Markedness and Permeability in Interlanguage Systems

Juana M. Liceras

ABSTRACT. The purpose of this paper is to propose that the grammar of interlanguage systems (ILs) should account for the relationship that exists between markedness and permeability. ILs are permeated by the native language (L1) and the target language (L2) rules, and may also be permeated by the rules of other systems (Ln). Given that IL permeability varies depending on the different syntactic processes, I suggest that there may be a relationship between the processes to which ILs are permeable and the markedness of these processes. It is shown that investigation of that relationship may contribute to the construction of a theoretical model of the grammar of ILs.
1. Introduction.

In this paper I will propose that a theoretical model of the grammar of interlanguages (ILs) should consider the relationship that may exist between markedness and permeability.

Permeability has been posited as a characteristic of ILs that accounts for the existence of native language (L1) rules and target language (L2) rules in those systems.

My aim is to contribute to the characterization of permeability by constructing a model based on a comparison of the languages involved, in which the notion of markedness proposed by the exponents of the Revised Extended Standard Theory is taken into account. Markedness will be defined on the basis of "core" (belonging to universal grammar) versus "peripheral" (language specific) syntactic processes.

In order to illustrate how the relationship between markedness and permeability may be established, I will provide a comparison of some relativization processes in English and Spanish. In this comparison marked and unmarked syntactic rules are differentiated. I will also analyze those syntactic processes in the IL of native speakers of English learning Spanish.

2. The grammar of interlanguage systems.

The IL Hypothesis emerges as an attempt to account for the properties of the learners' linguistic systems that were not accounted for by the Contrastive Analysis Hypothesis (CA). The IL Hypothesis states that learners' systems are natural languages that have their own properties. Permeability is proposed by Adjéman (1976) as a specific property of ILs which allows the penetration of L1 rules and the distortion or overgeneralization of L2 rules.

It is not simply the coinage of a new term—it could be thought that it simply embraces both transfer and overgeneralization—that makes the proposal interesting, but the overall methodological
approach to the analysis of II as a linguistic system *per se*, as opposed to the search for learning strategies in the learners' speech. For Adjéman the application of transfer or overgeneralization does not result in the speech forms produced by the learner but results in the application of linguistic rules or improper generalizations that violate the internal systematicity of the II.

In my opinion, that "violation" is precisely an intrinsic component of the systematicity of IIs. In fact, that is what follows from Adjéman's (1980) defense of the need for an idealized model of grammar which accounts for the II speakers' competence. If permeability is part of that competence, the grammar of II has to include appropriate mechanisms to characterize it. Adjéman argues explicitly against the position taken by Arditty and Perdue (1979), who maintain that the differences between IIs and other systems are simply quantitative, on the basis that while permeability may appear in performance acts in II, it is not a part of the native speaker's competence. According to Adjéman, II speakers cannot avoid permeability.

I agree that the distinction between competence and performance should be maintained if we are to construct an idealized model of grammar, but it may be the case that what is specific to IIs is the actual ways in which they characterize permeability rather than their being permeable. In other words, my position is that permeability and other characteristics that have been posited as specific to IIs may be found in any language system and that universal grammar has to provide the necessary mechanisms to account for them. In fact, if universal grammar has to provide mechanisms to account for language change and language variation, it should also account for permeability in any language system, because permeability is not merely a new label for language transfer as defined by Kellerman (1977), but the linguistic output of the speakers' application of the strategy of transfer. Under this approach, what is important is to think of permeability as a linguistic construct and to characterize it.
3. The characterization of IL permeability.

In order to characterize permeability we have to determine what specific rules permeate the IL system, whether those rules are distorted, the nature of the distortion and the rules that are specific to the IL. Consequently, a suitable model of the grammar of IL will have to consider L1 and L2 rules and principles of universal grammar, so that it characterizes permeability by determining which rules permeate the system; which rules will seldom permeate it or will not permeate it at all, and how the principles of universal grammar determine the permeability of IL. This represents a new approach to CA.

Wardhaugh (1975) rejects the predictive power of CA theoretically and empirically. He rejects it at the theoretical level because it makes demands that linguistic theory is not in a position to meet. Linguists—he says—do not have an available set of linguistic universals formulated within a comprehensive linguistic theory and a theory of contrastive linguistics into which they could incorporate complete linguistic descriptions of the two languages being compared. At the empirical level, he rejects the predictive power of CA because it does not predict many possible "errors" and predicts some that do not occur.

The empirical argument loses its validity if we consider the learners' system as having an identity of its own; in other words, if we adopt the IL hypothesis. An analysis of permeability based on a linguistic model which has been proposed as a contribution to universal grammar may account for L1 and L2 rules and for IL rules that are present neither in L1 nor in L2. This approach invalidates Wardhaugh’s theoretical argument, although it would be a matter of clarifying what he sees as the demands of CA with respect to language universals. Research will always be limited by the stage of development reached by any given linguistic theory, psychological theory or any other theory, but that should not prevent us from
working with the tools that are available. Furthermore, the application of linguistic theory to the analysis and comparison of natural languages, including IL systems, is a *sine qua non* condition for its development and improvement. In addition, the search for universals is a central issue in present linguistic research.

