One of the most significant advances in recent developments of the Generative-Transformational research program has been a shift of focus from the study of single syntactic constructions to the study of the rule systems and systems of principles that underlie and ground these constructions.

In the early stages of the program each construction was essentially conceived of as an indivisible whole, to be treated in its own terms, as it were, that is by a specific rule. There were such constructions (and corresponding rules) as 'Passive', 'Raising', 'Topicalization', etc. One of the conceptual drawbacks of this approach was the impossibility to express in a general and unified way those properties which are common to two or more constructions; and this for the simple reason that each such construction was treated as a separate whole. With hindsight, this appears now to have been due to a failure to distinguish different levels of linguistic structure.

Undoubtedly such constructions as Passive, Wh-questions, Topicalization, etc. constitute separate units at some level of analysis. It seems that they can legitimately be taken as separate units from a 'functional' or 'pragmatic' point of view. It is much less obvious that they should be considered as distinct indivisible units from the syntactic point of view (that is from the point of view of the formal realization of the 'functional' units). Indeed it appears that there is much to lose under this conception.\(^1\)
The viewing of constructions not as complex unitary rules but as different combinations of the same simple components has in many cases permitted a reduction of the apparent complexity of the facts to a small number of maximally simple and general principles. The complex properties of many a construction have indeed been shown to be the result of the interaction of distinct and simple components which may recur, differently arranged, in other constructions.

In the same general spirit, I will now consider a number of so-called 'topic' constructions as they are found in Italian, French, English, German and Dutch.

The term 'topic construction' is perhaps somewhat misleading. Here it will be understood simply to cover those (non wh-) constructions where there is a phrase external to the sentence which is 'linked' to a position inside the sentence (which can be represented by a resumptive pronoun or a 'resumptive' empty category).

Some of the constructions considered here represent different functional or pragmatic entities (quite apart from the possible syntactic differences among them).

To make things clearer, in introducing each construction I will illustrate its basic pragmatic import and its basic syntactic properties. It will be seen that one and the same import or function can be realized, in two languages, by two quite different syntactic means and that, on the other hand, one and the same syntactic construction can have two quite different pragmatic functions (either in the same language or in two different languages). In other words, there appears to be no one-to-one relation between the notion 'pragmatic construction' and the notion 'syntactic construction'. In fact, as I said, there is little reason to assume the independent existence of 'syntactic constructions'. Under this view they are simply a clustering of formal syntactic components which interact together and provide the formal realization of a functional or pragmatic unit. This of course is not to say that the syntactic and pragmatic domains have no points of contact. It simply means that
the principles operative in each are not reducible to those operating in
the other in any simple manner.

I will begin by an examination of (so called) 'topic' constructions in
Italian and consider later how they compare with related constructions
in the other languages mentioned above.

Italian is characterized by three fundamental 'topic' constructions which
can be distinguished from both a syntactic and a pragmatic point of view
(they also differ at an intonational level that will be considered only
tangentially here - see fn. 4).

An example of each such (pragmatic) construction is given in (1) - (3):

(1) Tu fratello, invece, lui si che aveva sempre fame.
   'Your brother, however, him yes that (he) was always hungry'

(2) A tuo fratello, non gli hanno ancora dato il visto.
   'To your brother, (they) not to-him-have given the visa yet'

(3) Tu fratello, hanno invitato, non te.
   'Your brother, (they) have invited, not you.

For ease of reference, let us call the construction exemplified by (1),
the Hanging Topic Left Dislocation construction (HTLD), that exemplified
by (2) the Clitic Left Dislocation construction (CLLD) and that in (3)
the Topicalization construction (T), following the terminology used in
Vat (1981) and Van Haaften and Smits (this volume).

Pragmatically, they differ (at least) in the following ways. In HTLD the
lefthand phrase is used to bring up or shift attention to a new or unex-
pected topic. An appropriate context would be the following:

(4) [A friend of two brothers recalling childhood with one of them]
   In those days I remember you would eat only occasionally and un-
   willingly...(1)
In CLLD, the lefthand phrase refers, instead, to an item which is assumed by the speaker to be 'given information' for the addressees (either because it occurred in the previous linguistic context or because it is 'sufficiently' salient in the extralinguistic context). Such a phrase cannot be contrasted.

