cinco cuadras
                        ↓ * dat
             opt dat        le escribí una carta
                        ↓ dat
             obl dat        le pegué una paliza
                        ↓ dat
For the double dat case, the only possible interpretation is always ben dat.

Rule of Interpretation of refl CLs.
1. A refl CL attached to a pronominal verb has no interpretation.
2. A refl CL attached to a non-pronominal verb can be interpreted as
   i) acc refl: if the verb subcategorizes an acc object, and there is no acc CL or NP in the sentence
   ii) dat refl: if the verb subcategorizes a dat object, and there is no dat CL or NP in the sentence
   iii) ben refl: a) if the verb does not subcategorize an object
           b) if the verb subcategorizes an optional object, and there is no...
corresponding CL or NP in the sentence

c) if the verb subcategorizes an object, and there is a corresponding CL or NP in the sentence.

We have to add also that all CLs must have an interpretation.

Examples:

case (i)

(4.10.11).a  me lavé  \\
             acc refl

   .b  me lavé una camisa  \\
       *acc refl

   .c  me la lavé  \\
       *acc refl

'I washed myself'
'I washed a shirt'  
'I washed it'


case (ii)

(4.10.12).a  me pegué  \\
             dat refl

   .b  me le pegué a Juan  \\
       *dat refl

'I hit myself'
'I hit John'


case (iii)
(4.10.13)  me vine a caer
          \    
            ben refl  'It turned out that I fell down'

b)

(4.10.14).a  me escribí (una carta) 'I wrote (a letter) for
          ↓
          ben refl (escribir subcategorizes optional subjects)

          .b  me lavé 'I washed for myself'
              ↓
              *ben refl (lavar subcategorizes an obligatory acc object)

          .c  me pegué 'I hit for myself'
              ↓
              *ben refl (pegar subcategorizes an obligatory dat object)

c)

(4.10.15).a  me lavé una camisa 'I washed a shirt for
          ↓
          ben refl myself'

          .b  me la lavé 'I washed it for myself'
              ↓
              ben refl

          .c  me le pegué a Juan 'I hit John on myself'
              ↓
              ben refl
4.11 Impersonal Sentences

Impersonal sentences are sentences that have an unspecified subject. These sentences have a 3rd person refl CL attached to the verb.

Impersonal sentences are generated with a special 3rd person pronoun, called PRO, as subject. We define a feature

\[
F_{\text{reference}} = (\text{REF}, 2) = [+ \text{REF}]
\]

such that the regular 3rd person FPron is [+ REF], and PRO is [- REF], that is,

\[
\text{3rd pers FPron} = \begin{bmatrix} + N \\ - V \\ + \text{PRON} \\ + \text{REF} \end{bmatrix}, \quad \text{PRO} = \begin{bmatrix} + N \\ - V \\ + \text{PRON} \\ - \text{REF} \end{bmatrix}
\]

The structure of an impersonal sentence is the following:

\[
(4.11.3)
\]

\[
\text{S}\quad \begin{array}{c}
\text{NP} \\
\text{PRO} \\
\end{array}\quad \begin{array}{c}
\text{VP} \\
\end{array}
\]
4.12 Subject-Verb Agreement

Subject NP and verb must agree in person and number. As seen in 4.3, NPs are generated with features of case, person, number and gender by rules (4.3.5). Verbs are also generated with features of person and number, as follows:

\[(4.12.1).a\] \[V \rightarrow F_{\text{person}}', \quad F_{\text{person}} = (\text{PERS},3)\]

\[(4.12.1).b\] \[V \rightarrow F_{\text{number}}', \quad F_{\text{number}} = (\text{PLUR},2) = [+\text{PLUR}]\]

Rules (4.12.1) will then generate either of the following forms:

\[(4.12.2)\]

\[
\begin{align*}
&[V_{\text{1PERS}}], &[V_{\text{1PERS}}], &[V_{\text{2PERS}}], &[V_{\text{2PEFS}}], &[V_{\text{3PERS}}], &[V_{\text{3PERS}}] .
\end{align*}
\]

The rule of Subject-Verb Agreement checks whether the [+ NOM] NP and the V immediately dominated by the VP win a sentence have the same values for the features of person and number, that is, \(F_{\text{person}}', F_{\text{number}}'.\)

As seen in 4.5, a rule of agreement is a rule that matches values of features in particular constituents. If any of these matchings fail, the sentence is eliminated.

The rule has three parts, the first part specifies the environment in which the rule applies; the second part specifies the particular constituents that have to be checked; the
third part specifies the features whose values have to be matched.

Rule of Subject-Verb Agreement:

\[ (4.12.3) \quad \text{MATCH} \left( S / \left[ + \text{NP} \right], V / F_{\text{person}}, F_{\text{number}} \right) \]

The same general principles, Chomsky's A/A and Wilkins' Variable Interpretation Convention and Grossest Constituent Analysis, referred to in 4.5, for the selection of the right NP and V, apply here. That is, the agreement rule takes the NP immediately dominated by the S in the environment of the rule, and the V immediately dominated by the VP which is immediately dominated by the same S.

There is a further check that the rule of Subject-Verb Agreement does. It concerns refl Cls.

The rule of Subject-Verb Agreement verifies whether a refl CL is present in the sentence in the two following cases:

i) When the V is subcategorized as a pronominal V.

ii) When the sentence has the 3rd person pronoun PRO as the subject, that is, a \([+ \text{NOM}]\) PRO.

For these two cases, the presence of a refl CL is obligatory.

If the checking fails, the sentence is eliminated.

For both of these two cases, the rule of CL/NP
Agreement will ensure that the refl CL is the right CL, that is, a [+ NOM] CL that will agree with the subject NP in case, person and number. Since PRO is a [+ 3P] [+ NOM] pronoun, the only CL that will go through the rule of CL/NP Agreement for impersonal sentences will be the 3rd pers refl CL se.
4.13 Object-Verb Agreement

In impersonal sentences, the acc NP object of the V agrees optionally with the V. The degree of optionality depends on the particular sentence, and on the dialect. For some speakers, this agreement is almost obligatory, for other speakers, it is preferred, but it alternates with no agreement. There are some syntactic constructions for which this agreement does not occur, but this is a syntactic process that will be dealt with throughout Chapter 5.

The rule of Object-Verb Agreement checks whether the V and the [- NOM] [+ ACC] NP, both immediately dominated by the same VP, in an impersonal sentence have the same values for the features of person and number, that is, \( F_{\text{person}}, F_{\text{number}} \).

The environment for Object-Verb Agreement is an impersonal sentence, that is, a sentence that has the 3rd person pronoun PRO as subject.

Rule of Object-Verb Agreement:

\[
(4.13.1) \quad \text{MATCH} \left( \left[ S \text{ PRO VP} \right]_S / V, \left[ \begin{array}{c} \text{NP} \\ - \text{NOM} \\ + \text{ACC} \end{array} \right] / F_{\text{person}}, F_{\text{number}} \right)
\]

Here again, the same principles referred to in 4.5 and 4.12 assure that the right V and NP are chosen by the agreement rule.

Because Subject-Verb Agreement applies between PRO and the V, and PRO is [3 PERS],\(^9\) the V has to be [3 PERS]. Then,
when Object-Verb Agreement applies, the only possible objects that can agree with the V are [3 PERS] NPs. This is indeed the case, due to the fact that impersonal sentences have the 3rd person refl CI attached to the V, and then the V has to be 3rd person. This checking of the value [3 PERS] for the V is done by both Subject-Verb Agreement and Object-Verb Agreement independently, so that no relative order between the two rules is required.
4.14 **CL/NP Deletion**

One of the claims of this thesis is that the syntactic processes that take place in a sentence are independent of the surface co-occurrence of coreferential pairs of CL and NP. CLs and NPs are generated in the base. They are kept throughout the syntactic derivation. The basic syntactic processes that take place are common to the Romance languages. The surface distribution of CL/NP pairs is obtained by a last rule of CL/NP Deletion, and is language-and-dialect dependent.

**Rule of CL/NP Deletion**

At the end of the syntactic derivation, both co-referential CLs and NPs are present. A rule of CL/NP Deletion applies then and deletes either the CL, or the NP, or none of them. This rule is sensitive to the case of the CL/NP pair, to whether the NP is a NprNP or a F Pron, and in certain situations, to the animacy of the NprNP. This rule is language-and-dialect dependent.

The general form of the rule is the following. Transformationally,
For each coreferential pair of CL/NP, the rule applies whenever the corresponding CL and NP have the case mentioned in the rule, and the NP has the feature values $F_1, \ldots, F_n$. As a result of the application of the rule, either the CL or the NP or none of them is deleted.

Since this rule has a particular form, it can be written in a simplified way, where only the relevant parts of the rule are specified. The form of the rule would be the following:

$$
(4.14.2) \quad (\text{CL/NP case, NP features}) \rightarrow \left\{ \begin{array}{c} 1 \\ 2 \end{array} \right\}
$$

For each coreferential pair of CL/NP, the rule applies whenever the CL/NP-case part of the rule matches the case of the corresponding CL and NP, and the NP-features part of the rule matches the corresponding features of the NP.

The numbers of the right-hand side of the rule indicate which element of the pair CL/NP remains. The CL is represented by 1, and the NP is represented by 2. Then,
1 means that CL remains and NP is erased,
2 means that NP remains and CL is erased,
1 + 2 means that both CL and NP remain.

In this part of the rule, () and {} brackets can be used to indicate optionality and exclusion, respectively.

The division of NPs into FProns and NprNPs is done by means of the feature

\[(4.14.3) \quad F_{\text{pron}} = (\text{PRON},2) = [\pm \text{PRON}]\]

in such a way that FProns are \([+ \text{PRON}],\) and NprNPs are \([- \text{PRON}].\)

The division of NPs into animate and inanimate is done by the feature

\[(4.14.4) \quad F_{\text{animacy}} = (\text{ANIM},2) = [\pm \text{ANIM}]\]

in such a way that animate NPs are \([+ \text{ANIM}],\) and inanimate NPs are \([- \text{ANIM}].\)

The relevant sentences were given in 3.1. Both formulations of the rule are given in the examples that follow.

French:

CL and NP cannot coexist.
If the NP is a NprNP, then only the NP appears.
If the NP is a FPron, then only the CL appears.

(4.14.5).a  CL  FPron → 1  Ø  (αACC, + PRON) → 1
           .b  CL  NprNP → Ø  2  (αACC, - PRON) → 2

Canadian French:

CL and NP cannot coexist.

If the NP is a NprNP, then only the NP appears.
If the NP is a FPron, then preferably the CL appears, but under emphasis the NP may appear.

(4.14.6).a  CL  FPron → \{\frac{1}{2}\}  (αACC, + PRON) → \{\frac{1}{2}\}
           .b  CL  NprNP → Ø  2  (αACC, - PRON) → 2

Spanish:

For acc CL/NP:
If the NP is a NprNP, then only the NP appears.
If the NP is a FPron, then under no emphasis the CL appears, under emphasis both CL and NP remain.

For dat CL/NP:
The CL must always be present.
If the NP is a NprNP, then both CL and NP appear.
If the NP is a FPron, then under no emphasis only the CL appears, under emphasis both CL and NP remain.
Platense Spanish:

For acc CL/NP:

If the NP is a NprNP, then if the NP is not animate, only the NP appears, while if the NP is animate, both CL and NP appear.

If the NP is a FPron, under no emphasis only the CL appears, under emphasis both CL and NP remain.

For dat CL/NP:

The CL must always be present.

If the NP is a NprNP, the both CL and NP appear.

If the NP is a FPron, then under no emphasis only the CL appears, under emphasis both CL and NP remain.
The rule of CL/NP Deletion is a post-syntactic rule, that is, it is a rule that applies after all syntactic rules have applied. The post-syntacticity of the rule is an essential attribute of the rule, since it has been defined as applying after all syntactic processes have occurred.

This rule applies only inside the VP. If an NP is moved outside of this domain, then the rule does not apply.

An example of this is NP Movements such as Topicalization or Left-Dislocation, and Right-Dislocation.

Whenever an acc or dat NP is topicalized or right-dislocated, a coreferential CL is attached to the verb.

Examples:

Spanish:

(4.14.9).a veo a Juan 'I see John'
.b a Juan _lo_ veo
.c _lo_ veo, a Juan

French:

(4.14.10).a je vois Jean 'I see John'
.b Jean, je _le_ vois
.c je _le_ vois, Jean
Italian:

(4.14.11).a  vedo Giovanni  'I see John'
   .b  Giovanni, lo vedo
   .c  lo vedo, Giovanni

In a theory of CLs in which CLs are not generated in the base, it has to be said that whenever an NP is topicalized or right-dislocated a pronominal copy of the NP has to be cliticized to the verb.

In a theory in which CLs are base-generated, nothing has to be said to account for topicalization or right-dislocation.

i) Since CL/NP Deletion is a post-syntactic rule, it applies after Topicalization or Right-Dislocation have applied.

ii) Since CL/NP Deletion applies only inside the VP, once the NP has been moved outside of the VP the rule of CL/NP Deletion cannot apply, and the CL always remains.
4.15 Clitic Subject Pronouns

Subject pronouns are cliticized to the verb in French. Under emphasis, the full form of the pronoun is found, co-existing with the cliticized form. The following table shows both forms.

<table>
<thead>
<tr>
<th></th>
<th>sing</th>
<th>plur</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FPron</td>
<td>CL</td>
</tr>
<tr>
<td>1 pers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 pers</td>
<td>toi</td>
<td>tu</td>
</tr>
<tr>
<td></td>
<td>lui</td>
<td>il</td>
</tr>
<tr>
<td>3 pers</td>
<td>elle</td>
<td>elle</td>
</tr>
</tbody>
</table>

If the subject is a FPron, the subject CL is obligatory. The FPron remains under emphasis and is deleted under no emphasis.

If the subject is an NprNP, the subject CL does not appear.

Examples:

(4.15.2).a Pierre chante 'Peter sings'
  .b *Pierre il chante id.
  .c *lui chante 'he sings'
  .d lui il chante id.
  .e il chante id.
We can then say that a CL subject pronoun is always generated in the base with the verb, together with a subject NP, which can be either a NprNP or a FPron.

The rule of CL/NP Agreement checks whether subject NP and subject CL agree in person, number and gender. Since both refl CLs and subject CLs agree with a [+ NOM] NP, subject CLs are also [+ NOM]. Furthermore, we will use a feature $F_{\text{subject}}$ to distinguish subject CLs from refl CLs, as follows:

$$(4.15.3) \quad F_{\text{subject}} = (\text{SUBJ},2) = [+ \text{SUBJ}],$$

so that subject CLs are [+ SUBJ] and refl CLs are [- SUBJ].