3.1 Language universals and IL systems.

There has been recent concern in second language learning literature with some of the universals proposed by linguistic theory. Eckman (1977) proposed that we incorporate the notion of typological markedness into the CA Hypothesis. He maintains that the comparison of L1 and L2 is not sufficient to predict degrees of difficulty in language learning. His definition of markedness is based on hierarchies such as the hierarchy of grammatical relations proposed by Keenan and Comrie (1977, 1979). Gass (1979a, 1979b) investigates the relationship between Keenan and Comrie's hierarchy of grammatical relations in relative clause formation and language transfer, in order to determine what types of language phenomena are generally transferable. She maintains that language universals play a leading role in determining where transfer occurs, and that the likelihood of the transferability of linguistic phenomena must take into account both target language facts and rules of universal grammar. Szamosi (1979) identifies a number of language universals that have been proposed and maintains that their possible existence in the natural system of the learner is an empirical question. He suggests that this empirical question should be the main focus of a much-needed linguistically oriented framework in second language acquisition research, because an elaboration of linguistic theory based on such an investigation has the potential of placing constraints on the form of IL.

3.2 Core grammar and the logic of markedness.

Chomsky defines sentence grammar as the formal grammar of a language which is subdivided into core and non-core or peripheral
aspects (Chomsky 1975, 1977, 1980a). The unmarked aspects of a language, which may be invariant across languages are accounted for by core grammar. Those unmarked aspects do not have to be learned by the language learner, or are extremely easy to learn. Peripheral grammar includes language specific rules and marked processes. The way in which different rules and conditions on the application of rules diverge from core grammar is accounted for by the logic of markedness.

The logic of markedness characterizes the larger theory of language acquisition and generation within which core grammar is presented. Chomsky specifically relates core grammar and universal grammar. He considers universal grammar as an element of shared biological endowment and sees core grammar as a system derived by fixing the parameters of universal grammar. Language learning in this view is precisely the fixing of the parameters of core grammar, plus the addition of marked rules up to the periphery (Koster 1978). The core/periphery distinction has been interpreted in different ways. Chomsky (1977) makes a distinction between rules of sentence grammar which belong to the core and rules which are outside it. Under this approach we could say that Wh-Movement belongs to the core of English while preposition stranding (lack of obligatory pied piping) belongs to the periphery because it generates a construction which goes against core conditions and is a language particular rule. Koster (1978) develops a notion of rules of sentence grammar with two sorts of dimensions: core aspects and auxiliary hypotheses. The auxiliary dimensions belong to peripheral grammar and cover phenomena that would count as counterexamples to the predictions made by the core parameters. Hirschbühl and Rivero (1980) interpret the core/peripheral distinction as follows: They consider a rule of sentence grammar as an aggregate of dimensions, some of which belong to the core and others to the periphery. They propose that this interpretation of the core/periphery distinction may provide a fruitful framework for comparative grammar and historical
research. As I will show below, it will also be relevant to the comparison of English and Spanish relative clauses.

4. **English and Spanish relative clauses.**

   In this section I will provide a comparison of English and Spanish restrictive relative clauses based on Chomsky (1977) and Rivero (1979, 1980), and I will discuss how these two languages differ with respect to the rule of deletion in COMP in oblique and non-oblique relativization.

4.1 **Relative forms.**

   In the inventory of relative forms a distinction has been made between the relative pronouns (*who, which, whose, what...*) and the complementizer *that*. The analysis of *that* as a conjunction in relative clauses was first proposed by Jespersen (1927). Klima (1964), Emonds (1976) and Stahlke (1976) also argue in favor of the analysis of *that* as a complementizer in relative constructions.⁴ This is also the analysis adopted by Chomsky (1977). Rivero (1979, 1980a) proposes that Spanish has a relative pronoun *QUE* that appears in oblique relativization (sentences (10)b–c in chart B below), and that the Spanish *QUE* that appears in non-oblique relative clauses (sentences (1)b–(6)b in chart A below) is the same complementizer that is present in all subordinate clauses.

   The following chart illustrates the main differences between English and Spanish restrictive relative clauses:
### CHART A  Non-oblique relativization

**SU**
1a) The boy \{ WHO/THAT/\*Ø \} is playing the piano...
1b) El chico \{ *quien*/el que*/el cual/QUE/\*Ø \} toca el piano...
2a) The table \{ WHICH/THAT/\*Ø \} stands in the corner...
2b) La mesa \{ *la que*/la cual/QUE/\*Ø \} está en el rincón

**DO**
3a) The person \{ WHO(m)/THAT/\*Ø \} we met yesterday...
3b) La persona \{ *quien*/la que*/la cual/QUE/\*Ø \} conociste ayer..
4a) The proposal \{ WHICH/THAT/\*Ø \} you wrote...
4b) La propuesta \{ *la que*/la cual/QUE/\*Ø \} escribiste...