The following would be a typical context for this construction:

(5) Speaker A: "My brother and I should start packing. We leave tomorrow for Tbilisi.
   Speaker B: "But I have heard that..." (2)

(1) and (2) correspond to the English pragmatic constructions 'Left dislocation' and 'Topicalization' of Ross (1967), Chomsky (1977). Or, at least, (2) corresponds to the main pragmatic import of what is called 'Topicalization' in English.

In T, the lefthand phrase is the focussed element of the sentence and is explicitely, or implicitly, contrasted with some other individual or object. A typical context in which (3) could occur is (6):

(6) Speaker A: "Since they have invited me, I'll go".
   Speaker B: "No, (3)

This construction corresponds roughly to what is referred to as 'Yiddish Movement' in some grammatical descriptions of English (Ross (1967), Postal (1971), etc.).

These are rather crude pragmatic characterizations but they will suffice for our purposes.

Let us now consider the basic syntactic properties of the three constructions and see how they can be derived from the general principles and organization of the theory of syntax. Since their syntactic properties overlap to a certain extent it is to be expected that the 'grammar' of the three constructions share some component of principles. This appears
to be especially clear with CI, and T, as we shall see. I will first
contrast the HTLD construction with the CILD construction and later
CILD with T.

Consider (7) and (8), which represent some of the basic syntactic properties of HTLD and CILD, each letter comparing the two constructions along one and the same dimension. For example, (4a) and (5a) can be taken as giving the property's answer or value for the single question: what is the categorial status of the lefthand phrase? (4b), (5b) to the question: how many lefthand phrases may there be? (4c), (5c) to the question: where can the lefthand phrase occur? (4d), (5d) to the question: what can the resumptive element be? And, finally, (4e-f), (5e-f) can be brought together as answers to the question: what is the relation between the lefthand phrase and the resumptive element?

<table>
<thead>
<tr>
<th>(7) Properties of HTLD</th>
<th>(8) Properties of CILD</th>
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<tbody>
<tr>
<td>(a) The lefthand phrase can be of category NP only.</td>
<td></td>
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<tr>
<td>(b) There may be at most one lefthand phrase.</td>
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<tr>
<td>(c) The lefthand phrase typically occurs to the left of a 'root' S.</td>
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<tr>
<td>(d) The 'resumptive element' can be a 'pronominal' name (or epithet, like that poor guy) or an ordinary pronoun, either tonic or clitic.</td>
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<tr>
<td>(e) There is no connectedness between the lefthand phrase and the resumptive element (in terms of Case matching, etc. - see below).</td>
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<tr>
<td>(a) The lefthand phrase can be of category NP, PP, AP, $\tilde{S}$ (essentially any X maximal, in the sense of X theory).</td>
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<td>(b) There is no (theoretical) limit to the number of lefthand phrases.</td>
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<td>(c) The lefthand phrase can occur to the left of 'root' and 'non-root' Ss.</td>
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<tr>
<td>(d) The 'resumptive element' can be a clitic pronoun only.</td>
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<tr>
<td>(e) There is obligatory connectedness between the lefthand phrase and the resumptive element (in terms of Case matching, etc.).</td>
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The relation between the lefthand phrase and the resumptive element is not sensitive to island constraints.

The relation between the lefthand phrase and the resumptive element is sensitive to island constraints.

I will comment on each directly and give some examples. Note that these properties can be isolated only in a 'rational reconstruction' of the phenomena. In an actual corpus many sentences will in fact be syntactically ambiguous. That is, they will qualify syntactically for both HTLD and CILD.

The correctness of setting up these two constructions can nonetheless be substantiated in a number of ways, in terms that are quite theory neutral.

If a sentence displays a property which is unique to construction A (i.e. incompatible with construction B) we predict that, under any manipulation, that sentence will be incompatible with all the other properties which are unique to construction B (and will be consistent with all the properties which are unique to construction A). Consider one example. Suppose we fix in a certain way the 'parameter' in (d), that is, taking the resumptive element to be a non clitic pronoun. This property is consistent with the HTLD (cf. 7d) and inconsistent with CILD (cf. 8d). We now expect that such property will be incompatible with properties 8a-b-c-e-f in what is unique in them to CILD. This is indeed the case, as can be seen from sentences (9) through (13):

(9)* [pp All a stazione] non voglio andare [lá] 'to the station, not I want to go there'.

(10)* Tu o fratello, Maria, lei ama lui 'your brother, M., she loves him'.

(11)* Credo che Mario, lui non venga 'I think that M. he won't come'.

(12)* Me, non vogliono me 'Me, they don't want me'.