The rule of CL/NP Deletion deletes either the subject NP or the subject CL, or none of them, as follows.

If the NP is a NprNP, then only the NP appears.
If the NP is a FPron, then under no emphasis the CL appears, under emphasis both CL and NP remain.

The rules of CL/NP Deletion, in the two formulations given in 4.14, are the following:

$$(4.15.4).a \quad \text{CL FPron} \rightarrow 1 \left\{ \emptyset \right\}_2 (\text{+ SUBJ}, \text{+ PRON}) \rightarrow 1 + (2)$$

$$b \quad \text{CL NprNP} \rightarrow \emptyset \quad 2 (\text{+ SUBJ}, \text{- PRON}) \rightarrow 2$$

Notice that we have accounted for the distribution of subject pronouns in French with the rules already available
for CL/NP pairs. In particular, the surface distribution of CL subject pronouns and subject NPs, both NprNPs and FProns, is obtained from the rule of CL/NP Deletion that was devised for object CL/NP pairs. Moreover, the CL/NP Deletion rule (4.15.4) for subject CL/NP pairs in French is identical to rule (4.14.7) for acc CL/NP pairs in Spanish, which shows (i) the universality of this type of rule, and (ii) the dependence on the language and dialect considered.

The rule of CL/NP Deletion, as defined in 4.14 for object CL/NP pairs, applies inside the VP. To extend this rule to subject CL/NP pairs we have to make the rule apply inside the domain in which the CL/NP pairs are generated. For subject CLs and NPs this domain is the sentence.

Assuming that topicalized and right-dislocated subject NPs are attached outside of the sentence, we can also account for the obligatory presence of subject CLs, whenever the subject NP is topicalized of right-dislocated. Examples in French follow.

(4.15.5)  
\[\begin{align*}
(4.15.5).a & \quad \underline{il} \text{ chante} & \quad \text{'he sings'} \\
.b & \quad \text{lui, } \underline{il} \text{ chante} \\
.c & \quad \underline{il} \text{ chante, lui}
\end{align*}\]
(4.15.6).a Pierre chante 'Peter sings'
 .b Pierre, il chante
 .c il chante, Pierre

As in 4.14, for topicalization and right-dislocation of object NPs, nothing has to be said to account for the presence of the subject CL when the subject NP is topicalized or right-dislocated. The subject CL is base-generated, and since the rule of CL/NP Deletion does not apply, the CL remains.
Footnotes to Chapter 4

1. The term object is used to refer to any complement of the verb.

2. Some of the verbs in this table have more than one meaning and in some cases a different meaning may subcategorize different objects. For example, *pegar* can have an acc object with the meaning of 'stick'. We will consider only one particular meaning in these examples.

3. The different alternatives to use two binary features for *person* that were described in (3.3.7) and (3.3.8) for CLs also apply for NPs.

4. In French, if both CLs are 3rd person, the surface order is *le lui*, that is, *acc dat*. However, it was shown in 3.5.2 that the underlying order is *lui le*, that is, *dat acc*, as it is the case for the other combinations - for example, *me le* - and there is a rule of Third Person Metathesis that gives the surface order.

5. The sequences of CLs *acc acc* and *dat dat* are not considered here because each NP has to match one CL in case.


The objection presented here was proposed by D. Perlmutter.
against the cyclicity of CL Placement in MIT class notes.

7 i.e., underlying verb-subject-object order.

8 The different alternatives to use two binary features for
   person that were described in (3.3.7) and (3.3.8) for CLs,
   and in (4.3.5) for NPs, also apply for Vs.

9 Either [+3P] or [-1P, -2P] can be used, according to
   whether system (3.3.7) or system (3.3.8) are considered
   as alternatives to the feature F
   person, respectively.
Chapter 5 consists of the study of structures with an embedded infinitival clause. These structures can be classified as follows:

- **Querer-type** called **VA-Equi structures** (5.1)
- **Decidir-type** called **non-VA-Equi structures** (5.2)
- **Deber-type** called **Aux structures** (5.3)
- **Permitir-type** called **dat-obj structures** (5.4)
- **Obligar-type** called **acc-obj structures** (5.5)
- **Hacer-type** called **causative structures** (5.6)

In what follows, and for all these different types of structures, the following order of exposition will be given.

i) One introductory set of examples with a few verbs which belong to the particular class, all other examples being given only with the prototype verb; and the behavior of the particular class of sentences with respect to different syntactic processes.

ii) Previous accounts for the particular structure.

iii) The syntactic structure proposed for the particular class of sentences.

iv) Analysis of the proposed structure, comparison with
other proposals, and verification that the proposed structure accounts for the facts presented in the examples.

Structures with an embedded tensed clause do not present any interest with respect to the movement of CLs. CLs cannot be extracted from a tensed clause. For example,

(5.0.1).a María quiere que Helena bese a José
'Mary wants Helen to kiss Joseph'

.b María quiere que Helena lo bese
'Mary wants Helen to kiss him'

.c *María lo quiere que Helena bese

This is readily accounted for by Chomsky's (1973) Tensed-S Condition that says:

'No rule can involve X, Y in the structure

... X ... [a ... Y ... ] ...

where a is a tensed sentence.'

Before analyzing the particular structures, we will make a few remarks regarding certain syntactic processes that will be considered. Spanish is used throughout the examples in this section.
The term upper will be used to refer to constituents in the matrix sentence, and the term lower to refer to constituents in the embedded sentence.

+ (placed before a sentence) indicates that the sentence is grammatical for some speakers, but highly marked or non-preferred in its use. It can be ungrammatical for other speakers. In general, whenever a + sentence is given, the preferred corresponding sentence is given in the same paradigm.

1. Clitic Movement (CL.M.)

In some Romance languages, a CL, syntactically dependent on the lower V, and thus attached to the lower V, can be attached to the upper V.

Example:

(5.0.2).a María quiere besar a José
'Mary wants to kiss Joseph'

.b María quiere besar lo
'Mary wants to kiss him'

.c María lo quiere besar
'Mary wants to kiss him'
2. Object-Verb Agreement (O.V.A.)

In some Romance languages, in impersonal sentences, the verb can agree with the direct object. The conditions under which this agreement can take place are complicated, but the cases that we want to consider now are the cases in which this agreement takes place.

Example:

(5.0.3).a  
\[
\text{Juan vende una casa 'John sells a house'} \\
\text{(sg) (sg) (sg)} \\
\]

.b 
\[
\text{se vende una casa 'PRO sells a house'} \\
\text{(sg) (sg) = 'a house is sold'} \\
\]

c 
\[
\text{Juan vende casas 'John sells houses'} \\
\text{(sg) (sg) (pl)} \\
\]

d 
\[
\text{se venden casas 'PRO sells houses'} \\
\text{(pl) (pl) = 'houses are sold'} \\
\]
5.1 VA-Equi Structures

5.1.0 Data

Prototype querer 'to want'

Examples:

(5.1.1) María quiere besar a José 'Mary wants to kiss Joseph'
        puede can
debé must
tiene que has to
trata de tries to
comienza a begins to
termina de ends to
deja de stops to
e=etc.

CL.M.: They allow CL.M.

Example:

(5.1.2).a María quiere besarlo 'Mary wants to kiss him'
      .b María lo quiere besar id.

O.V.A.: Object Agreement can be performed with the upper verb. This agreement is in general preferred, but how much it is preferred has dialectal variation.

Example:

(5.1.3).a +se quiere vender casas 'PRO wants to sell houses'
      (sg)          (pl)
      .b se quieren vender casas id.
      (pl)          (pl)
Passive: Corresponding passive sentences have different meaning.

Example:

(5.1.4).a María quiere besar a José
'Mary wants to kiss Joseph'
.b ≠ José quiere ser besado por María

The sentential object besar a José is an acc NP, because

i) it pronominalizes to an acc CL,

(5.1.5).a María quiere besar a José
.b María lo quiere
'Mary wants it'
.c María quiere besar a José y Helena también lo quiere
'Mary wants to kiss Joseph and Helen also wants it'

ii) it allows Clefting,

(5.1.6) lo que María quiere es besar a José
'what Mary wants is to kiss Joseph'
iii) it allows Passive,

\[(5.1.7)\]  
\[\text{María desea besar a José} \]
'Mary wishes to kiss Joseph'
\[\text{besar a José es deseado por María} \]
to kiss Joseph is wished by Mary

iv) it can be questioned,

\[(5.1.8)\]  
\[\text{¿qué quiere María? - besar a José} \]
'what does Mary want? - to kiss Joseph'

5.1.1 Previous Accounts

The first works on CL Movements in this type of structures that we are considering in this section, like, for example, Perlmutter (1971), Contreras & Rojas (1972), Roldán (1972), Rivero (1973), Aissen (1974), Bordelois (1974), Rivas (1974), Luján (1975), Aissen & Rivas (1975), have assumed that there is a rule that moves the CL from the lower sentence to the upper verb. This rule has different characteristics in the different proposals, but it is essentially the same rule, and has been in general called Clitic Climbing.

More recent analyses treat CL Movements in VA-Equi Structures as is sketched in what follows.

Quicoli (1975b) gives a general account of CL.M. for
Portuguese by means of Chomsky's (1973) Tensed-S Condition and Specified Subject Condition. In particular, for VA Equi structures, he says that a rule of Equi-NP Deletion applies between the upper subject and lower subject, deleting the lower subject, and leaving no trace. Then, in this type of construction, CL Climbing can freely apply.

Aissen & Perlmutter (1976), in the framework of Relational Grammar, propose a rule of Clause Reduction to account for the behavior of CLs in this type of construction. The rule of Clause Reduction takes a bisentential structure and reduces it to a simple sentence. The dependants of the lower verb become then dependants of the upper verb. CL.M. takes place because the pronouns dependants of the lower verb become dependants of the upper verb, and are then cliticized to the upper verb. O.V.A. with the upper verb occurs because the lower direct object becomes an upper direct object, and therefore, the upper verb agrees with its new object. For a Clause Reduction hypothesis, then, sentences in which CL.M. or O.V.A. with the upper verb has taken place must have undergone Clause Reduction.

Strozer (1976) proposes a structure with a lower infinitival VP instead of a lower sentence for the VA-Equi structure. She says that, since the lower VP has no subject, CLs can be extracted out of the infinitival complement without violating the specified subject condition.
5.1.2 Proposed Structure

The structure proposed for this construction is the following:

\[(5.1.9)\]

\[\begin{array}{c}
S \\
NP_1 \\
V \\
NP \\
S \\
NP_2 \\
VP
\end{array}\]

This structure will be eliminated unless the subject \(NP_2\) of the lower \(S\) is a F Pron that can be coreferential with the subject \(NP_1\) of the upper \(S\). Then, for the sentence to go through, \(NP_2\) has to be a F Pron that agrees with \(NP_1\) in person, number and gender.

In this case, \(NP_2\) is deleted and the subject of the lower \(S\) is interpreted as being \(NP_1\).

The \(V\) in the lower \(S\) is in the infinitive form.\(^4\)

We call the rule that performs these operations rule of Matching Pronoun Deletion.

We have attached the lower clause to an NP in the upper sentence because, as seen in 5.1.0, the lower clause behaves as an NP.

We have chosen a bisentential structure because we want to leave open the possibility of having a Passive
transformation. A sentence like

(5.1.10).a María quiere ser besada por José
'Mary wants to be kissed by Joseph'

should be able to be derived from a deep structure

.b María quiere [José besar a María]
'Mary wants [Joseph kiss Mary]' so that the presence of the lower subject María is necessary.

The alternative choice, a lower clause without a subject, that is, a lower VP instead of a lower S, was proposed by Strozer (1976). It has the disadvantage of requiring no Passive transformation, and furthermore, if the lower clause is attached to an NP, it requires a PHS rule of the form NP + VP, instead of the rule NP + S, which is used for the other bisentential structures to be studied in the rest of the Chapter.

Moreover, we want to propose a general principle that establishes that all structures consisting of an upper clause and a subjectless infinitival lower clause have a bisentential deep structure, and for the structure to surface there has to be some procedure by which the subject of the lower sentence is eliminated.
We will call this principle the Principle of Bisententiality.

5.1.3 Rule of Matching Pronoun Deletion

The rule of Matching Pronoun Deletion (M.P.D.) operates in a structure of the following form

(5.1.11)

\[
\begin{array}{c}
S \\
\text{NP}_1 \\
V_1 \\
\text{NP} \\
\text{S} \\
\text{NP}_2 \\
V_2 \\
X
\end{array}
\]

It checks whether \(\text{NP}_2\) is a FPron, and whether \(\text{NP}_1\) and \(\text{NP}_2\) have the same values for the features of person, number and gender.

It also checks that \(V_2\) is in the infinitive form.
If these conditions are met, \(\text{NP}_2\) is deleted, and the subject of the lower \(S\) is interpreted as being \(\text{NP}_1\).
If any of these conditions are not met, the sentence is eliminated.

5.1.4 Analysis

It is important to note that there is a difference
between the rule of Matching Pronoun Deletion and the rule usually called Equi-NP Deletion. The rule of Equi-NP Deletion operates on a structure of the following form

\[ (5.1.12) \]

\[
\begin{array}{c}
S \\
\downarrow
\end{array}
\begin{array}{c}
NP_i \\
\downarrow
\end{array}
\begin{array}{c}
VP \\
\downarrow
\end{array}
\begin{array}{c}
V \\
\downarrow
\end{array}
\begin{array}{c}
NP_i \\
\downarrow
\end{array}
\begin{array}{c}
S \\
\downarrow
\end{array}
\begin{array}{c}
VP
\end{array}
\]

where both \(NP_i\)'s are identical NPs which are coreferential.

Let us consider the derivation of an impersonal sentence in both cases.

**Structure (5.1.12) with rule of Equi-NP Deletion:**

\[ (5.1.13) \]

\[
\begin{array}{c}
\text{lower cycle} \\
\text{Imp.-S Agr.}
\end{array}
\begin{array}{c}
\text{upper cycle} \\
\text{Equi-NP Del.} \\
\text{Imp.-S Agr.}
\end{array}
\begin{array}{c}
\text{surface form} \\
*se quiere venderse una casa}
\]

\[
\begin{array}{c}
\text{'wants'} \\
\text{'to sell a house'}
\end{array}
\]

**Structure (5.1.11) with rule of Matching Pronoun Deletion:**


The rule of Equi-NP-Deletion applied to a structure like (5.1.12) will give a sentence with two se's, which is ungrammatical; while the rule of Matching Pronoun Deletion applied to a structure like (5.1.11) will give a sentence with one se attached to the upper verb, which is the correct sentence.