**TIME COMPLEM.**
5a) The day \{ THAT/\*which/\*Ø \} he left...
5b) El día \{ QUE*/el que*/el cual/\*Ø \} se fue...

**NOMINAL PREDICATE**
6a) We are not the men \{ THAT/\*who/\*Ø \} we were.
6b) No somos los hombres \{ QUE/*quienes/*/los que/*/los cuales/\*Ø \} éramos.

### CHART B  Oblique relativization

**DO**
7a) The person \{ *to whom/*/to that \} I met yesterday...
7b) La persona \{ A QUIEN/ A LA CUAL/ A LA QUE/?? a que \} conocimos ayer..

**TIME COMPLEM.**
8a) The day \{ ON WHICH/\*on that \} he left...
8b) El día \{ EN EL QUE/EN EL CUAL/EN QUE \} se fue...

**IO**
9a) The person \{ TO WHOM/*/to that/\*Ø \} we gave the key...
9b) La persona \{ A QUIEN/A LA QUE/A LA CUAL/*/a que \(1e\) dimos la llave...

**OBJECT OF PREP.**
10a) The person \{ WITH WHOM/*/with that/\*Ø \} he was living...
10b) La persona \{ CON QUIEN/CON LA QUE/CON LA CUAL/??con que/*/Ø \} el vivía...
11a) The person \{ WHO/THAT/Ø \} he was living with...
11b) La persona \{ *quien*/la que*/la cual/\*que/\*Ø \} el vivía con...
Capital letters indicate the grammatical forms. In all cases we have shown both grammatical and ungrammatical forms. In the case of [+human] antecedents, Spanish may have three different relative pronouns QUIEN, EL CUAL, EL QUE (and sometimes QUE). With [-human] antecedents QUE, EL CUAL and EL QUE may appear.

3.2 Deletion in COMP: non-oblique relativization.

The main difference between English and Spanish in (1)-(6) is that Spanish may only have QUE, the complementizer, while English has three choices: empty COMP (Ø), the complementizer THAT, or the relative pronoun in (1)-(4), and either THAT or Ø in (5)-(6).

It has been proposed that the rule of deletion in COMP accounts for the fact that the relative pronoun cannot be present (as in the case of Spanish) or may not be present (as in English). Following Chomsky and Lasnik (1977) a sentence such as (4) would be analyzed as follows:

(12) The proposal \[ S \left[ \text{COMP} \left[ \text{that} \left[ \text{you wrote} \left[ \text{which} \right] \right] \right] \right] \]

The rule "Move Wh-phrase" places the wh-phrase in the COMP position to the left of COMP. Elements in COMP may freely delete. The application of Wh-movement to (12) gives (13),

(13) The proposal \[ S \left[ \text{COMP} \text{which}_{i} \left[ \text{that} \left[ \text{you wrote} \right] \text{t}_{i} \right] \right] \]

Consequently, from the surface structure (13) we may get the four different sentences in (14)

(14) a. *the proposal which that you wrote
   b. the proposal that you wrote
   c. the proposal which you wrote
   d. the proposal you wrote

Free deletion in COMP is presented as a rule of core grammar. In order to account for the non-existence of (14)a in Modern English, they add surface filter (15) to the grammar so that a doubly-filled COMP is excluded.

(15) *[COMP wh-phrase complementizer]

In Spanish, the application of Wh-movement to a sentence such as (16) gives (17). But the only possible grammatical output as we see in (14)b
is (18)a.

(16) La propuesta \[\begin{array}{c} \exists \text{COMP que escibiste [la cual]} \end{array}\]

(17) La propuesta \[\begin{array}{c} \exists \text{COMP que la cual escibiste t}_1 \end{array}\]

(18)a la propuesta que escribiste
  b *la propuesta la cual escribiste
  c *la propuesta la que escribiste
  d *la propuesta ____ escribiste
  e *la propuesta que la cual escribiste

In order to account for the absence of a relative pronoun in Spanish non-oblique relativization, Rivero (1979, 1980b) proposes the following analysis: a) deletion in COMP applies obligatorily; b) QUE is inserted by lexical rules; c) there are two surface filters. Filter (15) prevents the appearance of QUE + wh-phrase in relative clauses because (18)e is ungrammatical. Filter (19) prevents the occurrence of an empty COMP because in Spanish the COMP slot cannot be empty, as shown in (18)d and in all the examples in chart A.

(19) \[\exists \text{COMP e }\] (in tensed clauses)

This filter has to apply in the case of other subordinate clauses such as (20)a because (20)b is ungrammatical,

(20)a creo que vienen
  b *creo____ vienen

We may conclude that the rule of deletion in COMP is present in English and Spanish non-oblique relativization. But it has two different dimensions: its application is free in English and obligatory in Spanish.