(13)*
(13) Giorgio, non conosco la ragazza che lui vuole sposare
    'G, I don't know the girl that he wants to marry'.

In (9) there is a lefthand PP, a property which is allowed only in CLLD, not in HTLD. But (9) has a non clitic resumptive pro-PP (lui) which is incompatible with CLLD. Hence the contradiction which leads to illformedness. In (10) there are two lefthand (Noun) phrases, a possibility open to CLLD but not to HTLD. But (10) has also two non clitic resumptive pronouns which are compatible with HTLD only. Hence, again, a contradictory situation which induces illformedness. (11) is likewise ruled out because the lefthand NP Mario is in a 'non-root' context, a diagnostic for CLLD, and the resumptive element is again a non clitic pronoun, a diagnostic for HTLD. Hence the conflict and the ungrammaticality. An analogous conflict is found in (12) where Case matching appears, which is unique to CLLD and where the resumptive element is a non clitic pronoun (which excludes CLLD). Finally (13) is grammatical because the non clitic resumptive pronoun determines that the sentence is an instance of HTLD and sensitivity to island constraints is unique to CLLD (cf. 7f and 8f).

If similar interactions of the other properties give consistent results, as it appears, then we have some reasons to set up two distinct constructions with the respective sets of properties seen in (7) and (8) (among others), quite apart from any attempt to relate such constructions to a general theory.

We will proceed now to consider how such clusterings of properties can be made to follow from the basic organization of the theory presupposed here (the so-called 'Government and Binding' theory of Chomsky (1981a) and many related works).

Let us consider HTLD first.

The fact that the relation between the lefthand NP and the resumptive pronominal shows no syntactic connectedness nor is sensitive to island constraints might indicate that the rule responsible for the 'connection' is not a sentence grammar rule but a principle of discourse grammar. This
is not necessary, however. For example, the relation between the head and the resumptive pronoun in relative clauses with a resumptive pronoun strategy as in the colloquial English sentence (14):

(14) The man who they think that if Mary marries him then everyone will be happy

shows no syntactic connectedness nor is sensitive to island constraints though one might want to say in this case that this is a sentence grammar phenomenon. I will return to a comparison of HTLD with such a case directly. Suppose we say that the connection between the topic NP and the resumptive pronominal is indeed one of discourse grammar, in fact the same one which intervenes between a full NP and a pronominal in two adjacent sentences in discourse, as in (15):

(15) I like John. I do think however he/those little bastard should be quieter.

What does this hypothesis entail for the properties of the construction? Some of these follow with no additional assumptions needed. For example, if the lefthand NP and its 'resumptive' pronominal belong, as it were, to two different units of discourse, it is to be expected that they should show no syntactic connectedness (in terms of Case matching, etc.) of the type found say in wh-constructions. This is just what happens between two NPs in two distinct sentences. It is also expected that the relation between the two is not sensitive to island constraints which is a sentence grammar phenomenon (cf. Williams [1977]).

Likewise it is to be expected that the so called 'resumptive' pronominal should be freely a clitic or tonic pronoun or a pronominal epithet (like that bastard) since these are all permitted means of coreference across sentences.

Similarly the fact the lefthand NP occurs typically in the absolute initial position in 'root' Ss is understandable if the relation is between two units of discourse? 
Properties 7c, d, e and f are thus seen to be automatic consequences of

the hypothesis that HTLD is a discourse grammar construction. What about

properties 7a-b? These are not necessary consequences of the hypothesis

but they are quite compatible with it and perhaps even natural.

The fact that the lefthand phrase can essentially be a NP only is perhaps

understandable if we think that it must be an autonomous unit of discourse.

This requirement for example seems to exclude PPs, APs and other catego-

ries which are subcategorized by a V etc. and which would have to be

'reconstructed' in their sentence internal position in order to be inter-

preted\(^8\).

As for 7b (the prohibition against more than one lefthand NP), again, it

might seem reasonable to think that having two topics simultaneously (or

bringing attention to more than one object to predicate something of them)

makes little sense. Analogously one might wonder why languages do not al-

low for two subject positions, etc. But I have no especially revealing

answer to this point.

This discourse grammar hypothesis for the HTLD construction (which to ant-

icipate to some extent what I will say later is the same construction

found under the simple name 'LD' in English, French, Dutch and German

and undoubtedly other languages) departs somewhat from Chomsky's (1977)

analysis. Chomsky takes the connection between the topic NP and the re-

sumptive pronoun to be effected by a special rule of predication which is

also operative in relative clauses and other structures.