It is also important to point out that the checking of the subcategorization of the verb for a refl CL is done between the verb and the CL that agrees with the syntactical subject of the verb before any rule of Matching Pronoun Deletion applies, and not with the interpreted subject once the rule of Matching Pronoun Deletion has applied.
If the subcategorization of the verb were done with the interpreted subject, we would have the following situation:

(5.1.16) Maria se quiere [ella se peinar]

All verbs in this class allow CL.M. and V.O.A. In CL.M. the CL that is an object of the lower V can be attached to the upper V. In O.V.A. the object of the lower V can agree with the upper V. In both cases, then, the upper V can play the role of the lower V.

The following sentences show that when either CL.M. or O.V.A. takes place, no constituent can be present between the upper and the lower V:

(5.1.17).a María quiere evidentemente besar
    .b *María lo quiere evidentemente besar
       'Mary wants evidently to kiss him'
    .c María quiere no besar
    .d *María lo quiere no besar
       'Mary wants not to kiss him'
5.1.5 Rule of Verb Adjunction

It seems then that when CL.M. or O.V.A. occurs, the verbs cannot be separated by any constituent.

In order to account for these processes, we propose a rule of Verb Adjunction (V.A.) that takes the lower $\overline{V}$ and Chomsky-adjoins it to the upper $\overline{V}$, removing all the nodes between the upper VP and the lower $\overline{V}$, and attaching the complements under the lower VP to the upper VP.

Rule of V.A.

Structurally,

\[(5.1.18)\] 

Transformationally,

\[(5.1.19)\]

\[ [VP \overline{V} [\overline{V} X]] \rightarrow [VP [\overline{V} 1 + 2] 3] \]

\[1 \quad 2 \quad 3\]
The rule of V.A. formulated here does not reorder constituents. It simply adjoins a lower V to an upper V, creating a Verb-Adjunction structure. The complements of the lower VP are then attached to the upper VP.

This type of rule may not be a desirable transformation. When dealing with Causative Constructions, in 5.6, the rule of V.A. will be extended. It will be argued, then, that this rule is not a regular transformation, but a central syntactic process that takes place in Romance languages, with the purpose of reducing a bisentential structure to a simple sentence. An attempt of explanation of why the rule has the proposed form and not any other arbitrary form will be given.

5.1.6 Rule of Clitic Gliding

In order to account for the movement of CLs, we propose a rule of Clitic Gliding (C.G.) that takes the CL node attached to a V, and moves it to the left so that the node CL will be attached to an adjacent V if both Vs are dominated by the same V.

Rule of C.G.

Structurally,

(5.1.20)
Transformationally,

(5.1.21) \[ \overrightarrow{V \text{ CL}} \rightarrow 2 + 1 \emptyset \]

Then, if the rule of V.A. applies, we have the configuration necessary for the rule of C.G., and the CLs attached to the lower V can be attached to the upper V.

If V.A. does not apply, C.G. cannot take place, and the CLs attached to the lower V remain there. In this case, constituents can be placed between the non-adjoined Vs.

Then, the agreement between the object of the lower V and the upper V in impersonal sentences can occur only if the verbs are adjoined. We can say that the feature \( F_{\text{number}} \) attached to the lower V by the Object-Verb Agreement Rule, glides to the upper verb under the same conditions in which the rule of C.G. can apply, that is, after the verbs have been adjoined by the rule of V.A.

If V.A. applies, we have the configuration necessary for the agreement between the object of the lower V and the upper V; while if V.A. does not apply, the agreement between the object of the lower V and the upper V is impossible.
5.1.7 Rule of CL Attraction

If we consider an impersonal sentence with a VA-Equi verb and a CL attached to the lower V, we find that this sentence is, in general, ungrammatical. It is grammatical under certain conditions that we will point out, and for some speakers the ungrammatical sentence is only non-preferred, so that we will mark this sentence with a +, instead of with an *.

(5.1.22).a se quiere escribir una carta
'PRO wants to write a letter'

.b +se quiere escribir la
'PRO wants to write it'

.c +se quiere escribir le a Juan
'PRO wants to write to John'

.d +se quiere escribirle
'PRO wants to write to him'

The sentence in which the underlying CL attached to the lower V is actually attached to the upper V is grammatical.

(5.1.23).a se la quiere escribir
'PRO wants to write it'

.b se le quiere escribir a Juan
'PRO wants to write to John'
This occurs if the object of the lower V coreferential to the CL attached to the lower V is either dat or inanimate acc. If the object is animate acc, then the coreferential CL remains attached to the lower V. Again, for some speakers this is only a preferred sentence, and the sentence with the CL attached to the upper V is non-preferred.

(5.1.24).a se quiere besar a María
'PRO wants to kiss Mary'

.b se quiere besarla
'PRO wants to kiss her'

.c +se le quiere besar
'id.

If a CL attached to the lower V is attached to the upper V giving a forbidden combination, then the sentence is ungrammatical, and the sentence with the CL attached to the lower V is always grammatical.

(5.1.25).a se quiere bañarse
'PRO wants to take a bath'
The same is true if there are more than one CL attached to the lower V.

(5.1.26).a  +se quiere escribir_{mela}
.b  se me la quiere escribir
    'PRO wants to write it to me'
    (se me la is a permissible seq.)
.c  se quiere escribir_{selaa}
.d  +se se la quiere escribir
    'PRO wants to write it to him'
    (se se la is a forbidden seq.)

Moreover, if a CL attached to the lower V cannot be attached to the upper V because V.A. cannot take place, then the sentence with the CL attached to the lower V is grammatical.

(5.1.27).a  +se quiere escribir_{laa}
.b  se la quiere escribir
    'PRO wants to write it'
It seems that this rule, that we call rule of CL Attraction (C.A.), is a rule of the following sort.

If the conditions for the rule to apply are met, and the resulting sentence is grammatical, then the rule applies obligatorily, and therefore the original sentence is ungrammatical. (For some speakers, the application of the rule is preferred, leaving the original sentence highly marked or non-preferred).

However, if the conditions for the rule to apply are not met (no V.A., or animate acc object), then it does not apply, and the original sentence is grammatical. Also, if the rule applies and the resulting sentence is ungrammatical (forbidden sequence of CLs), then the resulting sentence is eliminated and the original sentence is grammatical.

Optional rules are rules such that, if they do not apply, the original sentence is grammatical, if they apply, the resulting sentence is grammatical. Obligatory rules are rules such that, if they do not apply, the original sentence is ungrammatical, if they apply, the resulting sentence is
grammatical. But the rule of C.A. is neither optional nor obligatory. We will call it a quasi-obligatory rule, and define quasi-obligatory rules as follows.

A quasi-obligatory rule is a rule that tries to apply obligatorily. If the resulting sentence is grammatical, then the original sentence is ungrammatical. (For some speakers it is highly marked or non-preferred). If there is no resulting grammatical sentence (the rule did not apply, or the rule applied but the resulting sentence was ungrammatical), then the original sentence is grammatical.

To distinguish animate objects from inanimate objects, we define a feature \( F_{\text{animacy}} \) as follows:

\[
(5.1.28) \quad F_{\text{animacy}} = (\text{ANIM},2) = [+ \text{ANIM}],
\]

so that animate NPs are [+ ANIM], and inanimate NPs are [- ANIM].

Rule of Clitic Attraction

If a CL is attached to the upper V, and CLs are attached to the lower V, whenever none of these CLs is coreferential to a [+ ANIM] acc object, then the rule of C.G. applies quasi-obligatorily.
5.1.8 Post-syntactic Rules

We have seen in 5.1.4 that, in Spanish, no constituents can be present between the upper verb and the lower verb when the verbs are adjoined. In French, however, a certain group of constituents can be present between adjoined verbs. We propose that the rules that place these constituents are rules that apply after all regular syntactic rules have applied.

There is a set of syntactic processes that can be characterized by the fact that they place some specific element in some fixed place in a sentence regardless of the derived structure of that sentence. These rules seem to operate after all regular syntactic processes have applied:

A) Subject-Clitic Inversion in French.

In order to form interrogative sentences, the subject CL pronoun and the verb immediately following it are inverted. It does not matter what the derived structure of the sentence is, subject CL and following verb invert always:

(5.1.29).a Elle a embrassé Jean
'she has kissed John'

.b A-t-elle embrassé Jean?
'has she kissed John?"
B) **Pas** Placement in French.

In order to form some negative sentences, the particle **pas** is placed immediately after the verb to which the negative particle **ne** is attached. This is also irrelevant of derived structure:

(5.1.30) \[ \text{Elle n'a pas embrassé Jean} \]

'she has not kissed John'

C) **Adverb** Placement in French.

In sentences with a pair of verbs, one immediately following the other in derived structure, adverbs have a highly preferred position between both verbs. This happens independently of whether Verb Adjunction has or has not taken place.

**Avoir** requires Verb Adjunction:

(5.1.31) \[ \text{Marie a certainement embrassé Jean} \]

'Mary has certainly kissed John'

**Vouloir** does not require Verb Adjunction:

(5.1.32) \[ \text{Marie veut certainement embrasser Jean} \]

'Mary wants certainly to kiss John'
D) **Vd. Placement in Spanish.**

The formal second-person singular pronoun *Vd.* (which is a written abbreviation of *usted* 'you sing. formal') can be placed after the finite verb in a sequence of verbs under certain emphasis conditions. This occurs whether Verb Adjunction has or has not applied. In Spanish this is a curious phenomenon because no constituent can intervene between adjoined verbs at all.

*Haber* requires Verb Adjunction:

(5.1.33).a  ¿Vd. ha besado a Juan?
'have you kissed John?'

.b  ¿Ha Vd. besado a Juan?
'have you kissed John?' (emphasis)

*Querer* does not require Verb Adjunction:

(5.1.34).a  ¿Vd. quiere besar a Juan?
'do you want to kiss John?'

.b  ¿Quiere Vd. besar a Juan?
'do you want to kiss John?' (emphasis)

E) **Characterization of Post-syntactic Rules.**

For these reasons, a set of rules called post-syntactic
rules are proposed, having the following properties:

i) They apply after all syntactic rules have applied.

ii) They place a constituent in a specific position in a sentence.

iii) The description of the position where the element is placed is independent of syntactic structure.

F) The rule of CL/NP Deletion, that we studied in 4.14, does not place a constituent in some specific place; rather it deletes constituents in specific positions. We have seen that this rule also applies after all syntactic rules have applied, therefore, CL/NP Deletion is a Post-Syntactic Rule.
5.2 Non-VA-Equi Structures

5.2.0 Data

Prototype decidir 'to decide'

Examples:

\[(5.2.1)\] María decidió besar a José 'Mary decided to kiss
esperó 'hoped José'
soñó con 'dreamt'
penso en 'thought'
insistió en 'insisted'
etc.

CL.M.: They do not allow CL.M.

Example:

\[(5.2.2).a\] María decidió besarlo
\[.b\] *María lo decidió besar
'Mary decided to kiss him'

O.V.A.: Object Agreement cannot be performed with the
Upper V.

Example:

\[(5.2.3).a\] se decidió vender casas
\(\text{(sg)}\) \(\text{(pl)}\)
\[.b\] *se decidieron vender casas
\(\text{(pl)}\) \(\text{(pl)}\)
'PRO decided to sell houses'
Passive: As with VA-Equi verbs, corresponding passive sentences have different meaning.

Example:

(5.2.4).a María decidió besar a José
'Mary decided to kiss Joseph'
.b José decidió ser besado por María
'Joseph decided to be kissed by Mary'

The sentential object besar a José is an acc NP, for the same reason as with VA-Equi verbs, described in 5.1.0.

(5.2.5) i) María los decidió
'Mary decided it'
María decidió besar a José y Helena también lo decidió
'Mary decided to kiss Joseph and Helen also decided it'

ii) lo que María decidió es besar a José
'what Mary decided is to kiss Joseph'

iii) besar a José fue decidido por María
'to kiss Joseph was decided by Mary'

iv) ¿qué decidió María? - besar a José
'what did Mary decide? - to kiss Joseph'
5.2.1 Previous Accounts

Quicoli (1975b), analyzing CL Movement in Portuguese, argues that, while for VA-Equi verbs the deletion of the subject of the lower sentence allows the CL to climb to the upper verb, for non-VA-Equi verbs this deletion does not occur, and then the Specified Subject Condition blocks the climbing of the CL to the upper verb. He suggests that the Equi-NP Deletion Rule applies only to verbs whose subjunctive that-complements are in complementary distribution with their infinitival complements.

For example, in Spanish, querer 'want' allows CL.M. and is subject to Equi-NP Deletion in that-complements, while decidir 'decide' does not allow CL.M. and is not subject to Equi-NP Deletion in that-complements.

Strozer (1976) argues that the correlation between verbs that allow CL.M. and verbs subject to Equi-NP Deletion in that-complements is not correct, at least for Spanish. For example, evitar 'avoid' does not allow CL.M. but is subject to Equi-NP Deletion in the that-complement.

As seen in 5.1.1, she proposes a VP complement for VA-Equi verbs. For non-VA-Equi verbs, she proposes a sentential complement. CL.M. is then blocked by the Specified Subject Condition.

The analysis that will be proposed here was first outlined in Rivas (1974), and later in Aissen & Rivas (1975).
5.2.2 Proposed Structure

The structure proposed for this construction is the same as the structure proposed for non-VA-Equi verbs, that is,

(5.2.6)

The rule of Matching Pronoun Deletion applies in the same way as for VA-Equi structures. The same arguments used for VA-Equi verbs, in 5.1.0 and 5.1.2, to justify the lower sentential complement and the NP that dominates it can be applied here.

There is no clear semantic distinction between VA-Equi verbs and non-VA-Equi verbs. Moreover, there is dialectal variation with regard to which verb belongs to each class.

We will use a feature

(5.2.7) $F_{V\cdot A.} = (VA, 2) = [+ VA]$
and non-VA-Equi verbs will be $[- \text{VA}]$.

The rule of V.A. will apply only when the upper V is $[+ \text{VA}]$. This rule, first formulated in 5.1.5, is reformulated here as follows:

Rule of V.A.