It remains to account for the fact that the COMP slot cannot be empty in the case of relativization of English subjects—(1a) and (2a)—if (21)a, b is to be interpreted as a relative clause,

(21)a *the boy____ is playing the piano...
  b *the table____ stands in the corner...

Chomsky (1977) proposes the filter in (22) to account for this fact. It also applies in other constructions in the language.

(22) \[\text{NP tense VP}\]

Baker (1979) discusses the role of surface filters in the grammar. I will discuss his different proposals in section IV.
While obligatory deletion in COMP is present in all cases of Spanish non-oblique relativization, as in (1)b-(6)b, in English deletion is obligatory only in the case of Nominal Predicates and Time complements, as in (6)a and (5)a respectively. The behaviour of Time complements can be explained by the fact that the Wh-phrase that is moved cannot be an NP. It should be an adverb, and that explains why we can get

(23) The day when he left

A possible explanation for the fact that who is not an adequate lexical item to substitute Nominal Predicates maybe that the Wh-phrase that is moved is not an NP but an Adjectival phrase, as Berman (1974) suggests. This would imply that the rule of relativization applies to the category AP (Adjectival and Adverbial Phrases). This is in fact what happens in the case of two Spanish relative constructions that have been analyzed as being the result of Wh-movement. I refer to

(24) No te das cuenta de lo borracho
  \( \text{QUE/}x \text{lo cual/}x \text{lo que/}x \emptyset \text{ está}
  \)  'you do not realize how drunk he is'

(25) No funciona lo bien
  \( \text{QUE/}x \text{lo cual/}x \text{lo que/}x \emptyset \text{ esperábamos}
  \) 'It does not work as well as we expected'

Lo is a neutral article, borracho is an adjective and bien is an adverb. Rivero (1980b) has analyzed these constructions as very special cases of relativization in which the antecedent is not generated in the base but is raised from the subordinate clause to an antecedent position. She also proposes the existence in the base of an adverbial element that modifies the Adjectival or the Adverbial Phrase. Knowles (1978) maintains that the relativization rule should be formulated as a cross-categorical rule that applies not only to the category NP but also to AP.

3.3 Deletion in COMP: oblique relativization.

As shown in Chart F, the two main differences between English and Spanish oblique relativization are: a) their behaviour with respect to the Pied Piping Convention;¹⁰ b) the use of two different strategies in the relativization of Spanish direct objects (DOs).

The Pied Piping Convention stipulates that any NP above some
specified NP may be reordered (moved) instead of the specified NP. There are environments where the lower NP may not be moved, and only some higher one can, as long as the conditions on the application of rules are respected. This means that Pied Piping is obligatory in some contexts. This is the case in Spanish, as in all Romance languages, and in other languages as well. (Ross 1967; Van Riemsdijk 1978; Hirschbühler and Rivero 1980). It is, however, not the case in English.

In Spanish, the application of Wh-movement to phrase structure (26) has to move the NP together with the preposition because if the preposition is stranded the result is ungrammatical as in (27).

(26)

```
Det     NP   S
  │     │  →
  the   N   VP
     NP
      COMP
      he lived with whom
      la persona
      él vivía con la cual
```

(27) *La persona la cual él vivía con ...

Pied Piping is not obligatory in English. We can move the NP whom in (26) out of PP and get (28) or move the PP and get (29).

(28) The person \[COMP with whom \_\_ that\] he was living \_\_ ...
(29) The person \[COMP whom \_\_ that\] he was living with \_\_ ...

Deletion in COMP applied up to recoverability. The oblique Wh-phrase cannot be deleted because the specified lexical content could not be recovered. The trace (t₁) keeps a record of the syntactic function but does not keep a record of the lexical content. Deletion in COMP may apply in (29) because the lexical content of the PP has not been moved into COMP and deletion of P+NP does not occur. Consequently, from (29) we may get

(30)a The person whom he was living with...
   b The person he was living with...
   c The person he was living with...
   d *The person whom that he was living with...

As in the case of non-oblique relativization, filter (15) prevents
the appearance of a doubly-filled COMP.

We have already indicated in Charts A (3b) and B (7b) that Spanish may apply two different strategies in the relativization of $\llbracket +\text{human} \rrbracket$ DOs: deletion in COMP as in (31) or non-deletion in COMP as in (32),

(31) Me lo dió esa persona que conocimos ayer
me it gave that person that (we) met yesterday

(32) Me lo dió esa persona a la que conocimos ayer
me it gave that person to the that (we) met yesterday
'It was given to me by that person we met yesterday'

This follows from the fact that conocer may take an oblique or non-
oblique as (33) and (34)

(33) Conoci un chico estupendo
(I) met a guy fantastic

(34) Conocí a un chico estupendo
(I) met to a guy fantastic
'It I met a fantastic guy'

Other Spanish transitive verbs only allow one of the two strategies
(Liceras 1980).