The idea is that the LD (HTLD) construction, much like relative clauses,

is essentially an open sentence: that is, a sentence containing a pro-

nominal position lacking independent reference which must be anaphorical-

ly linked to the NP in the sentence peripheral position (either the 'head'

of the relative clause or the 'topic' NP in the Left Dislocation con-

struction).

Thus both:
(16) John, Mary doesn't like him

and (14), above, would be taken to contain an open sentence as indicated in (17):

(17) a. Mary doesn't like —
   b. They think that if Mary marries — then everyone will be happy

which is predicated of John and the man, respectively.

For concreteness, one may think of this rule of predication as re-indexing the independently generated referential index of the pronoun in (14) and (16) to match the referential index of the 'head' or 'topic'
NP.)

There is however a notable difference between the Left Dislocation case and the relative clause case. In relatives the resumptive element can generally be a pronoun (or a gap) only, not a full NP (e.g. a pronominal epithet). But in the Left Dislocation construction (i.e. HTLD) there is no comparable restriction. See the contrast in (18).

(18) a. John, Mary doesn't like that little bastard
   b. *The man who we met the girl that loves that bastard...

The contrast becomes understandable if we reserve the Predication rule to relative clauses only, for which a quantifier/variable structure in LF seems independently plausible. Pronouns (or gaps) can serve as variables because they need not have independent reference, but full NPs like that bastard normally cannot.

I take the well-formedness of (18a) to indicate that HTLD does not involve the Predication rule mentioned for relatives nor any other sentence grammar rule for that matter, nor a quantifier/variable structure at LF. There is in fact no reason to hypothesize anything special in addition to the discourse principle(s) that govern(s) coreference across sentence boundaries.
This appears to be confirmed by the existence of such cases as (19):

(19) John, Mary doesn't like that kind of person

where there is no resumptive NP but only a more vague relation of 'aboutness' in the proposition (the only real requirement on this 'construction' (cf. Chomsky 1977, p. 81)), or even such (Italian) cases as:

(20) \textit{Lui, Mario non è affatto adatto}
   'Him, M. is not at all suited'

where the order referential NP-resumptive pronoun appears 'reversed'.

Of course, the argument crucially hinges on the assumption that (18a), (19) (and (20)) are all instances of the same 'construction type'. This is not necessarily correct, but seems natural\textsuperscript{12}.

Thus, I tentatively conclude that HTLD is a discourse grammar phenomenon\textsuperscript{13}. Its properties are consistent with the simplest possible analysis: the null hypothesis, which asserts that there is no sentence grammar rule specific to the construction.

Let us now consider CILD. This construction has no syntactic analogue in English (for principled reasons, as I will suggest below).

When its basic properties given in (8) above are taken together and contrasted with those of the HTLD construction, they seem to indicate that CILD is a sentence grammar construction, although some of them, separately, are not necessarily peculiar to sentence grammar\textsuperscript{14}.

Such properties are clearly reminiscent of those characterizing the relation between a \textit{wh}-phrase in COMP and its trace in what are typical sentence grammar constructions.

Before proposing anything specific about the grammar of this construction let us consider more closely what the property of obligatory connectedness essentially consists in.
Very grossly, this property can be characterized in the following way: the lefthand phrase (remember that it can be virtually any major category) behaves with respect to the various syntactic and Logical Form (LF) principles as if it occupied the position actually filled by the resumptive clitic pronoun within the associated S. I give a couple of examples for the sake of illustration. Additional examples can be found in Van Haaften & Smits (this volume) in which HTLD in Dutch and German are compared with Contrastive Left Dislocation in the same languages, where the latter construction bears some similarities with CLLD.

For one thing, where Case is marked morphologically (as in 1st and 2nd person singular personal pronouns) the Case of the topic NP must be identical to the Case assigned to the resumptive clitic in CLLD. See:

(21)a. Gli unici che {a me mi hanno sempre trattato bene sono loro

 'The only ones who me, they have always treated me nicely are them,

b. Gli unici che {pio dicevano che non ce l'avrei fatta sono loro

 'The only ones that I, they would say that I could not make it, are them'

Secondly, the categorial status of the lefthand phrase must be identical to that of the resumptive clitic (that is, the lefthand phrase must satisfy the same subcategorization requirements apparently satisfied by the resumptive clitic). See (22):

(22)a. Se [a Giorgio loro non [gli] hanno scritto, una ragione c'è

 'If to G. they have not-him-written, there is a reason'

b. *Se [Giorgio loro non [gli] hanno scritto, una ragione c'è

 Scrivere ('write') requires a PP introduced by the proposition a. This requirement is satisfied by the lefthand phrase in (22a) but not in (22b).
Analogously, the thematic role assigned to the NP in 'Topic' position (such roles as agent, goal, patient, etc.) is the one that the appropriate predicate would assign to the position filled by the resumptive pronoun (e.g. 'goal' to the topic NP in (22a)).