Structurally,

\begin{equation}
(5.2.8)
\begin{array}{c}
\text{VP}_1 \\
\overline{V}_1 \\
[+ \text{VA}]
\end{array}
\quad \begin{array}{c}
\text{(NP)} \\
| \\
\text{(S)} \\
\end{array}
\quad \begin{array}{c}
\text{VP}_2 \\
\overline{V}_2 \\
\end{array}
\end{equation}

Transformationally,

\begin{equation}
(5.2.9)
\begin{array}{c}
\text{VP} \\
[\overline{V} \quad [\overline{V} \text{X}]] \\
[+ \text{VA}] \\
\end{array}
\rightarrow 
\begin{array}{c}
[1 + 2] \\
3 \\
\text{VP} \\
\overline{V}
\end{array}
\end{equation}

5.2.3 Analysis

Since C.G. and O.V.A. with the upper verb need the structure

\begin{equation}
\begin{array}{c}
\overline{V} \\
\end{array}
\end{equation}

\begin{array}{c}
\overline{V} \\
\end{array}
\end{equation}
to be able to apply, and since [- VA] verbs do not allow V.A., therefore they also do not allow either C.G. or O.V.A. with the upper verb. The rule of V.A. and the characterization of Equi verbs as either [+ VA] or [- VA] relate then two processes that seemed to be independent: the movement of CLs and the agreement between the object of the lower verb and the upper verb in impersonal sentences.

The rule of CL Attraction is another process that distinguishes [+ VA] verbs from [- VA] verbs. As seen in 5.1.7, an impersonal sentence with a VA-Equi verb (querer 'to want', for example) like the following:

(5.2.10).a  +se quiere escribirla

'PRO wants to write it'

is ungrammatical. (For some speakers, highly marked or non-preferred). The rule of CL Attraction gives

.b  se la quiere escribir

'PRO wants to write it'

However, if we take an impersonal sentence with a non-VA-Equi verb (decidir 'to decide', for example), the sentence

(5.2.11).a  se decidió escribirla

'PRO decided to write it'
is grammatical; and since V.A. cannot take place, CL Attraction cannot apply, and the sentence

\[ \text{b} \quad *\text{se la decidió escribir} \]

'PRO decided to write it'

is ungrammatical.

As mentioned in 5.2.1, in order to distinguish VA-Equi from non-VA-Equi structures, Quicoli (1975b) proposes two different processes, and Strozer (1976) proposes two different structures. The two processes proposed by Quicoli, application of Equi-NP Deletion for VA-Equi structures, and non application of Equi-NP Deletion for non-VA-Equi structures, cannot be correlated to other syntactic processes. The two structures proposed by Strozer, VP complement for VA-Equi verbs, and S complement for non-VA-verbs have to be sub-categorized by the verb.

Since the difference between VA-Equi structures and non-VA-Equi structures seems to be lexically governed by the verb, we prefer to use a lexical feature [+ VA] to account for this difference, and leave the same deep structure for both constructions.

This allows us to keep the Principle of Bisententiality enunciated in 5.1.2.
5.2.4 Independence of V.A. and C.G.

Aissen & Perlmutter (1976) have claimed that V.A. and C.G. are in fact consequences of the same process. That is that whenever the equivalent of V.A. applies, the equivalent of C.G. applies. We will show that this is not true.

It is a necessary condition for the rule of C.G. to apply that V.A. has applied. This is so because the structure

\[
\overline{V} \\
\overline{V} \\
V
\]

necessary for C.G. to apply is given by V.A. However, V.A. can apply without C.G. also applying. In order to show this, let us consider the following arguments.

1. Rule of todos Movement

a) The quantifier todos 'all' can move across a V.

(5.2.12).a veo a todos 'I see all'

.b a todos veo id.

b) The quantifier todos cannot move across a VP. soñar con 'to dream of' is a [- VA] verb, thus we have
(5.2.13).a  soñé con verlos
   .b  *los soñé con ver
       'I dreamt of seeing them'
   .c  se soñó con vender las casas
       (sg) (pl)
   .d  *se soñaron con vender las casas
       (pl) (pl)
       'PRO dreamt of selling the houses'

Then the sentence

(5.2.14).a  soñé con verlos a todos
      'I dreamt of seeing them all'

has two VPs because V.A. cannot apply, and todos cannot move:

   .b  *a todos soñé con verlos
       'I dreamt of seeing them all'

Structurally,

(5.2.15)
c) The quantifier todos can move across a $\bar{V}$ obtained by V.A.

*querer* 'to want' is a [+ VA] verb, then V.A. is possible. The CL los attached to the upper V ensures that V.A. took place.

(5.2.16).a  los quise ver a todos 'I wanted to see them all'

is derived from

.b  quise verlos a todos  id.

by C.G., and then

.c  a todos los quise ver  id.

is derived by todos-Movement.

Structurally,

(5.2.17)

...
lower V, a theory that establishes that V.A. and C.G. are consequences of the same process would predict that, since the CL stayed attached to the lower V, V.A. did not take place, and then todos-Movement could not take place. This is not the case. The sentence

(5.2.18)  a todos quise verlos
'I wanted to see them all'

is correct. This shows that V.A. must have applied even if C.G. did not.

Structurally,

(5.2.19)

2. Constituents can intervene between the verbs querer 'to want' and ver 'to see' when todos did not move, showing that V.A. can optionally not apply in those cases.

(5.2.20).a quise evidentemente verlos a todos
'I wanted evidently to see them all'
'I wanted not to see them all'

'did you want to see them all?'

However, if todos moved, no constituent can intervene between querer and ver, showing that VA must have applied, even if the CL los stayed attached to the lower V.

(5.2.21).a  *a todos quise evidentemente verlos
 .b  *a todos quise no verlos
 .c  *a todos quisiste tú verlos?

3. There is a rule, that has been called Tough-Movement or Complement-Object Deletion,\textsuperscript{11} that relates a sentence like the following:

(5.2.22).a  es difícil entregar esta cartas
     'it is difficult to deliver these letters'

to a sentence like the following:

 .b  estas cartas son difíciles de entregar
      'these letters are difficult to deliver'
We do not want to get into the details of how this process takes place. Different alternatives have been provided for it, but what follows is independent of which alternative is right.

For this argument, we need a lower V with a CL attached to it, so that we will use the following sentence.

\[(5.2.23)\]

\[
es difícil entregarle estas cartas a María\]

\['it is difficult to deliver these letters to Mary'\]

a) The acc object of the lower V can move across a \( \bar{V} \). In this case, the dat CL \( \text{le} \) coreferential to the dat NP \( \text{a María} \), and a CL \( \text{las} \) coreferential to the acc NP \( \text{estas cartas} \), are found attached to the lower V.

\[(5.2.24)\]

\[
estas cartas son difíciles de entregárselas\]
\[\text{a María}\]

\['these letters are difficult to deliver to Mary'\]

b) The acc object of the lower V cannot move across a VP. \( \text{soñar con} \) 'to dream of' is a \([-\text{VA}]\) verb, then V.A. cannot apply and the structure has two VPs.
(5.2.25).a  es difícil soñar con entregarle estas cartas a María

'it is difficult to dream of delivering these letters to Mary'

.b *estas cartas son difíciles de soñar con entregárselas a María

'these letters are difficult to dream of delivering to Mary'

c) The acc object of the lower V can move across a $\overline{V}$ obtained by V.A. querer is a [+ VA] verb, then V.A. is possible.

(5.2.26).a  es difícil quererle entregar estas cartas a María

'it is difficult to want to deliver these letters to Mary'

.b estas cartas son difíciles de querérselas entregar a María

'these letters are difficult to want to deliver to Mary'

The CLs le and selas, attached to the upper V ensure that V.A. has taken place.

d) However, if the CLs le and selas stay attached to the lower V, the acc object of the lower V can still move to the left.
es difícil querer entregarle estas cartas a María

'it is difficult to want to deliver these letters to Mary'

estas cartas son difíciles de querer entregárselas a María

'these letters are difficult to want to deliver to Mary'

This shows that V.A. must have taken place, even if C.G. did not.

It is worthwhile to note that both rules, V.A. and C.G. are optional rules. Since C.G. can only apply when V.A. has applied, we can have three possible configurations: no V.A. and no C.G., V.A. and no C.G., V.A. and C.G.
5.3 Aux Structures

5.3.0 Data

Prototype deber 'must'

Examples:

(5.3.1) Maria debe besar a Jose 'Mary must kiss Joseph'
        suele has the habit
        puede can
        tiene que has to
        etc.

CL.M.: They allow CL.M.

Example:

(5.3.2).a Maria debe besarlo
       .b Marfa lo debe besar
       'Mary must kiss him'

O.V.A.: Object Agreement can be performed with the
        upper verb. Moreover, it is highly preferred.
        Example:

(5.3.3).a +se debe vender casas
       (sg) (pl)
       .b se deben vender casas
       (pl) (pl)
       'PRO must sell houses'
The CL se can also be attached to the lower Vp.

(5.3.4).a. +debe venderse casas,
       (sg)       (pl),
.b. deben venderse casas,
       (pl)       (pl),
'PRO must sell houses.'

Passive: Corresponding passive sentences have the same meaning.
Example:

(5.3.5).a. María debe besar a José;
'Mary must kiss Joseph.'
.b. = José debe ser besado por María
'Joseph must be kissed by Mary'

5.3.1 Proposed Structure

The structure proposed for this construction is the following:

(5.3.6)
A rule of NP Movement, that has also been called Subject-to-Subject Raising, moves the subject of the lower sentence to the position of the subject of the upper sentence. After this movement has applied, Aux Structures are syntactically similar to VA-Equi Structures, and, indeed, all the processes that take place in VA-Equi Structures take place in Aux Structures as well.

There are two differences however:

1. In the behavior of impersonal sentences, as exemplified by sentences (5.3.4) the impersonal CL se can be attached either to the upper verb or to the lower verb in Aux Structures, while this CL se can only be attached to the upper verb in VA-Equi Structures. This is due to the difference in deep structure for both constructions.

The impersonal CL se in Aux Structures has to be present in the lower sentence because it has to agree with the impersonal subject PRO. This CL can glide to the upper V, after the Vs have been adjoined, by means of the rule of C.G. This is why we find this CL attached to either the lower V or the upper V.

2. Corresponding active and passive sentences, as exemplified in sentences (5.3.5) have the same meaning.

Since the lower S can give us both the active and passive constructions before NP Movement:
(5.3.7).a María besa a José
'Mary kisses Joseph'

and

.b José es besado por María
'Joseph is kissed by Mary'

with the same meaning, the corresponding active and passive constructions, after NP Movement has applied, have also the same meaning.
5.4. Dat-obj Structures

5.4.0 Data

Prototype permitir 'to permit'

Examples:

(5.4.1) María le permitió tocar la flauta a José
'Mary permitted Joseph to play the flute'

ordenó ordered
mandó sent etc.

A. The constituent José, interpreted as the subject of the lower sentence, is a dat object of the upper V, because it pronominalizes to a dat CL.

(5.4.2).a María le permitió tocar la flauta a José
.b María le permitió tocar la flauta
'Mary permitted him to play the flute'

B. The sentential object tocar la flauta is an acc NP, because

i) it pronominalizes to an acc CL,

(5.4.3).a María le permitió tocar la flauta a José
.b María se lo permitió a José
'Mary permitted it to Joseph'
María le permitió tocar la flauta a José y Helena también le permitió;
'Mary permitted Joseph to play the flute and Helen also permitted it to him'

ii) it allows Clefting,

(5.4.4) lo que María le permitió a José fue tocar la flauta
'what Mary permitted Joseph was to play the flute'

iii) it allows Passive,

(5.4.5) tocar la flauta le fue permitido a José
'to play the flute was permitted to Joseph'

iv) it can be questioned.

(5.4.6) ¿qué le permitió María a José? - tocar la flauta
'what did Mary permitted Joseph? - to play the flute'

C. The dat object of the upper V José can be placed between the upper V and the lower S, resulting in a marked order.
(5.4.7) María le permitió a José tocar la flauta

The unmarked order, however, is the order given in the prototype sentences (5.4.1).

D. The lower S cannot be broken.

(5.4.8) *María le permitió [tocar a José la flauta]

E. The CL coreferential to the upper dat NP is attached only to the upper V.

(5.4.9) *María permitió tocarle la flauta a José

5.4.1 Previous Accounts

Bordelois (1974) and Quicoli (1975b) propose analyses similar to the analysis presented here.

Bordelois considers a structure with a sentential object and an NP controller. The rule of Case Marking assigns the acc case to the sentential object and the dat case to the NP controller. She claims that for a CL to climb from the lower sentence to the upper verb, there must be an uninterrupted chain of infinitives. Since the NP controller is located at the right of the sentential object, and the subject of the lower sentence is deleted by the controller, then CLs from the lower sentence can climb to the upper verb.
Quicoli proposes a structure with a dat NP controller and a sentential object. The dat NP is subcategorized by the verb. In Portuguese, CL.M. does not occur in this type of constructions. He claims that this is due to the presence of the subject of the lower sentence between the CLs and the upper verb. The Specified Subject Condition will then block the movement of the CLs.

5.4.2 Proposed Structure

The structure proposed for this construction is the following:

\[(5.4.10)\]

```
S
  \(\quad\)
 NP  VP
  \(\quad\)
   V  NP
    \(\quad\)
     NP \(\_\_\_\)
       \(\quad\)
      S
       \(\quad\)
        NP\(2\)  VP
```

The rule of Matching Pronoun Deletion applies in the same way as for VA-Equi and non-VA-Equi structures. The only difference is that \(\text{NP}_1\) is not the subject of the upper S, but the second NP object of the upper S.

The rule of M.P.D. has then an argument that specifies which NP in the upper S is the \(\text{NP}_1\) of the rule, that is, the NP that controls the deletion. The \(\text{NP}_2\) of the rule, the NP
that must be a FPron and agree with $NP_1$, is always the subject of the lower $S$.

Which NP in the upper $S$ is the argument of the rule is decided by the class to which the verb belongs. Then, for VA-Equi and non-VA-Equi verbs, it is the subject; for dat-obj verbs, it is the second NP object of the verb.

5.4.3 Analysis

The application of C.M. gives then the right cases to the NPs object of the upper $V$; that is, the first object NP - the sentential NP - is acc; and the second object NP - the NP coreferential with the lower subject - is dat: (5.4.0 A and B).

The dat NP can be placed between the $V$ and the acc NP giving the same marked order as when it is done in simple sentences. For example,

(5.4.11).a María le arregló la flauta a José
'Mary fixed the flute to Joseph'

.b María le permitió tocar la flauta a José
'Mary permitted Joseph to play the flute'

have an unmarked order, while
(5.4.12).a Marfa le arregló a José la flauta 
   .b Marfa le permitió a José tocar la flauta

have a marked order: (5.4.0 C)

Since the lower sentence node is maintained in surface structure, no constituents of the upper sentence can be attached between constituents of the lower sentence: (5.4.0 D).