As I have indicated in (8)b above, the presence of QUE does not
imply that deletion in COMP has necessarily taken place.\footnote{QUE
alternates with the other relative pronouns in oblique relativization.
This cannot happen in non-oblique relativization--as shown in (1)b-(6)b--
where deletion in COMP applies obligatorily. QUE is a relative pronoun
in Spanish $\llbracket -\text{human} \rrbracket$ oblique relativization and--for some speakers--
in some cases of $\llbracket +\text{human} \rrbracket$ oblique relativization such as (35).}

(35) Es el chico de que te hablé
In fact in chart B, I have indicated that (7)b and (10)b may be acceptable.
5. Markedness and permeability.

In the previous section I have presented a very schematic comparison of the syntax of English and Spanish relative constructions within the framework of core grammar. The rule of deletion in COMP has been presented as a core grammar rule that exists in English and Spanish, and that has two main dimensions (optional and obligatory application respectively). The behaviour of English with respect to the application of the Pied Piping Convention has been presented as a marked rule. I have also indicated that English and Spanish share filter (15) that blocks the occurrence of a doubly-filled COMP and that Spanish has another filter against an empty COMP. Filter (19) applies in the case of relative clauses and all tensed subordinate clauses.

Based on the previous comparison, I will now analyze some restrictive relative clauses in the IL of native speakers of English learning Spanish. I have obtained various tests and compositions from an advanced student and compositions written by a group of twenty intermediate students.

5.1 Deletion in COMP: non-oblique relativization.

If deletion in COMP is a core grammar rule it should be a part of the IL, but given that its application is obligatory in Spanish and optional in English, we may find an optional application of the rule, or a dimension which is specific to this IL.

I have not found any instance of DOs, Time complements or Nominal Predicates with a relative pronoun. The complementizer QUE always appeared both with [\+human] and [\-human] antecedents. But I have found several sentences such as (36) in which the relative pronoun QUIEN was present,

(36) El hombre quien se casó
    the man who got married

This might be taken as evidence that deletion in COMP has not applied, but it is significant that we have not found any instance of [\+human] SU or DO in which el cual or el que appear. If it were the case that
students identify *el cual* with which, we could have found cases of \([-\text{human}\)]\) SU with *el cual*, but we have not found any. It is always *quien*, the only relative lexical item marked uniquely as \([+\text{human}]\). The students seem to identify *who* with *quien* and use the relative pronoun *quien* in \([+\text{human}]\) SU relativization.

5.2 Filters and second language learning.

There has been some discussion in the literature on the status that surface filters should have in the theory of grammar and in the grammar of individual languages in order to satisfy the learnability criterion with respect to first language acquisition.

It has been assumed that part of the grammar of every language consists of a "filter component." If a filter is assigned universal status, it should not pose any learnability problem. On the other hand, learnability problems arise immediately in connection with language-specific or dialect-specific filters.

Baker (1979) explores two possible alternatives to account for the way in which specific filters may be accounted for by the theory of grammar:

A. **Application** of filters is seen as a complication. Baker maintains that "prohibiting filters" such as the ones proposed by Chomsky and Lasnik (1977)--filters (15), (19) and (22) above--represent a complication of the grammar.

According to Chomsky and Lasnik, filter (22) above has to be postulated as the "unmarked case" for children who are learning English nowadays, because they do not receive negative evidence that shows that it does not hold. Baker considers the specific filters that have been proposed to account for the complementation system of English and French and some specific filters in other languages. He shows that in order to account for all the data more and more filters have to be added to the universal component. According to this position, languages will differ in whether specific filters are assigned the value "plus" (applies) or "minus" (it does not apply). The value "plus" would be the "unmarked" value. A child would only
assign the value "minus" to a filter if he receives positive evidence indicating that the filter does not hold.

B. Non-application of filters is seen as a complication. Baker proposes that instead of specifying grammatical COMP configurations in a language by saying which ones are not possible, we specify them by saying which ones are possible. According to this proposal, the filter component in each language should contain only "permitting filters". The learnability problem arises when they do not apply.

Alternatives A. and B. would include the following filters in the grammar of English and Spanish finite relative clauses:

<table>
<thead>
<tr>
<th>ENGLISH</th>
<th>SPANISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Prohibiting filters&quot;</td>
<td></td>
</tr>
<tr>
<td>(19) *</td>
<td>- [COMP e] + [COMP e]</td>
</tr>
<tr>
<td>(22) *</td>
<td>+ [NP NP tense VP] + [NP NP tense VP]</td>
</tr>
<tr>
<td>(15)a</td>
<td>+ [wh-phrase+complementizer] + [wh-phrase+complementizer]</td>
</tr>
<tr>
<td>(15)b</td>
<td>+ [complementizer+wh-phrase] + [complementizer+wh-phrase]</td>
</tr>
<tr>
<td>&quot;Permitting filters&quot;</td>
<td></td>
</tr>
<tr>
<td>(19)</td>
<td>[COMP e]</td>
</tr>
<tr>
<td>(37)</td>
<td>[COMP NP]</td>
</tr>
<tr>
<td>(38)</td>
<td>[COMP Prep P] + [COMP Prep P]</td>
</tr>
<tr>
<td>(39)</td>
<td>[COMP que]</td>
</tr>
<tr>
<td>(15)b</td>
<td>complementizer+wh-phrase</td>
</tr>
</tbody>
</table>

Filter (15)b should be added to the grammar of Spanish to account for subordinate clauses such as (42) below.