Also with respect to the possibilities for coreference the lefthand phrase behaves as if it were within the associated S, in the place of its resumptive pronoun. In the theory of Universal Grammar the possibilities for coreference of a NP are governed by very general principles: the Binding principles.

They characterize for each one of the three essential types of NPs (anaphors, like reflexive pronouns, pronominals, and full NPs) when it can be coreferential to another NP in the sentence.

In Chomsky (1981a, p. 188) these principles take the form in (23):

(23)a. An anaphor is bound in its governing category
   b. A pronominal is free in its governing category
   c. A full NP is free

Consider the examples in (24) - (26):

(24)a. I imagine that [Mary got herself a new purse]
   b. *Mary imagines that [I got herself a new purse]

(25)a. *I imagine that [Mary wrote to her]
   b. Mary imagines that [I wrote to her]

(26)a. *She imagined that Mary got a new purse
   b. Although she imagined that, Mary didn't actually get a new purse

Without entering into the chain of definitions that clarify what is meant by (23), let me simply say that the governing category for the relevant NP in (24) and (25) is the sentence indicated by the brackets there. A reflexive pronoun like herself is an anaphor and as such it must satisfy
(23a).

To say that a NP is bound means roughly that there is another NP coreferential with it which bears a certain structural relation to it (let's say, it is higher up in the tree representation of the sentence than the NP in question)\textsuperscript{16}.

Now in (24a) herself is bound in its governing category (in fact by the NP Mary) since the latter NP is within the brackets and is higher up in the tree than herself.

In (24b) however, although than NP Mary is higher up in the tree, it is not contained in the brackets, so that herself is not bound in its governing category and the sentence is illformed.

In (25) we have the inverse situation with respect to grammaticality. This is because pronominals must be free (i.e., not bound) in their governing category.

Full NPs on the other hand must be free throughout. That is, they cannot have an antecedent higher up in the tree. (26a) is ungrammatical because the NP she qualifies as an antecedent of this type but (26b) is allowed because the NP she is not higher up in the tree in the intended sense (being inside a subordinate adverbial clause).

Sentences (27)-(29) are the Italian equivalents of (24)-(26).

(27)a. Immagino che Maria\textsubscript{1} abbia comprato un nuovo borsellino per sé\textsubscript{1}

b. *Maria\textsubscript{1} immagina che io abbia comprato un nuovo borsellino per sé\textsubscript{1}

(28)a. *Immagino che Maria\textsubscript{1} non abbia scritto a lei\textsubscript{1}

b. Maria\textsubscript{1} immagina che io non abbia scritto a lei\textsubscript{1}

(29)a. *Lei\textsubscript{1} si immaginò che Maria\textsubscript{1} avesse comprato un nuovo borsellino
b. Anche se lei, se l'era immaginato, Maria di fatto non si è comprata un nuovo borsellino.

Now if we construct a CLLD counterpart of (27)-(29) by locating the phrase underlined in (27)-(29) in 'Topic' position, we can see that the grammaticality judgements are preserved:

(30)a. Per sé immagino che Maria si sia comprata un nuovo borsellino
b. *Per sé Maria immagina che io si sia comprato un nuovo borsellino

(31)a. *A lei immagino che Maria non le abbia scritto
b. A lei Maria immagina che io non le abbia scritto

(32)a. *Maria lei si immaginò che avesse comprato un nuovo borsellino
b. Maria anche se lei, se l'era immaginato, di fatto non si è comprata un nuovo borsellino

That is, with respect to the application of the Binding Principles, which in Chomsky's recent framework apply at least as early as S-structure, the phrases in 'topic' position of CLLD behave as if they actually occupied at S-structure, the structural position filled by the resumptive pronoun.