Since the subject of the lower sentence is coreferential to the upper dat NP, and deleted by it, it is the upper dat NP that matches a coreferential CL in the upper S. Then this CL is dat, and attached to the upper V: (5.4.0 E).

There is a case in which both the subject of the lower sentence and the upper dat NP have a coreferential CL, each one in its own sentence. This is when the lower subject has a refl CL. For example,

(5.4.13) Marfa le permitió peinarse a José

'Mary permitted Joseph to comb himself'

This shows that the lower subject was present in the lower S when it agreed with the refl CL se.

5.4.4 CL Movement

CL.M. occurs only under certain conditions. It is
described in what follows.

A. The acc CL underlyingly attached to the lower V is preferentially attached to the upper V.

(5.4.14).a le permití escribir una carta a Juan
'I permitted John to write a letter'

.b +le permití escribirla a Juan
'I permitted John to write it'

.c se la permití escribir a Juan

id.

B. A dat CL attached to the lower V cannot be attached to the upper V.

(5.4.15).a le permití escribirles a los chicos a Marfa
'I permitted Mary to write to the children'

.b le permití escribirles a Marfa
'I permitted Mary to write to them'

.c *{se} les permití escribir a Marfa

id.

C. If there are two CLs, acc and dat, attached to the lower V, they cannot be attached to the upper V.
(5.4.16).a le permití escribirles una carta a los chicos a María
'I permitted Mary to write a letter to the children'

.b le permití escribírsela a María
'I permitted Mary to write it to them'

.c *\{se la\}_{17} permití escribir \{se \}_{les} a María
\{la \}_{le}\ (la moves)

.d *\{se les\}_{se les le} permití escribir\{la\}_{le se}
\{le se \}_{se le} \ (les = se moves)

.e *\{se se la\}_{se le etc.} permití escribir a María
\{les la \}_{la = sela moves}

D. If there is a constituent between the upper V and lower V, no CL.M. can take place.

(5.4.17).a le permití a Juan escribir una carta
'I permitted John to write a letter'

.b le permití a Juan escribir\{la\}_{la}
'I permitted John to write it'

.c *se la permití a Juan escribir
id.

In order to account for these facts, we say that V.A.
and C.G. can always apply whenever the conditions for their application are met. Furthermore we will use the CL Filter defined in 4.9 (1), that is,

CL Filter: The only possible order among CLs is refl dat acc.

This explains while the only possible case in which a CL is found attached to the upper V is when this CL is an acc CL object of the lower V. Since the upper CL is always dat, the configuration dat acc is the only possible one.

Then (5.4.14).c is grammatical, but (5.4.15).c is ungrammatical because of the sequence of CLs *dat dat.

In (5.4.16).c the acc CL la cannot be attached to the upper V because the constituent that moves in the rule of C.G. is the constituent CL, and then if one CL moves, all CLs have to move. If all CLs move, then the forbidden sequence *dat dat will result, and the sentence will be eliminated.

In (5.14.17).c no CL object of the lower V can be attached to the upper V because the constituent a Juan is between the upper V and the lower V, and then V.A. cannot apply.

Note that it is not necessary to say that V.A. has to be ordered after the movement of the NP a Juan because, if V.A. applies, NP-Movement cannot apply because the NP cannot be placed between two adjoined Vs; while if V.A. does not
apply, NP-Movement can apply freely. On the other hand, if NP-Movement applies, V.A. cannot apply because the Vs need to be adjacent for V.A. to apply; while if NP-Movement does not apply, V.A. can apply freely.

To fully account for sentences (5.4.14) we have to refer to the rule of CL Attraction. This rule will give us the + sentence (5.4.18).a and the grammatical sentence (5.4.18).b when the acc object of the lower V is inanimate, and no constituents appear between the upper V and lower V, that is, V.A. has applied,

(5.4.18).a +le permití escribirla a Juan
'I permitted John to write it (inan.)'

(5.4.18).b se la permití escribir a Juan,

but it will give the grammatical sentence (5.4.19).a, and the + sentence (5.4.19).b otherwise,

(5.4.19).a le permití besarla a Juan
'I permitted John to kiss her (anim.)'

(5.4.19).b +se la permití besar a Juan

There is a subclass of dat-obj verbs that do not allow CL.M. at .1l.

Example:
(5.4.20).a  le prohibí escribir la a Juan
   b  *se la prohibí escribir a Juan

'I prohibited John to write it'

There is no other difference in syntactic behavior between dat-obj verbs that allow CL.M., like permitir 'to permit' and dat-obj verbs that do not allow CL.M., like prohibir 'to prohibit'. There is no semantic characterization of the two groups either.

We use the same feature $F_{V.A.}$ that we used for VA-Equi verbs and non-VA-Equi verbs to distinguish these two subclasses. Verbs that allow CL.M. are then [+ VA], while verbs that do not allow CL.M. are [- VA]. [+ V.A] dat-obj verbs allow V.A., and then C.G. is possible, like

(5.4.21)  se la permití escribir a Juan

'I permitted John to write it'

while [- V.A] dat-obj verbs do not allow V.A., and then C.G. is not possible, like

(5.4.22)  *se la prohibí escribir a Juan

'I prohibited John to write it'

As with VA-Equi verbs and non-VA-Equi verbs, O.V.A. is
sensitive to the feature $F_{V.A.}$, and we obtain the same type of behavior with dat-obj verbs, as will be seen in what follows.

When $V.A.$ is possible, then $O.V.A.$ with the upper $V$ can apply.

-- [+ VA] dat-obj verb with no constituents between the Vs:

\[(5.4.23).a\]  
\[\text{se le permitió vender casas a Juan}\]  
\[(sg)\]  
\[(pl)\]  
\[(5.4.23).b\]  
\[\text{se le permitieron vender casas a Juan}\]  
\[(pl)\]  
\[(pl)\]  
\['\text{PRO permitted John to sell houses}'\]

-- [+ VA] dat-obj verb with constituents between the Vs:

\[(5.4.24).a\]  
\[\text{se le permitió a Juan vender casas}\]  
\[(5.4.24).b\]  
\[\text{*se le permitieron a Juan vender casas}\]  

-- [- VA] dat-obj verb:

\[(5.4.25).a\]  
\[\text{se le prohibió vender casas a Juan}\]  
\[(sg)\]  
\[(pl)\]  
\[(5.4.25).b\]  
\[\text{*se le prohibieron vender casas a Juan}\]  
\[(pl)\]  
\[(pl)\]  
\['\text{PRO prohibited John to sell houses}'\]
5.5 Acc-obj Structures

5.5.0 Data

Prototype obligar 'to compel'

Examples:

(5.5.1) María obligó a José a tocar la flauta  'Mary compelled Joseph to play the flute'
   forzó
   mandó
   persuadió
   etc.

A. The constituent José, interpreted as the subject of the lower sentence,\(^{19}\) is an acc object of the upper V, because it pronominalizes to an acc CL.

(5.5.2).a María obligó a José a tocar la flauta
   .b María lo obligó a tocar la flauta
   'Mary compelled him to play the flute'

   Since it is an acc object, it passivizes.

(5.5.3) José fue obligado a tocar la flauta
   'Joseph was compelled to play the flute'

B. The sentencial object a tocar la flauta is a PP.
It is not a dat object, because it does not pronominalize to a dat CL.
(5.5.4).a  María obligó a José a tocar la flauta
      .b  *María le obligó a José
           'Mary compelled Joseph to it'

C. The acc object of the upper V José can be placed after the lower sentence.

(5.5.5)  María obligó a tocar la flauta a José

The unmarked order, however, is the order given in the prototype sentences (5.5.1).

Note the difference in the order of the object NP José in both dat-obj and acc-obj structures in the unmarked order:

(5.5.6) dat-obj)  María le permitió tocar la flauta a José
                   'Mary permitted Joseph to play the flute'

(5.5.7) acc-obj)  María obligó a José a tocar la flauta
                   'Mary compelled Joseph to play the flute'

D. The lower S cannot be broken.

(5.5.8)  *María obligó [a tocar a José la flauta]
E. The CL coreferential to the upper acc NP is attached only to the upper V.

(5.5.9).a María lo obligó a tocar la flauta
   .b *María obligó a tocarlo la flauta
   'Mary compelled him to play the flute'

5.5.1 Previous Accounts

Bordelois (1974) and Quicoli (1975b) propose analyses similar to the analysis presented here.

Bordelois considers a structure with an NP controller and a sentential object. The rule of Case Marking assigns the acc case to the NP controller and the dat case to the sentential object. She claims that, for a CL to climb from a lower sentence to an upper verb, there must be an uninterrupted chain of infinitives. Since the object controller is located between the upper verb and the sentential object, then CLs from the lower sentence cannot climb to the upper verb.

Quicoli proposes a structure with an acc controller NP and a sentential object. The acc controller is subcategorized by the verb. He claims that CLs cannot climb in this construction due to the presence of the subject of the lower sentence between the CLs and the upper verb. The Specified Subject Condition blocks then the movement of the
5.5.2 **Proposed Structure**

The structure proposed for this construction is the following:

![Diagram](image)

The rule of Matching Pronoun Deletion applies in the same way as for the previous structures.

Then, for acc-obj verbs, the argument of the rule of M.P.D. is the first NP object of the verb.

5.5.3 **Analysis**

The application of C.M. gives then the right case to the NP object of the upper V; that is, the first object NP - the NP coreferential with the lower subject - is acc. The second object of the verb is a sentential PP.²⁰ (5.5.0 A and B).

The acc NP can be placed after the sentential PP
giving the same marked order as when it is done in simple sentences.

For example:

(5.5.11).a María mandó a José a la cocina
'Mary sent Joseph to the kitchen'

.b María obligó a José a tocar la flauta
'Mary compelled Joseph to play the flute'

have an unmarked order, while

(5.5.12).a María mandó a la cocina a José

.b María obligó a tocar la flauta a José

have a marked order: (5.5.0 C).

Since the lower sentence node is maintained in surface structure, no constituents of the upper sentence can be attached between constituents of the lower sentence:

(5.5.0 D).

Since the subject of the lower S is coreferential to the upper acc NP, and deleted by it, it is the upper acc NP that matches a coreferential CL in the upper S. Then this CL ir acc, and attached to the upper V: (5.5.0 E).

There is a case in which both the subject of the lower S and the upper acc NP have a coreferential CL, each
one in its own sentence. This is when the lower subject has a refl CL. For example,

(5.5.13).a María obligó a José a peinarse  
'Mary compelled Joseph to comb himself'

.b María lo obligó a peinarse  
'Mary compelled him to comb himself'

This shows that the lower subject was present in the lower S when it agreed with the refl CL se.

5.5.4 CL Movement

CL.M. does not occur in this structure.

(5.5.14).a obligué a Juan a escribir una carta  
'I compelled John to write a letter'

.b obligué a Juan a escribirla  
'I compelled John to write it'

.c *la obligué a Juan a escribir  
'id.

It does not occur even if the acc NP Juan is not between the upper and lower V, or if it is pronominalized.
It does not occur with any other combination of CLs attached to the lower V.

These sentences show that no lower CL can be attached to the upper V. This is so because of the presence of the base-generated acc CL, coreferential with the acc NP object of the upper V. Indeed, even if the surface sentence does not have an upper acc CL, when C.G. takes place, the acc CL is attached to the upper verb in deep structure, and then any sentence that has a sequence of CLs of the form acc CL -
other CL is eliminated by the CL Filter refl dat acc.

The following derivation will exemplify this process.

(5.5.17)  

\[
\begin{align*}
\text{lo obligué Juan a [ él } & \text{ la escribir ella]} \\
\text{acc} & \text{ acc}
\end{align*}
\]

upper cycle:

\[
\begin{align*}
\text{M.P.D.} & \quad \rightarrow \quad \phi \\
\text{NP-Mov.} & \quad \rightarrow \\
\text{V.A.} & \quad [\text{lo obligué a la escribir ella Juan} \\
\text{acc} & \text{ acc acc acc}
\end{align*}
\]

\[
\begin{align*}
\text{C.G.} & \quad \text{lo la obligué a escribir ella Juan} \\
\text{acc acc} & \text{ acc acc}
\end{align*}
\]

\[
\begin{align*}
\text{CL Filter} & \quad \text{refl dat acc} \\
\neq & \quad \text{Sentence is eliminated.}
\end{align*}
\]
5.6 Causative Structure

5.6.0 Data

Prototype hacer 'to make'

Examples:

(5.6.1) María hizo cantar a José  'Mary made Joseph sing'
    dejó
    vio
    oyó
    escuchó

A. If the lower S has no acc nor dat object, the subject of the lower S is an acc object of the upper V.

(5.6.2).a María hizo venir a José
      'Mary made Joseph come'
      .b María lo hizo venir
      'Mary made him come'

B. If the lower S has an acc object but no dat object, the subject of the lower S is a dat object of the upper V.

(5.6.3).a María le hizo tocar la flauta a José
      'Mary made Joseph play the flute'
      .b María le hizo tocar la flauta
      'Mary made him play the flute'
C. If the lower S has a dat object, whether it has an acc object or not, the subject of the lower S is a dat object of the upper V.

(5.6.4).a María le hizo escribirles (una carta) a los chicos a José
'Mary made Joseph write (a letter) to the children'

(5.6.4).b María le hizo escribirles (una carta) a los chicos
'Mary made him write (a letter) to the children'

D. The subject of the lower S follows the acc and dat objects of the lower V, as shown in sentences (5.6.3).a and (5.6.4).a It also follows complements strictly subcategorized by the lower V.

(5.6.5) María le hizo arrojar papeles en el cesto a José
'Mary made Joseph throw papers into the basket'

E. The subject of the lower S precedes the complements not strictly subcategorized by the lower V.

(5.6.6).a María hizo salir a José de la habitación
'Mary made Joseph go out of the room'
María le hizo tocar la flauta a José en la cocina

'Mary made Joseph play the flute in the kitchen'

Summarizing, the surface order of the objects is:
acc object of lower V, dat object of lower V, complements
strictly subcategorized by lower V, subject of lower S, other
complements of lower V.

The subject of the lower S is an object of the upper
V. Its case is assigned as follows:
-- If the lower V has no acc or dat object, the case of the
lower subject is acc.
-- If the lower V has an acc object or a dat object or
both, the case of the lower subject is dat.