A. states that prohibiting filter (19) against an empty COMP does not apply in English and children learning English will only assign a "minus" value to that filter (the marked value) if they receive positive evidence indicating that it does not hold. (e.g. if they are specifically told that COMP may be empty.) On the other hand, Spanish children would only delete if they were told to do so.
B. states that children will have learning problems when any of the permitting filters does not apply. E.g. English children will have problems in the case of SU relativization because permitting filter (19) does not hold.

White (1980) discusses these two alternatives in order to show that they make different predictions. She says that if we assign filter (22) the value "plus" (the unmarked value) and children do not get positive evidence in which the marked value appears, they should not produce subject relative pronoun deletion. Nevertheless her child systematically omitted subject relative pronouns. She also considers the possibility that the child may overgeneralize filter (19) to subject relatives. But if that is the case, then it would mean that the marked value of that filter is not triggered by positive data. On the other hand, the deletion of subject relative pronouns in children's speech is consistent with proposal B.14

In the case of second language learning, the two different alternatives would make the following predictions: According to alternative A. filter (19) is marked in L1 and unmarked in L2; consequently, the marked value may permeate the IL system. I have only found two examples of empty COMP in the case of time complements (38) and (39) in a composition of a low intermediate student,

(38) el tiempo ___ alguien espera a otra persona  
    the time    someone waits for another person

(39) para el tiempo ___ está esperando  
    for the time  (he) is waiting

She did not produce any empty COMP in the case of other non-oblique (or oblique) relativized positions. At least at the intermediate and advanced level the students' IL does not seem to be permeable to the marked value of filter (19) in English. It may also mean that they have received enough positive evidence (exposure to Spanish) or negative evidence (corrections and/or explanations in the classroom); or that the Spanish unmarked value of the filter is very easily learned.
In fact, in order to be able to decide which value originates more learnability problems, we would have to analyze the IL of native speakers of Spanish learning English. But due to the fact that in English the rule of deletion in COMP applies freely, the Spanish speaking student would seldom produce errors. Nevertheless, their IL may differ from L2 (English in this case): it may not have any instance of an empty COMP.

B. would simply predict that the IL may be permeated by permitting filter (19). As I said above, I have found two instances of deletion in COMP (40 and 41). This alternative does not make any predictions with respect to markedness.

A. states that English and Spanish take the unmarked value of filter (22). In the case of Spanish this filter is redundant because the unmarked value of filter (19) already prevents the existence of such an NP. I have not found any instance of an empty COMP in subject relativization. B. would not make any predictions with respect to filter (22) but it would predict (permitting filter 37) that we may find instances of a relative pronoun in subject relativization. I have found many IL sentences such as (36) above, in which the relative pronoun QUEEN was present in non-oblique relativization. But, as I have already mentioned, it is significant that the only NP that appears in COMP position in IL non-oblique relative clauses is QUEEN.

In the case of filter (15) A. would predict that it will be present in the IL because it takes the unmarked value in English and in Spanish. Since B. does not make any prediction with respect to this filter, it is assumed that it will not present any learnability problem. I have not found any instance of a doubly-filled COMP.

If we are to account for all cases of complementation, Spanish would have to specify that filter (15) may have a "minus" value (15b) in some interrogative and declarative subordinate clauses (case A.) or add (15)b as a permitting filter (case B.) I have not found any instance of a doubly-filled COMP in any IL subordinate clause. In fact, the advanced student rejected Spanish grammatical sentences
such as (42)

(42) Pedro dice que qué pasa
Peter says that what happens

According to A., this would mean that the IL is not permeated by L2.

On the other hand, B. would include this permitting filter and the prediction would be that it may permeate the IL system. The rejection of (42) seems to indicate that this filter has to be learned.

B. predicts that permitting filters (38) and (39) will be present in the IL. A. does not make any prediction with respect to these filters. They were present in the IL.

I have not analyzed enough data to reach definitive conclusions. From the predictions made by A. and B. we may tentatively conclude that:

1. "Permitting filters" or L1 marked values seldom permeate the IL in the case of filter (19).

2. "Permitting filter" (15)b or its unmarked value in L2 do not permeate the IL.

3. The IL is permeable to the unmarked value of filters (22) and (15) in L1 and L2.

4. "Permitting filters" (38) and (39) permeate the IL.

5. A. does not make any prediction with respect to IL sentences in which quien appears in subject relativization. "Permitting filter" (27) in B permeates the IL. It may be the case that the lexical identification of who and quien causes this permeability.

Both alternatives A. and B. present matching values, and I have found that when there is a matching value the IL contains the filter. This may indicate that we will never find errors due to the non-application of matching permitting or prohibiting filters.