One last case of connectedness that I will mention has to do with a Logical Form (LF) property. In (33):

(33) A suo figlio, credo che [ognuno di loro] finirà per lasciargli un appartamento

'To his son, I think that each of them will end up leaving an apartment'

suo can be bound by the quantifier [ognuno di loro] even though, at S-structure and at LF, the pronoun is not in the scope of the quantifier. Notice that the resumptive pronoun is, however, in the scope of the quantifier. Once again we are led to the conclusion that the 'topic'
phrase behaves with respect to a certain principle (this time an LF one) as if it occupied the position of the resumptive pronoun. In all these cases, corresponding sentences in the HTLD construction show no connectedness. How can one account for the observed facts of connectedness shown by the CILD construction?

In principle, there are two ways one can represent such connectedness properties, both of which have been explored in recent literature. One is to employ some sort of 'reconstruction' rule, whereby the 'topic' phrase is, as it were, transferred in the associated sentence internal position ('put back', in the wh-movement cases) at the level at which the relevant principles operate, so that the grammar may represent each property unitarily. The other, recently explored by van Riemsdijk and Williams (1981), essentially consists in base generating the (ultimately) sentence peripheral phrase in sentence internal position and having it move to its final position very late, after all syntactic and LF principles have operated (so that the generalization is automatically, and, in fact, trivially, satisfied). The sentence peripheral phrase acts as if it were in the sentence internal position filled by the resumptive element simply because it actually is in that position when the relevant principles operate; after that, it moves to the sentence peripheral position that it manifestly fills, leaving a resumptive pronoun in the original site.

The two alternatives, when rendered more precise, make different empirical claims and are, in principle, distinguishable. Here, however, I will not pursue this question, although some of the discussion and analysis that follows does implicitly bear on the matter.

Here, I am tentatively adopting the former alternative, for concreteness.

Suppose the 'reconstruction' process I have alluded to takes the following form:
At D(eep)-structure, phrases generated in Topic position (outside of $\tilde{S}$) are superscript coindexed with a categorially identical sentence internal phrase as in (34):
(34) \[ \begin{align*}
&\text{[}\text{S \text{TOP \text{pp}^3 \ a \ Giorgio}] [\text{S \ COMP \text{S \ Piero \ non \ [\text{pp}^3\text{gli}]} \ ha} \\
&\text{scritto} [\text{pp}^3] \text{]} \text{]} \end{align*} \]

'To G, P not to-him-has written'

The categorially identical sentence internal phrase is an empty phrase (which may itself be bound by a clitic pronoun). Such superscript coindexing has the effect of building up a 'chain' of like categories where the 'chain' can be conceived of as the dilation of a single category. In other words, the chain counts as one argument position in that it contains a single contentive element (the content of the category in TOP) even though such content is 'linked' to two categorial positions: the one in TOP position and the sentence internal empty phrase 17).

I am assuming that clitic pronouns, in as much as they do not fill the sentence internal position but merely 'bind' it from a position attached to the verb, have the faculty of not counting as arguments so that the full 'chain' consisting of the lexical phrase in TOP, the clitic pronoun and the empty sentence internal phrase still counts as a single argument position spread in three categories 18).

Furthermore let us assume that all the relevant structural properties (of government, thematic role assignment, etc.) of the sentence internal empty phrase are absorbed by the 'chain', of which the latter is a 'link', and are satisfied by the lexical content of the chain which is located in TOP position 19).

These assumptions have the effect of ensuring that the sentence peripheral phrase (in TOP position) acts in all relevant respects, that is, with respect to principles operating at S-structure and LF, as if it actually filled the sentence internal position with which it is associated.

The 'connectedness' or 'reconstruction' property of the sentence peripheral phrase is thus expressed formally.

Before briefly considering the consequences of this approach for the CLLD construction, the contrast between the wellformedness of (34) and the illformedness of the following should be noted:
(35) $^[S_{TOP} \text{PP}_{3a \text{ Giorgio}} \text{ COMP}_{S_{Piero \text{ non ha scritto}}_{3a \text{ lui}}}]$

'To G., F. not has written to him.'

The minimal difference between (34) and (35) lies in the fact that in (34) the sentence peripheral phrase is matched by a corresponding empty phrase within the associated $S$, whereas in (35) no such empty phrase is present. That is, the 'chain' in (35) consists of two PPs which are both lexically filled by an argument in argument position (Giorgio and lui). I assume that the two PPs cannot count as a single 'chain'; that is, as a single contentive element (cf. Chomsky (1981a,b)). There is, thus, a crucial difference between a tonic pronoun, which fills an argument position, and a clitic, which is in a non argument position, the latter only being able to be part of a 'chain'.