F. The subject of the lower S that becomes an acc
object of the upper V does not passivize.

(5.6.7).a Marfa hizo venir a José
'Mary made Joseph come'

.b Marfa lo hizo venir
'Mary made him come'

c *José fue hecho venir (por María)
'Joseph was made come (by Mary)'

d *José hizo ser venido (por María)
'Joseph made be come (by Mary)'

G. As it was seen in (D) and (E), the subject of the lower S can break the lower S between the strictly subcategorized complements of the lower V, and the other complements. It can also break the lower S between other constituents, reflecting a marked order.

(5.6.8) Marfa le hizo tocar a José la flauta
'Mary made Joseph play the flute'

H. No constituent can separate the upper V and the lower V.22

(5.6.9).a *Marfa hizo a José cantar
'Mary made Joseph sing'

.b *Marfa le hizo a José tocar la flauta
'Mary made Joseph play the flute'

.c *hizo Marfa cantar a José

I. The sentential object is not an NP, because
i) it does not pronominalize to a CL,

(5.6.10).a Marfa hizo cantar a José
'Mary made Joseph sing'

.b *Marfa $\frac{10}{le}$ hizo (a José)$^{23}$
'Mary made it (Joseph)'
*Maria le hizo tocar la flauta a José
'Mary made Joseph play the flute'

*María se hizo (a José)
'Mary made it (Joseph)'

*María hizo cantar a José y Helena también
'Mary made Joseph sing and Helen also made it'

ii) it does not allow Clefting,

(5.6.11) *lo que Marfa {lo} hizo (a José) fue
{cantar}
{tocar la flauta}
'what Mary made (Joseph) was {sing
{play the flute}

iii) it does not allow Passive,

(5.6.12) *{cantar
tocar la flauta} (le) fue hecho (a José)
'sing
'play the flute was made (Joseph)'

iv) it cannot be questioned,

(5.6.13) ¿qué (le) hizo Marfa (a José)? - {cantar
tocar la }
'sing
'play the flute'}
J. There is a case in which the underlying subject of the lower S is found in a PP with the Prep por 'by'. This case is usually referred to as the por-Construction (or the par-Construction in French). The cases in which the subject of the lower S is marked as dat are called the a-Construction (or the à-Construction in French).

(5.6.14) María hizo tocar la flauta por José

'Mary made the flute be played by Joseph'

5.6.1 Previous Accounts

There is considerable divergence among previous studies with respect to what the deep structure of causative constructions is.

Kayne (1969), later Kayne (1975), Aissen (1974) and Quicoli (1976) assume a deep structure of the following form.

(5.6.15) \[ S \rightarrow NP \longrightarrow VP \rightarrow V \rightarrow S \]

Since the lower subject appears always to the right of the lower V and objects of the lower V, these theories need a rule that moves either the lower subject to the right of the lower VP, or the lower VP to the left of the lower
subject.

Kayne (1975) proposed a rule of Faire-Infinitive. This rule moves the V and the object NPs to the front of the lower S, and outside of it:

(5.6.16) \[ X - \text{faire} - \text{NP} - V - (\text{NP}) - Y \rightarrow 1 2 4 5 3 6 \]

This rule will give sentence (5.6.18) from deep structure (5.6.17).

(5.6.17) \[ \text{Jean - fera - son ami - partir} \]

(5.6.18) \[ \text{Jean fera partir son ami} \]

'John will make his friend leave'

And sentence (5.6.20) from deep structure (5.6.19).

(5.6.19) \[ \text{Jean - fera - son enfant - boire - un peu de vin} \]

(5.6.20) \[ \text{Jean fera boire un peu de vin à son enfant}^{25} \]

'John will make his child drink some wine'
The individual elements, V and NPs, are moved as separate constituents.

Quicoli (1976) proposed a rule of $\overline{V}$-Preposing, which moves the $\overline{V}$ node that dominates the V and the object NPs to the front of the lower S.

This rule moves the constituent $\overline{V}$, and not the individual elements V and NPs, as Kayne did. Quicoli points out that the node $\overline{V}$ is also dominated by a higher node $\overline{\overline{V}}$ that dominates the other complements of the lower V.

This rule will give sentence (5.6.22) from deep structure (5.6.21),

(5.6.21) \[ \text{je laisserai [Jean [lire ce livre]]} \]
\[ S \]

(5.6.22) \[ \text{je laisserai [ [lire ce livre] à Jean]^{26}} \]
\[ S \overline{V} \]
'I will let John read this book'

Aissen (1974) proposed a rule of Verb Raising that raises the lower V and its objects to the upper S. This rule, contrary to Quicoli's $\overline{V}$-Preposing, 'erasers the lower S node, and collapses both sentences into one.

Bordelois (1974) proposed two structures for causative constructions. If the lower S is
intransitive, the structure is similar to the structure posposed by Kayne, Aissen and Quicoli, that is, structure (5.6.15). If the lower S is transitive, the structure has an object in the upper S that deletes the subject of the lower S under coreferentiality. The deep structure is of the following form.

(5.6.23)

Bordelois chooses structure (5.6.23) because with this structure no movement rule is necessary. When the upper object deletes the lower subject, all constituents appear in the required surface order. Sentence (5.6.20) will have deep structure (5.6.24), and the surface structure obtained at the bottom of the tree.
Bordelois chooses deep structure (5.6.15) for a lower S with an intransitive verb because of sentences like the following:

(5.6.25) j'ai fait sortir Jean de la maison

'I made John go out of the house'

where the lower subject is found between the lower V, sortir, and the complement of the lower V, de la maison. For this type of sentence, deep structure (5.6.23) will give the wrong surface order, that is,

(5.6.26) *j'ai fait sortir de la maison Jean

For sentences with lower intransitive V, Bordelois needs then a Movement Rule that moves the lower subject to
the right of the lower V.

Strozer (1976) does not propose a unique deep structure for Causative Constructions, but a set of different deep structures to account for different configurations of Causatives. These structures are only for Spanish, and are the following:

\[(5.6.27) \ V \ [^{NP}_{+DIR}] \ S, \ V \ [^{NP}_{-DIR}] \ S, \ V \ [^{NP}_{-DIR}] \ V'', \ V \ S \ [^{NP}_{-DIR}] \]

\[V \ V'' \ [^{NP}_{-DIR}], \ V \ V'.\]

The first five are structures for the \textit{a}--construction, and the last one is a structure for the \textit{por}--construction.

She claims that all the possible combinations in the following sentence are grammatical in Spanish:

\[(5.6.28) \ \text{Lola} \ \{\text{lo} \ \{\text{dejó} \ \{\text{hizo} \ \text{vio} \ \text{oyó} \}} \ \{\text{salir \ sacar \ la \ nina \ a \ la \ calle}\}
\text{Lola} \ \{\text{let} \ \text{made} \ \text{saw} \ \text{him} \ \{\text{leave} \ \text{take \ the \ girl \ out \ into \ the \ street}\},\]

She adds that, in sharp contrast with this, in French the acc CL is only admissible when the embedded VP is intransitive, while the dat CL is only admissible when the
embedded VP is transitive.

5.6.2 Proposed Structure

The structure proposed for this construction is the following:

(5.6.29)

```
    S
  /    \
 NP VP
 /    \   : complements of V_1
V_1 S NP_1
 /    \
 NP_2 VP
   /    \
 VP' PP* : strictly subcategorized by V_2
      /    \
 VP' PP* : strictly subcategorized by V_2
       /    \
 V_2 NP_0 PP
```

The rule of Matching Pronoun Deletion applies in the same way as for the previous structures.

Then, for causative verbs, the argument of the rule of M.P.D. is the NP object of the verb.

The justification of the proposed structure will be done in 5.6.10, after a major part of the data for Causative Constructions have been analyzed.

We have included a new category, VP', that dominates V and the object strictly subcategorized by the verb. The other complements are dominated only by the VP.
The rule that generates the VP, formulated in 3.3.2, is now reformulated in the following way.

(5.6.30) \[ \text{VP} \rightarrow \text{VP}' \quad \text{PP}^* \]

(5.6.31) \[ \text{VP}' \rightarrow \overline{V} \quad \text{NP}_0^2 \quad (\text{PP}) \]

For the causative structures we need a rule of the form

(5.6.32) \[ \text{VP}' \rightarrow \overline{V} \quad \text{S} \quad (\text{NP}) \]

Causative verbs subcategorize then a sentential object and an optional NP. The sentential object is the lower S of the causative structure.

5.6.3 Reformulation of Verb Adjunction

The rule of V.A. is now extended to cover the causative structures. As it was formulated in 5.1.5, the rule of V.A. Chomsky-adopts the lower \( \overline{V} \) to the upper \( \overline{V} \), removing all the nodes between the upper VP and the lower \( \overline{V} \), and attaching the complements under the lower VP to the upper VP.

Since we have expanded the generation of the VP, we have to indicate how the strict complements of the VP' and the other complements of the VP in the lower S will be
attached to the VP' and VP in the upper S. This is done as follows.

The rule of V.A. takes the lower V and Chomsky-adoins it to the upper V, removing all the nodes between the upper VP' and the lower V. The constituents that were under the lower VP' are attached to the upper VP', and the constituents that were under the lower VP are attached to the upper VP. When constituents are attached to a node that already has its own constituents, the underlying linear order is preserved.

What this rule does, then, is to make the two sentences collapse into the upper sentence, Chomsky-adoining the two Vs, in such a way that constituents that were under a certain node A in the lower S are attached to the same node A in the upper S. If different constituents merge into the same node, the underlying linear order is preserved.

Rule of V.A.

Structurally,
As pointed out in 5.1.5, this type of rule is not a desirable transformation. It does not reorder constituents, except for the interchange in linear order of $X_1$ and $Y_2$. We want this rule not to be a regular transformation, but a central syntactic process that takes place in Romance languages, with the purpose of reducing a bisentential structure to a simple sentence. The justification of this proposal, together with the proposed structure for Causative Constructions, will be done in 5.6.10.

5.6.4 Analysis

We can account now for the facts mentioned earlier in the following way.

The surface order of the objects follows from the structure proposed for causative constructions and the application of the rule of V.A. The subject of the lower $S$ is an object of the upper $V$ generated under the upper $VP'$. After the rule of V.A. has applied the objects strictly subcategorized by the lower $V$ are attached to the upper $VP'$, preceding the controller. The other complements of the lower $V$ are attached to the upper $VP$, following then the controller: (5.6.0 D and E).

The lower $S$ can be broken at any point between its constituents. This is so because V.A. destroys the lower $S$, and attaches its complements to the upper $S$. The objects of
the lower S can then be broken, reflecting a marked order, as in a simple sentence: (5.6.0 G).

No constituents can separate the upper V and the lower V because V.A. adjoins both Vs, and this results in the impossibility of attaching a constituent between the Vs: (5.6.0 H).³⁰

The sentential object is not an NP, but an S: (5.6.0 I). Aside from the increase in structure complexity, this is the fact that distinguishes dat-obj structures from causative structures. Dat-obj verbs subcategorize NP\S NP, while causative verbs subcategorize S NP.

To account for the surface case of the controller, we extend the rules of Case Matching (C.M.) and CL/NP Agreement (C.N.A.) as follows.

The rules of C.M. and C.N.A. apply only to a sentence in which the objects that are subcategorized by the verb are NPs or PPs of the form (Prep NP). This is so because it is the objects that are subcategorized by the verb whose case or preposition and coreferential CLs have to be checked. These objects are the objects under the VP'.

If some object under the VP' is an S, then the rules of C.M. and C.N.A. cannot apply, because they have to wait until a configuration with all NPs is found.

In causative constructions, then, the rules of C.M. and C.N.A. do not apply in the upper S until the node S is
removed by the V.A. rule.

With this consideration, the current rule of C.M. already predicts the facts presented in 5.6.0 A and B:

When the lower S has no acc or dat object, the controller is found as the first NP to the right of the lower V, and as such it must be an acc object. When the lower S has an acc object but no dat object, the controller is found as the second NP to the right of the lower V, and as such it must be a dat object.

The complex \( \overline{V} \) formed by the adjunction of the upper \( \overline{V} \) and lower \( \overline{V} \) does not have any special subcategorization for objects, and therefore the standard subcategorization \text{acc dat} \) applies.

When the lower V has a dat object, the controller is a dat NP. The rule of C.M. must then check for a second dat NP whenever there is an NP following a dat NP.

5.6.5 Final Formulation of Case Matching

The rule of Case Matching does the following:

-- It checks if the NP to the left of the verb is [+ NOM].
-- It checks if the NPs to the right of the verb are [- NOM].
-- It checks if the number of objects present in the sentence agrees with the number of objects that the verb can have, considering whether an object is subcategorized optionally or obligatorily.
If the particular verb requires special case markings, it checks whether the object NPs have the required case, and the object PPs have the required preposition.

If the particular verb does not require special case marking, it checks whether the first NP is a [+ ACC] NP, and the second and third NPs are [- ACC] NPs.

This rule operates only on constituents under the VP', and only if all constituents are NPs or a PP of the form (Prep NP). If any of these checkings fail, the sentence is eliminated.

This accounts for the facts in (5.6.0 C).

5.6.6 CL Movement

CL.M. occurs only in certain situations. It is described in what follows.

A. The CL coreferential to the controller is always attached to the upper V.

(5.6.34).a María hizo venir a José
'Mary made Joseph come'

.b *María hizo venirlo

c María lo hizo venir
'Mary made him come'

.d *María hizo tocarle la flauta a José

.e María le hizo tocar la flauta a José
'Mary made Joseph play the flute'
B. If there is no controller, acc and dat CLs attached to the lower V can also be attached to the upper V.

(5.6.35).a María hizo escribir
   María la hizo escribir
   'Mary made X write it'

C. If there is a controller, acc and dat CLs attached to the lower V cannot be attached to the upper V, with the exception of only one case. The exceptional case is the following: If the CL coreferential to the controller is dat, and there is only one CL attached to the lower V, and the CL is acc, then this CL can be attached to the upper V.

If the object of the lower V is inanimate, the acc CL can only be attached to the upper V. For some speakers
this is not a requirement, but a preference.

If the object of the lower V is animate, the acc CL can only remain attached to the lower V. For some speakers this is also not a requirement, but a preference.