5.3 Oblique relativization.

As we saw in section III, deletion in COMP does not apply in Spanish oblique relativization. It does not apply in English either unless the Pied Piping Convention does not apply. The obligatory application of Pied Piping has been posited as a part of core grammar
(Chomsky 1977; Van Riemsdijk 1978; Koster 1977). English (and also Dutch) represent the marked case with respect to this convention. In the IL there were no instances of preposition stranding or deletion in COMP in oblique relativization. A student wrote sentence (43), but I do not think that it can be taken as evidence of deletion in COMP following Wh-movement given that the Spanish equivalent would be (44),

(43) La personalidad de la chica que él quiere casarse
the personality of the girl that he wants to get married

(44) La personalidad de la chica con la que él quiere casarse
the personality of the girl with whom he wants to get married

In my opinion, (43) is an IL sentence in which casarse has been used as a transitive verb, which indicates that the IL system has been permeated by the feature [+transitive] of the English verb to marry and la chica has been considered a DO. Consequently, deletion in COMP has applied and que has been inserted.

The IL does not seem to use the oblique strategy in the relativization of DOs because I have not found any instance in the compositions. There was an ambiguous IL sentence (45) that might be interpreted as (46) or as (47). In the context in which it was produced, the sentence was to be interpreted as (47). The insertion of le (maybe an attempt to avoid ambiguity due to the drop of subject pronouns) in fact produces ambiguity.

(45) Recibe a un forastero que no le conoce
he receives a foreigner that not him knows

(46) He receives a foreigner who does not know him

(47) He receives a foreigner he does not know

Spanish sentence (48) has exactly the meaning of (47), and if it does not look clear enough, a native speaker would produce (49), where al cual is marked as DO, exactly in the same way as its antecedent,

(48) Recibe a un forastero que no conoce

(49) Recibe a un forastero al cual no conoce

The advanced student judged (50)a as ungrammatical. A native speaker of Spanish who was also asked, chose (50)a without hesitation,
(50a) Ese perro a quien quiere como si fuera un hijo

Ese perro que quiere como si fuera un hijo

that dog he loves as if it/he were his son

Although (50)b would not normally be ambiguous, ese perro could be interpreted as being the subject of querer. The native speaker chose the unambiguous DO marking.

The IL does not seem to have consistent use of que, el que, or el cual in oblique relativization. There were combinations such as (51) or (52) which are not present in L2.

(51) la guerra durante *que* (la cual/la que)... the war during which

(52) la prisa con *cual* (la cual/la que)... the hurry with which

(53) se trata de un caracter con quien (a quien)... it concerns a character with whom

(54) no se acordada del día en que hablaba el forastero (de que) (he) did not remember the day in which spoke the (about

foreigner which)

In (51) there is a wrong choice of lexical item with respect to L2 (Spanish only uses the pronoun que after some monosyllabic prepositions). In (52) la does not appear. Sentences such as (53) and (54) are cases of a wrong choice of argument.

The advanced student translated several sentences with oblique arguments, but they all happened to be [-human] complements and she always put quienes after the preposition. In the IL que was used in [+human] oblique relativization and quien in [+human] oblique relativization. El cual was not used with [+human] NPs and it was systematically rejected as ungrammatical. This seems to confirm that in the IL deletion in COMP applies obligatorily in non-oblique relativization because el cual never appeared. It was also systematically rejected when it appeared with a [-human] antecedent in non-oblique relativization.

From the IL data that I have analyzed the following conclusions may be drawn:
a) The IL has a rule of deletion in COMP that applies obligatorily in non-oblique relativization. If the obligatory application of the rule represents the marked case (Hirschmüller and Rivero 1980), then the IL system is permeable to this marked process of Spanish.

b) The IL is not permeable to English non-obligatory application of Pied Piping, which is considered highly marked (Chomsky 1977; Van Riemsdijk 1978; Koster 1979).

c) The two alternatives that Baker (1979) discusses seem to make similar predictions with respect to the IL data that I have analyzed, except in the case of permitting filter (37). Permitting filters and/or marked values in L1 seldom permeate the IL. Permitting filters and/or marked values in L2 do not permeate the IL. Matching values for L1 and L2 permeate the IL.

d) The IL is permeable to the arguments taken by L1 verbs as shown by sentence (43). In this case, it is not the rule of relativization per se but grammatical relations and case marking that permeate the system. Sentences (53) and (54) seem to be examples of IL-specific arguments.

e) The oblique strategy of Spanish DO relativization does not permeate the IL.

f) Time complements and possession were an important source of difficulty. The IL was not permeable to the specific structure of the different Spanish time complements. In the case of possession, unless cujo and whose were identified, the students had a hard time judging the grammaticality and providing the meaning of noun complements formed with del cual or del que (of whom/which) instead of with cujo. This seems to confirm Case's findings and comments with respect to the Genitive. It seems that at the semantic level this grammatical relation should be rather low in the hierarchy, but that there are intralingual features (structural L2 features or differences with respect to L1) that may modify the general direction of the Accessibility Hierarchy proposed by Keenan and Comrie (1977, 1979).
6. Conclusion.