The details of this interpretation of the 'reconstruction' problem obviously necessitate much more careful attention than has been accorded to them here. I refer to Cinque (forthcoming) for further discussion. Suffice it to note that under the approach briefly sketched here most of the properties mentioned above of the CLD construction follow more or less straightforwardly. So, for example, the first three properties of (8) are expected; they follow as the null hypotheses.

As for (8a) the coindexing convention discussed can involve plainly any major category (as long as an identical major category is found sentence internally).

As for (8b) it is also expected that such coindexing convention may take place more than once (as long as the matching with an identical sentence internal phrase is satisfied). Thus there is no (theoretical) upper limit to the number of times it applies, the limit being set intrinsically, if at all (by the number of actual argument positions available).

Likewise, for (8c), the simplest hypothesis is obviously that the coindexing convention can take place without restrictions of context (in both 'root' and 'non-root' contexts).
Property (8d) follows from the assumption made above that only syntactic clitic pronouns (not tonic pronouns) have the faculty of entering as links of a 'chain' in that they can (optionally) be taken as non-arguments.

(8e) also follows from the coindexing convention and the associated convention that the structural properties of the empty sentence internal phrase are transferred to the sentence peripheral phrase for satisfaction. In fact both conventions were primarily proposed to account for this property.

What about (8f)? So far, it has been assumed implicitly that the sentence peripheral phrase is generated in place and connected to the sentence internal empty phrase (and the clitic phrase, if any) via the coindexing convention proposed. But it might be suggested that such coindexing is brought about by an application of the transformational rule Move α. This can be done in either of two ways. In the first the phrase in TOP starts out in the corresponding sentence internal position and is moved to its ultimate sentence peripheral position by Move α (may be passing through COMP), a coindexed trace being left behind (I return to the fact that a clitic may be present, too). This derivation is schematically represented in (36):

(36) \[ S \overset{\text{TOP}}{\leftarrow} S \overset{\text{COMP}}{\leftarrow} S \ldots (\text{cl}) \ldots [X] ] \]

The second would consist in adopting what was proposed by Chomsky (1977) for the English Topicalization construction, according to which the phrase in TOP is base generated there, outside of S, and it is matched by the movement to the adjacent COMP of a corresponding wh-phrase (the wh-phrase being later deleted). The derivation is as indicated in (37):

(37) \[ S \overset{\text{TOP}}{\leftarrow} S \overset{\text{COMP}}{\leftarrow} S \quad \ldots (\text{cl}) \ldots [\ldots \alpha+\text{wh}] ] \]

In this way, the fact that the relation between the phrase in TOP and the associated sentence internal phrase is sensitive to island constraints could directly be reduced to subjacency, a principle holding of movement.

There is, however, evidence that CLLD does not involve a movement component. This can be seen more clearly if one contrasts CLLD with the Topicalization construction in Italian which mirrors the Topicalization construction of English, analyzed in Chomsky (1977) as involving wh-movement.

The basic properties of the construction, to be compared with (8), are:

(38)a. The lefthand phrase can be virtually any major phrase
   b. There can be just one lefthand phrase
   c. The lefthand phrase can occur in 'root' and 'non-root' contexts alike
   d. The resumptive position is obligatorily an empty phrase
   e. There is obligatory connectedness
   f. The relation between the lefthand phrase and the sentence internal empty phrase with which it is associated is sensitive to island constraints.

Topicalization differs from CLLD in at least two respects: properties b and d (cf. (8) with (38)).

Under an analysis in which CLLD incorporated a movement component along the lines suggested in (36) or (37) property (8b) should induce a plain violation of subjacency.

The principle essentially states that in a structure like:

(39)  \[ \ldots \ [\alpha \ldots [\beta \ldots y \ldots] \ldots] \ldots x \]

movement from \( y \) to \( x \) is blocked if \( \alpha \) and \( \beta \) are cyclic categories. There is evidence that in Italian \( s \) and NP are cyclic categories (cf. Rizzi (1982)). Thus consider a CLLD case like the following:

(40)  Mario, la sua bicicletta, credo che a Carlo, risulti chiaro che non gliel’ha prestata.
Mario, his bike, I think that to Carlo, it seems clear that he has not lent it to him.

where two argument phrases of the most deeply embedded clause are 'left dislocated' to absolute initial position and a third argument phrase of the same sentence is 'left dislocated' in front of the first embedded clause. It is easy to see that, whatever the derivation, at least two of the three 'left dislocated' phrases would cross two cyclic S boundaries under a wh-movement analysis of CILD.