General case:

(5.6.36).a  Marfa le hizo escribir_{\textit{le}}
  .b  *Marfa \{le\}_{\textit{se}}33 le hizo escribir
      'Mary made him write to him'
  .c  Marfa le hizo escribir\textit{\textsubscript{\text{se\_sela}}}
  .d  *Marfa \{le\}_{\textit{se\_se}} la hizo escribir
      'Mary made him write it to him'
  .e  Marfa lo hizo besarse
  .f  *Marfa lo se hizo besar
      'Mary made him kiss himself'

Exceptional case:

object of lower V is inanimate:

(5.6.37).a  +Marfa le hizo tocar\textit{la}
  .b  Marfa se \textit{la} hizo tocar
      'Mary made him play it (inanim.)'
object of lower V is animate:

(5.6.38).a Marfa le hizo besar\textsubscript{la}  
'bMaría se la hizo besar'

With the rules proposed to this point, and the CL Filter, we can account for all these facts. It only has to be said that V.A. is obligatory for causative verbs.

The rules of C.M. and C.N.A. ensure that all objects of the lower V must have a coreferential CL attached to the lower V. C.M. and C.N.A. cannot apply in the upper S until the node S is removed by the V.A. rule, leaving only NPs as objects of the upper V. Then it is only a CL attached to the upper V that can be coreferential to the controller: (5.6.6 A).

If there is no controller, a causative structure is syntactically similar to a VA-Equi structure, and should then behave in the same way. Indeed, they do. Acc and dat CLs attached to the lower V can also be freely attached to the upper V, because after V.A. has applied, C.G. can apply, and the CLs can glide from the lower V to the upper V. Since there is no controller, there is no CL attached to the upper V, so that C.G. always gives grammatical sentences: (5.6.6 B).

If there is a controller, there will be a coreferential
CL attached to the upper V. If C.G. applies, the resulting configuration of CLs attached to the upper V will be in general excluded by the CL filter. The only configuration that is not excluded by the CL Filter is the sequence dat\_acc. This is, in fact, the only case in which a CL attached to the lower V can be found attached to the upper V when there is a controller.

The rule of CL Attraction, in effect for VA-Equi, Aux and dat-obj structures, applies also for causative structures, giving the further results of 5.6.6 C. That is, if the object of the lower V is inanimate, the acc CL is attached to the upper V. If the object of the lower V is animate, the acc CL remains attached to the lower V.
5.6.7 Double Dative Object

Causative constructions with a dat object of the lower V are very interesting because the dat object interacts with the upper controller in different ways. As seen in 5.6.0 C, whenever there is a lower dat object, the controller is also dat. After V.A., then, both objects are dat objects.

In the analysis that follows we will use a sentence whose underlying structure will be of the form

(5.6.39) I made [John write to Peter]

where John and Peter can be replaced by a F Pron to give all the possible combinations. Two NPs, John and Peter, with the same features of person, number and gender are used on purpose, so that the corresponding coreferential CLs are the same, and we can study the different cases of ambiguity and non-ambiguity that arise.

To distinguish the two dat NPs, we will use the subscript _s to refer to the upper controller - underlying lower _subject - and the subscript _o to refer to the lower dat _object.

D.D.O. in Spanish

Consider the sentence
This sentence is not preferred because of the sequence _a NP a NP_ when the NPs are acc or dat NPs. (See FN 21). However, if _a Juan_ is separated from _a Pedro_, the sentence is all right:

_.b_  

=Juan_ le_s hice escribirle_o a Pedro_o

where _a Juan_ was topicalized, or:

_.c_  

le_s hice escribirle_o a Juan_s una carta a Pedro_o

'I made John write a letter to Peter'

where there is an acc object of the lower V, _una carta_, and _a Juan_ was moved between the verb and the acc object. In this sentence a pause between _a Juan_ and _una carta_ makes the sentence clearer.

Since in Spanish dat object NPs require a dat CL attached to the verb, there are no interesting cases that we can study. The CL corresponding to the controller is always attached to the upper V, and the CL corresponding to the lower dat object is always attached to the lower V. The CL Filter *dat dat*, referred to in 5.4.4, excludes two dat CLs
in sequence,\(^{34}\) so that the CL attached to the lower V cannot glide to the upper V through C.G.

**D.D.O. in French**

In French dat object NprNPs cannot have a coreferential dat CL, therefore, the causative constructions with double dative objects present more possibilities of study. We will consider first sentences with NprNP as dat object, and then sentences with CL or FPron as dat object.

1. Sentences with NprNP as dat object of the lower verb.

1.1 Without controller.

\(5.6.41\)

\[ \text{j'ai fait écrire à Pierre}_0 \]

'I made X write to Peter'

1.2. With controller.

\(5.6.42a\)

\[ \text{j'ai fait écrire à Pierre}_0 \text{ à Jean}_s \]

'I made John write to Peter'

\(5.6.42b\)

\[ \text{je lui}_s \text{ ai fait écrire à Pierre}_0 \text{ CL}\]

'I made him write to Peter'

Like in Spanish, sentence \(5.6.42a\) is not preferred because
of the sequence à NP à NP when the NPs are acc or dat NPs. (See FN 21.) However, if à Jean is topicalized, in which case a CL attached to the upper verb is required (see 4.14), the sentence is all right. For example,

\[ \text{c} \quad \text{à Jean} \text{s, je lui} \text{s ai fait écrire à Pierre} \text{o} \]

2. Sentences with CL or FPron as dat object of the lower verb.

2.1 Without controller

\[(5.6.43).\text{a} \quad \text{*j'ai fait écrire a lui}_\text{o} \quad \emptyset \text{ FPron} \]

'I made X write to him'

\[(5.6.43).\text{b} \quad \text{+} \text{j'ai fait lui}_\text{o} \text{ écrire} \quad \emptyset \text{ lower CL} \]

\[(5.6.43).\text{c} \quad \text{je lui}_\text{o} \text{ ai fait écrire} \quad \emptyset \text{ upper CL} \]

(5.6.43).a is ungrammatical because French does not allow a dat or acc FPron to be in surface structure; instead a CL must surface.

(5.6.43).b is ungrammatical because in causative constructions French does not allow object CLs attached to the lower verb in surface structure. There is a dialect of French that allows CLs attached to the lower V, and for that dialect, this sentence is accepted. This has been marked with the + sign.
(5.6.43).c is ungrammatical because C.G. has taken place.

2.2 With controller.

(5.6.44).a₁ *j'ai fait écrire à lui₁ à Jean₂  
"I made John write to him"

(5.6.44).a₂ *je lui₂ ai fait écrire à lui₁  
"I made him write to him"

(5.6.44).b₁ *+j'ai fait lui₁ écrire à Jean₂  
'id. (a₁)'

(5.6.44).b₂ *+je lui₂ ai fait lui₁ écrire  
'id. (a₂)'

(5.6.44).c₁ *je lui₁ ai fait écrire à Jean₂  
'id. (a₁)'

(5.6.44).c₂ *je lui₂ lui₂ ai fait écrire  
'id. (a₂)'

(5.6.44).a₁ and a₂ are ungrammatical because French does not allow a dat or acc F Pron to be in surface structure.

(5.6.44).b₁ and b₂ are ungrammatical because in causative constructions French does not allow object CLs attached to the lower verb in surface structure. As pointed out in 5.6 - 2.1, there is a dialect of French that allows CLs attached to the lower V, and for that dialect, these
sentences are accepted.

\[(5.6.44).c_2\] is ungrammatical because of the CL Filter
\[\ast \text{dat dat}\] that excludes two dat CLs in sequence. 36

But, why is \[(5.6.44).c_1\] ungrammatical?

Compare \[(5.6.42).b\] with \[(5.6.44).c_1\], that we repeat
and renumber here for convenience.

\[(5.6.45).a\] \quad \text{je lui}_s \text{ ai fait écrire à }
\text{Pierre}_o \quad \text{CL NprNP}

'I made him write to Peter'

\[(5.6.45).b\] \quad \ast \text{je lui}_o \text{ ai fait écrire à Jean}_s \quad \text{NprNP upper CL}

'I made John write to him'

Both sentences \[(5.6.45).a\] and \[.b\] have the same sur-
face configuration:

\[(5.6.46)\] \quad \text{je lui}_ \text{ai fait écrire à NP}

but only the sentence in which \text{lui} represents the controller,
and \text{à NP} represents the lower dat object is grammatical.

This otherwise unexplained fact follows automatically
from the fact that CLs are generated in the base, and they
coexist with NPs during the whole syntactic derivation. We
will show the derivation of both sentences \[(5.6.45).a\] and
\[.b\], and we will see that while \[(5.6.45).a\] surfaces, \[(5.6.45).b\]
does not.
Derivation of (5.6.45).a

\[(5.6.47) \quad \text{je lui} \_ \text{ai fait \[il lui} \_ \text{écrire Pierre]} \text{lui} \_ ^{37}\]

lower cycle
C.M. + C.N.A.

upper cycle
C.P.D.
V.A. \[\text{lui} \_ \text{ai fait lui} \_ \text{écrire}\]
C.M. + C.N.A.
C.N.D.
surface form \(\text{je lui} \_ \text{ai fait écrire à Pierre}^{38}\)

Derivation of (5.6.45).b

\[(5.6.48) \quad \text{je lui} \_ \text{ai fait \[il lui} \_ \text{écrire lui} \_ ] \text{Jean} \_ \]

lower cycle
C.M. + C.N.A.

upper cycle
C.P.D.
V.A. \[\text{lui} \_ \text{ai fait lui} \_ \text{écrire}\]
C.G. \[\text{lui} \_ \text{ai fait lui} \_ \text{écrire}\]
CL Filter will eliminate this sentence, because of the sequence *dat dat.
The rest of the derivation would be:
C.M. + C.N.A.
C.N.D.
surface form \(\star \text{je lui} \_ \text{ai fait écrire à Jean}\)

Notice that, in order to get (5.6.45).b we have to apply C.G., since \text{lui} \_ is attached to the upper V. But then,
since lui(s) is also attached to the upper V, the sentence is eliminated. This is why, even if in surface structure there is no lui(s) attached to the upper V, the presence of lui(s) during the syntactic derivation is crucial.

Then, if we have a sentence like the following

(5.6.49).a je lui ai fait écrire une lettre à Napoléon

there is only one possible reading

.b j'ai fait [lui écrire une lettre à Napoléon]
'I made him write to Napoleon'.

The reading

.c j'ai fait [Napoléon écrire une lettre à lui]
'I made Napoleon write a letter to him'

is out.

D.D.O. in Italian

Italian provides a further confirmation of this process, but with a different outcome.

In Italian, as pointed out by Burzio (1976), there is no CL Filter that excludes the sequence *dat dat. Then
the Italian counterparts of both sentences (5.6.45).a and .b should be grammatical. In fact, they are.

(5.6.50).a  gli\textsubscript{s} ho fatto scrivere a Pietro\textsubscript{o}  
'I made him write to Peter;

(5.6.50).b  gli\textsubscript{o} ho fatto scrivere a Giovanni\textsubscript{s}  
'I made John write to him'

The derivation of (5.6.50).a is similar to the derivation (5.6.47) of (5.6.45).a, giving the same grammaticality result.

The derivation of (5.6.50).b follows.

(5.6.51)  \textsubscript{\underline{gli\textsubscript{s} ho fatto \underline{egli gli\textsubscript{o} scrivere egli\textsubscript{o} Giovanni}}}

lower cycle  
C.M. + C.N.A.

upper cycle  
C.P.D.  \textsubscript{\underline{\phi}}  
V.A.  \textsubscript{\underline{gli\textsubscript{s} ho fatto gli\textsubscript{o} scrivere}}  
C.G.  gli\textsubscript{s} gli\textsubscript{o} ho fatto scrivere  
C.M. + C.N.A.  \textsubscript{\underline{\phi}}  
C.N.D.  \textsubscript{\underline{\phi}}  \textsubscript{\underline{\phi}}  \textsubscript{\underline{\phi}}  \textsubscript{\underline{\phi}}  \textsubscript{\underline{\phi}}  \textsubscript{\underline{\phi}}  \textsubscript{\underline{\phi}}  
surface form  gli ho fatto scrivere a Giovanni

Then, if we have a sentence like the following
Both readings

(5.6.52)  gli ho fatto scrivere una lettera a Francesco

ho fatto egli scrivere una lettera a Francesco
'I made him write a letter to Francis'

and

ho fatto Francesco scrivere una lettera a egli
'I made Francis write a letter to him'

are grammatical.

Furthermore, the case when both dat NprNPs are deleted, leaving two CLs in surface structure attached to the upper V, is possible.

In order to do this, we have to point out that there is a rule for Italian CLs, similar to the Spurious-SE Rule in Spanish (see 3.5.1), that does the following:

Spurious-CI Rule:  gli gli → gli ci

The sentence with two upper dat CLs is the following.

(5.6.53)  gli ci ho fatto scrivere
'I made him write to him'
The derivation of (5.6.53) follows.

(5.6.54) \[ \text{gli}_s \text{ ho fatto} \{\text{egli}_o \text{ scrivere} \text{egli}_o \} \text{egli}_s \]

lower cycle
C.M. + C.M.A.

upper cycle
C.P.D.
V.A. \[ \text{gli}_s \text{ ho fatto} \text{gli}_o \text{ scrivere} \]
C.G. \[ \text{gli}_s \text{ gli}_o \text{ ho fatto} \text{scrivere} \]
C.M. + C.N.A.
C.N.D.
Spurious-CI \[ \text{gli ci} \]
surface form \[ \text{gli ci} \text{ ho fatto} \text{scrivere} \]

5.6.8 No Accusative Object

All the cases that we have considered with the D.D.O. construction can have an optional lower acc object. In the examples of this section, we have used sentences with only a dat object, but all these sentences can have an acc object too. For example, the underlying form used for all the examples (5.6.39) could be changed to

(5.6.55) \[ \text{I made} \{\text{John write a letter to Peter}\} \]

and everything that has been said for the D.D.O. construction is still valid.

However, if there is no lower acc object, then there is an alternative construction available in French and
Italian. In this construction the controller, instead of being marked as a dat NP, is marked as an acc NP.

For the discussion that follows we will use French and an underlying structure of the form

(5.6.56) I made [John telephone to Mary]

The sentence in French corresponding to the form (5.6.56) is the following:

(5.6.57) j'ai fait téléphoner Jean à Marie
        'I made John telephone to Mary'

This construction places the controller between the lower V and the object of the lower V. This is the position that the controller occupies when the object of the lower verb is not strictly subcategorized by the V. For example, if the sentence

(5.6.58) Jean sort de la maison
        'John goes out of the house'

is embedded under a causative verb, we get the sentence
That is, the controller is placed between the lower V and the complements not strictly subcategorized by the verb.

Pronominalization of the controller Jean shows that it is an acc object of the upper V.

Sentence (5.6.60).a is ungrammatical even for the dialect of French that allows object CLs attached to the lower verb in causative constructions.