In conclusion, in order to characterize IL permeability we have to take into consideration lexical items, phrase structure rules, grammatical relations, deletion rules, filters, etc. The assumption is not—as Pridaux (1979) suggests in his article about children's acquisition of relative clauses—that the student learns a general rule of relativization, but that there are many processes involved in that rule that are related to other aspects of complementation or to other syntactic processes in a given language.

The IL data that I have analyzed in this paper is a part of a pilot study intended to generate hypotheses that will be further elaborated and/or tested in my dissertation.

By analyzing a larger amount of data I should be able to answer questions such as the following ones:
- What is the relationship that exists between markedness and permeability?
- Is there a significant empirical difference between the two different approaches to the status of filters?
- Does the IL follow the general direction of Keenan and Comrie's hierarchy, or the non-oblique/oblique dichotomy?
- Can Eckman's Markedness Differential Hypothesis predict the results?
- Is there any specific pattern with respect to the way in which grammatical relations, structural differences, or lexical items permeate the IL?

The Extended Standard Theory has developed formal mechanisms that permit a dissection of syntactic processes which is very useful to account for the differences and similarities between English and Spanish relative constructions and to analyze the IL.

The determination of the relationship between markedness and permeability may establish the basis for predicting the parts of the grammar in which one can find permeability, and will consequently contribute to linguistic theory by using IL as a ground to test the applicability of its theoretical constructs.
Notes

1. Kellerman (1977) defines transfer as the sum of projection (the ability to invent new material on the basis of what is already known) plus conversion (the actual application of what is already known about the relationship between L1 and L2 to the process of projection).

2. Keenan and Comrie (1977, 1979) in their analysis of more than fifty languages distinguish between an unmarked form and the rest of the relative forms, but they do not elaborate any further. In fact, their main concern is the establishment of a hierarchy of grammatical relations. Kayne (1976) offered syntactic arguments to prove that French que in relative constructions should be analyzed as the conjunction que that appears in most French subordinate clauses. The same type of arguments have been used by Cinque (1979) to analyze Italian che as a conjunction.

3. Spanish grammarians such as Bello (1847), Gili Gaya (1973) or Fernández Ramírez (1951) have discussed the choice of el cual versus el que or que and they all agree that it is made on the basis of style and stress considerations related to the number of syllables of the prepositions.

4. They base this order on evidence from Middle English and present non-standard dialects.

5. Gazdsky and Lasnik (1977) indicate that there are stylistic differences between (14)b and (14)c but that they ignore that matter in that specific paper.

6. This is a characteristic of Romance languages.

7. In Spanish, as Demonte (1977) indicates, both que and a wh-word may be present in interrogative and declarative constructions (see (42) above). Rivero (1979) proposes that the structure of Spanish COMP should include the feature wh, A rule of lexical insertion introduces que. The application of Wh-movement places the wh-phrase to the right of que.

8. Examples such as: a) Charles is a strange character who (*that) dislikes parties and b) The money that (*which) I have spent xeroxing! are not counterexamples to free deletion because neither a) where deletion is not possible, nor b) where deletion is obligatory, can be analyzed as restrictive relative clauses. a) seems to be a clear case of an appositive relative clause and b) seems to be a case of topicalization.
A sentence such as There is a man came yesterday might be subject to two different analyses: a syntactic one (it violates core grammar, it has to be peripheral; in fact, that is what some grammarians indicate) or it has to be handled by discourse grammar techniques as the sequence: The father is blond. The children are not. It would present the same kind of relationship. (See Hirschbühler and Rivero (1980) for a discussion of similar cases in the analysis of Catalan null genitives).

Ross (1967)—following Robin Lakoff's suggestion—introduces this terminology to describe the way in which constituents of larger noun phrases follow the specified noun phrase when it is reordered.

The use of que after a preposition is very widespread in the case of [-human] antecedents, but only after some monosyllabic prepositions. Que is not normally used as a relative pronoun in oblique relativization of [+human] antecedents.

Cual is used as an interrogative pronoun, most of the time as the equivalent of which.

According to Baker, an example of "permitting filters" would be the surface structure filter proposed in Perlmutter (1971) to account for Spanish preverbal clitic sequences.

White considers alternative explanations to account for this particular case. She indicates that it is possible that these filters are not triggered by data but come into operation for maturational reasons, in which case 'errors' involving the marked case may be expected before they come into operation. She also indicates that while the structures her child produced look like relative clauses, they may be conjoined clauses (as suggested by Tavakolian 1978).

In isolation, the IL sentence could have also been interpreted as the result of the use of le(him) instead of el(he), but this interpretation is not feasible if we consider the rest of the composition and the fact that neither the IL nor Spanish have a rule which places no (not) before the subject pronoun.
References.