The solution that we propose here is the following.

In sentences in which there is no lower acc object, the lower dat object can be derived under the VP, as an à-PP, instead of under the VP', as a dat NP. Then sentence (5.6.57) will follow automatically. For example
This solution says that in this type of construction, Marie can behave both as a dat NP:

(5.6.63) \[ \text{je \ lui \ à \ fait \ téléphoner \ à \ Marie} \]

'I made him telephone to Mary'

and as an à-PP:

(5.6.64) \[ \text{j'ai fait téléphoner Jean à Marie} \]

'I made John telephone to Mary'

This is confirmed by the pronominalization of à Marie. In (5.6.63) à Marie pronominalizes to a dat CL, that means, according to the definition of a dat object, that à Marie is a dat object. For example
In (5.6.64), however, à Marie does not pronominalize to either a dat or an acc CL, that means that à Marie is a PP. For example

(5.6.66).a  *j'ai fait {lui le} téléphoner Jean
          .b  *je {lui le} ai fait téléphoner Jean

'I made John telephone to her'

Note that (5.6.66).a should be a grammatical sentence for the dialect of French that allow CLs attached to the lower verb in causative constructions, but it is ungrammatical.

Even if Jean pronominalizes to an acc CL, the same paradigm is obtained:

(5.6.67).a  *je l'ai fait {lui le} téléphoner
          .b  *je {lui le le} ai fait téléphoner

'I made him telephone to her'
5.6.9 The por-Construction

Let us consider the following sentences:

(5.6.68).a María le hizo cambiar la rueda al mecánico
  .b María hizo cambiar la rueda por el mecánico
  'Mary made the mechanic change the wheel'

Causative Constructions that have a lower acc object
can have the subject of the lower sentence in a por-PP:
(5.6.68).b, instead of as a dat object of the upper verb;
(5.6.68).a.

If the lower sentence does not have an acc object,
the construction with the por-PP is not possible:

(5.6.69).a María hizo venir al mecánico
  .b *María hizo venir por el mecánico
  'Mary made the mechanic come'

We will call the sentences that have the lower subject
in a por-PP a Causative por-Construction, and the sentences
that have a dat controller a Causative a-Construction.

Kayne, and later Quicoli, has shown that the por-
Construction exhibits properties similar to a Causative
Construction with a passive structure in the lower sentence.
They propose that the por-Construction can be derived from
a regular Causative Construction by applying the Agent-Postposing part of the Passive Transformation to the lower sentence.

For the por-Construction we propose the following structure:

(5.6.70)

This structure is the same structure proposed for the Passive Construction in 4.4, so that the same PHS rules can generate the Passive Construction and the Causative por-Construction.

The Agent Postposing Rule formulated in 4.4 also applies to this structure giving
Then, the rule of Verb Adjunction applies.

The *por*-Construction differs then from the *a* construction in that there is no upper controller. Instead the lower sentence has a *por*-PP similar to the Passive Construction.

The fact that the *a*-Construction has an upper controller, while the *por*-Construction does not, can be confirmed by the behavior of CLs attached to the lower verb.

As seen in 5.6.7, a dat CL or a sequence of dat acc CLs underlyingly attached to the lower verb cannot be attached to the upper verb in the *a*-Construction. This is due to the fact that the dat controller has to have a co-referential dat CL attached to the upper verb. Then, if C.G. applies, a dat CL from the lower verb is attached to the upper verb, the forbidden sequence *dat dat* will be produced, and the sentence is eliminated.

In the *por*-Construction, however, since there is no
upper controller, there is no dat CL attached to the upper verb. Then, if C.G. applies, there is no forbidden sequence of CLs, and the CLs from the lower verb can be freely attached to the upper verb.

The following sentences exemplify both cases.

a-Construction:
(5.6.72).a María le hizo escribirles una carta a José
  .b *María {le} le {se} hizo escribir una carta a José
    'Mary made Joseph write a letter to them'
  .c María le hizo escribirlesla a José
  .d *María {le} se la hizo escribir a José
    'Mary made Joseph write it to them'

por-Construction:
(5.6.73).a María hizo escribirles una carta por José
  .b Marfa les hizo escribir una carta por José
    'Mary made Joseph write a letter to them'
  .c María hizo escribirlesla por José
  .d Marfa se {la} hizo escribir por José
    'Mary made Joseph write it to them'
5.6.10 **Final Remarks**

As seen in 5.6.1, Kayne, Aissen and Quicoli proposed a deep structure for Causative Constructions of the following form:

\[(5.6.74) \quad V \left[ g \text{ NP VP } \right].\]

Aissen & Perlmutter, in the framework of Relational Grammar, proposed also an underlying bisentential structure similar to (5.6.74). Bordelois proposed two deep structures, as follows:

\[(5.6.75) \quad V \left[ g \text{ NP VP } \right] \quad \text{for intransitive lower } S,\]
\[V \left[ g \text{ NP}_i \text{ VP } \right] \text{NP}_i \quad \text{for transitive lower } S.\]

Strozer proposed a set of six different deep structures, listed in (5.6.27), that can be summarized as follows:

\[(5.6.76) \quad V \text{ NP } \left\{ S_{V'} \right\} \text{ and } V \left\{ S_{V''} \right\} \text{ NP} \quad \text{for the a-}\]
\[\text{Construction, }\]
\[V \text{ V'} \quad \text{for the por}\]
\[\text{Construction.}\]

In this work we proposed a unique structure for Causative Constructions of the form:
(5.6.77) \( V \rightarrow s \ NP_2 \ VP \rightarrow NP_1 \)

If \( NP_2 \) is a FPron that agrees in person, number and gender with \( NP_1 \), then \( NP_2 \) is deleted by the rule of Matching Pronoun Deletion. Otherwise the sentence is eliminated.

We propose the deep structure (5.6.29) with an object controller NP for Causative Constructions because of the following reasons:

1. In order to avoid a special movement transformation that is unique to Causative Constructions for the type of structures being considered in this study, that is, a structure consisting of an upper clause and a superficially subjectless infinitival lower clause. For these structures we have a rule, Matching Pronoun Deletion, that deletes the underlying subject of the lower sentence.

Further application of the rule of Verb Adjunction to the deep structure proposed in 5.6.2 gives the surface order for Causative Constructions without a movement rule. Instead of a movement rule specific to Causative Constructions, we use a principle of superposition of sentence structures that establishes the following:

Principle of Superposition of Structures.

'Whenever a bisentential structure is reduced to a simple sentence, constituents attached to a node A in the
lower sentence will be attached to the same node A in the upper sentence. When constituents are attached to a node that already has its own constituents, the underlying linear order is preserved.'

The rule of Verb Adjunction can be expressed then as an adjunction transformation that adjoins two adjacent verbs in a bisentential structure, and causes the reduction of the structure to a simple sentence. The Principle of Superposition of Structures will produce then the right output configuration.

2. Only an animate NP can be the controller in a Causative construction. The same is true for the dat-obj and acc-obj structures. If there were no upper object controller, we must specify that the subject of the lower sentence has to be animate. If the upper verb subcategorizes a sentence as complement, we do not have a way to indicate that the subject of this sentence has to be animate. If there is an upper object controller, however, the animate NP can be directly subcategorized by the upper verb.

Furthermore, since we need the animate-NP subcategorization for dat-obj and acc-obj structures, this will be simply an extension to Causative Constructions of the same procedure.
Far from being the end of a chapter in Linguistic Theory, this work is merely the continuation of many previous works on Clitics and Romance languages. It has attempted to set up some basic ideas that can help to continue the discovery of the intricate nature of language. Even though there is a sense of convergence to an ultimate truth, perhaps this convergence is asymptotic, and we will never be able to attain the final goal. However, it is time to suspend this study and say, as Ptolemaeus did almost two thousand years ago,

"Now that these things have been added, Syrus, and to my mind about all things which ought to be considered in such a treatise have been worked out as much as the time to the present affords for discovery and more accurate revision and annals suggest is useful for the theory and not just as demonstration, it is therefore fitting and proper that this treatise end here."

The Almagest, XIII, Epilogue
Footnotes to Chapter 5

1 Some of these verbs, like poder 'can', deber 'must', etc. have a root meaning and an epistemic meaning. The meaning of the verbs that belong to the VA-Equi structures is the root meaning. The same verbs with the epistemic meaning belong to the Aux class.

2 For verbs belonging to this class with both root and epistemic meaning, like deber 'must', the corresponding sentences have different meaning under the root interpretation, but the same meaning under the epistemic interpretation. This will be dealt with in the section about Aux structures.

3 Passive is not done with some verbs like querer (when querer means 'to want'). For example,

    María quiere la flauta
    'Mary wants the flute'

*la flauta es querida por María
    'the flute is wanted by Mary'

But Passive can be done with other verbs like desear 'to wish'. For example,

    María desea la flauta
    'Mary wishes the flute'
la flauta es deseada por María
'the flute is wished by Mary'
(For some speakers passive sentences are non-preferred in general, due to the fact that Passive is in a process of being eliminated in Spanish.)

4 In this framework we can say that verbs are generated with different values of features corresponding to tense (mode, aspect, etc.). Rules can check, then, whether these features have certain particular values.

5 A sentence that does not have the CL se in either the lower S or the upper S will be eliminated because the impersonal subject PRO requires a refl CL.

6 Recall that a CL is attached to the right of the verb if the verb is in the infinitive form.

7 We will use the surface form of the FProns to refer to the FPron with particular values for the features of person, number and gender. Then él 'he' represents the FPron that is [+3P], [-PLUR], [-FEM].

8 French allows certain constituents between adjoined verbs. For this, see 5.1.8.

9 I call original sentence the sentence prior to the application of the rule.
10 The classification of verbs given here has been done considering the standard dialect of Spanish. For some speakers, however, there is some variation with respect to what verbs belong to each class.

For example, esperar 'to hope' is a VA-Equi verb for some speakers.


12 The sequence selas is obtained from lelas by the Spurious-SE Rule, defined in 3.5.1.

13 The verbs that belong to this class, called in general Auxiliary verbs, are the epistemic modals. These verbs have usually also a root meaning, in which case they belong to the VA-Equi class.

14 We will refer to the constituent interpreted as the subject of the lower sentence simply as the subject of the lower sentence, or as the lower subject. It will be understood, as we will see in 5.4.2, that the syntactic underlying subject is a pronoun coreferential to an object of the upper verb.

15 This sentence is correct with the meaning 'Mary permitted (somebody) to play the flute for Joseph'
16 With this combination of CLs, or with any other combination, the sentence is ungrammatical.

17 For this sentence, and for the sentences that follow, with the actual combination of CLs given, or with any other combination, the sentences are ungrammatical.

18 Other verbs in this subclass are sugerir 'to suggest', pedir 'ask', etc.

19 See footnote 14.

20 It is curious that the sentential object is the second object of the verb, and has the preposition a, which is the preposition that marks the dat case, which is the case that is assigned to a second object. This sentential PP, however, does not behave as a dat object.

21 Sentences with a sequence of two a NP's, where the NPs are acc or dat NPs, are not preferred. The same sentence, however, with the outer a NP placed at the beginning of the sentence is all right.

    A José María le hizo escribirles (una carta) a los chicos

For a discussion about this topic, see Aissen (1974) and Bordelois (1974).

22 French allows certain constituents between adjoined verbs.
For this, see 5.1.8.

23 Sentences that have the predicate lo hizo '(she) made it' are grammatical with the meaning '(she) did it', but they do not correspond to the pronominalization of the corresponding causative sentences.

24 Sentences with the por-Construction are sometimes not well accepted by some speakers. They usually receive the same judgement as a corresponding Passive sentence like

\[ \text{la flauta fue tocada por José} \]

'\text{the flute was played by Joseph}'

For an analysis of the por-Construction, see 5.6.9.

25 Kayne has a rule of à-Insertion that inserts the Prep à before the lower subject when the lower V is followed by an NP object.

26 Quicoli has a rule of Case Marking that makes the second NP after the verb a dat NP. Dat NPs take the Prep à.

27 Bordelois also has a rule of Case Marking that makes the second NP after the verb a dat NP. Dat NPs take the Prep à.

28 This was originally proposed by Quicoli (1975a), and later Quicoli (1977).
29 We will use the term controller to refer to the object of the upper sentence that deletes the subject of the lower sentence.

30 See footnote 22.

31 This sentence is grammatical with the meaning
'Mary made X play the flute for Joseph'

32 This sentence is grammatical with the meaning
'Mary made X play the flute for him'

33 This sentence, and any other sentence with several choices of CLs, are ungrammatical also for any other combination of the same CLs.

34 The CL Filter *dat dat excludes two true dat CLs in sequence. It does not exclude two dat CLs, such that the first CL can be interpreted as ben, and the second CL as true dat. (See 4.10). For example, the sentence

`te le hice escribir una carta ben s`

'I made him write a letter for you'

where `te` and `le` are dat CLs, is accepted. Notice, furthermore, that the sequence `le le` is always forbidden because of the Filter \[^{CL_1 \text{ CL}_1}\]. Then the sentence

`*le le hice escribir una carta ben s`

'I made him write a letter for him'
is ungrammatical.

35 CLs coreferential to the controller are always attached to the upper V, so that we do not test sentences in which this CL is attached to the lower verb.

36 See footnote 34. It applies also for French. The corresponding French examples are the following:

\[
\begin{align*}
&\text{je te lui ai fait écrire une lettre} \\
&\text{ben s}
\end{align*}
\]

'I made him write a letter for you'

\[
\begin{align*}
&*\text{je lui lui ai fait écrire une lettre} \\
&\text{ben s}
\end{align*}
\]

'I made him write a letter for him'

37 This sentence has the CLs \textit{lui} already generated. If that were not the case, the sentence would be eliminated by C.N.A.

38 Dat object NPs are marked with the Prep \textit{à}.

39 It does not matter whether the V does not subcategorize an acc object, or it does subcategorize an optional acc object but the actual sentence does not have one.

40 This alternative construction is not available in Spanish.

41 'to telephone' is used instead of 'to write' because in general the construction with two dat NPs is preferred
for some verbs, like écrire 'to write', while the construction with the lower subject as an acc NP is preferred for other verbs, like téléphoner 'to telephone'.

42 This argument has been proposed in Bordelois (1974).
BIBLIOGRAPHY

List of Abbreviations


BLS: Berkeley Linguistics Society

CLS: Chicago Linguistics Society


IJAL: International Journal of American Linguistics

LA: Linguistic Analysis

Lg: Language

LI: Linguistic Inquiry

LS: Language Sciences


RAE: Real Academia Española


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