One possibility is given in (41):
Thus a double violation of subjacency should be induced which should
discard the sentence. But this is not the case. Property (8b) of CLLD is
thus evidence that CLLD does not involve Move φ and its associated pro-
erties (subjacency)\textsuperscript{21}.

The fact that, on the contrary, Topicalization can have just one left-
hand phrase, is indeed compatible with a derivation of Topicalized struc-
tures through Move φ, as exemplified in (42):

\begin{equation}
\text{(42) \underline{La sua bicicletta}, credo[che risulti chiaro[che non ha prestato NP]]}
\end{equation}

'His bike, I think that it seems clear that he has not lent'

A successive cyclic movement will imply the crossing of at most one cy-
clic $\bar{S}$ boundary each time, with no violation of subjacency.

The second difference between CLLD and Topicalization (the possibility of
a clitic resumptive pronoun for the first construction vs the obligatory
presence of an empty phrase not bound by a clitic for the second) is
again suggestive of a difference between the two constructions in terms
of Move φ. If CLLD involved Move φ the possible presence of a clitic
should have to be accounted for, since a clitic is incompatible with
such clearly $\text{wh}$-movement constructions as $\text{wh}$-interrogatives, $\text{wh}$-relatives
and $\text{wh}$-comparatives in Italian.

It seems unlikely that the CLLD construction could be interpreted as a
case of 'clitic doubling' construction.

In languages which show the clitic doubling phenomenon, like modern
Roumanian, clitics coexist with $\text{wh}$-phrases even in ordinary overt $\text{wh}$-
constructions\textsuperscript{22}, as shown in (43):

\begin{equation}
\text{(43) Pe care ai văzut-o}
\text{'which one (did-you) see-her}
\end{equation}

because there are corresponding clitic doubling cases like:
(44) Am ŋisut-o pe ea 'I have seen-her her'

But Italian lacks 'clitic doubling' in this sense, and the assertion that
it has 'clitic doubling' just with CLLD would be an uninteresting stipu-
lation, at best.

An alternative would consist in saying that clitics can optionally be the
spelling out, or phonetic realization, of the traces left by wh-movement.
But again we would be left with no explanation for the fact that clitics
are incompatible with overt wh-constructions in the language, where, in
addition, this incompatibility can in fact be seen as a general consequence
of the Binding Principles.

I will thus tentatively conclude that CLLD does not involve wh-movement
(and in fact no movement component at all, differently from Cinque (1977))
in contrast to Topicalization. The absence vs. presence of wh-movement
(Move α) is thus the minimal difference which distinguishes CLLD from
Topicalization and from which various differences stem for the two con-
structions.

If the conclusion is correct, it implies, among other things, that the
phenomenon of connectedness cannot be seen merely as a consequence of
Move α (but, as proposed above, as an effect of 'chains', which in turn
can be created either by the convention of superscript coindexing or by
codexing through movement). Another non-trivial consequence whose dis-
cussion here would take us too far afield is the fact that island con-
straints must involve more than just subjacency which holds of Move α,
given that a non-movement construction like CLLD obeys these constraints
all the same.

To summarize the discussion up to this point, one may say that the evi-
dence available indicates that in Italian there are three syntactically
distinct 'topic' constructions. One major distinction separates the
agging construction, which is arguably a discourse grammar construc-
construction, from the other two, CLLD and Topicalization, which belong to sentence
grammar. The latter two constructions have been shown, furthermore,
to overlap partially in their syntactic properties. They share the pro-
properties of 'connectedness' (in the sense clarified above), of being 'non-root' constructions, and of 'sensitivity' to island constraints. It has been suggested that these three characteristics can be reduced to a single component that both constructions share, namely the notion of (extended) 'chain', which in the CILD case is created by free (super-)script coindexing at D-structure, and in the Topicalization case by Move 3.

It was also argued that the single module differentiating the two constructions (i.e. the fact that Move 3, with its associated properties, is involved in Topicalization but not in CILD) is the unique factor responsible for various features distinguishing the two constructions. Two of these have been reviewed here: (1) the fact that in CILD there may be an unbounded number of lefthand phrases whereas in Topicalization this is not permitted; and (2), the fact that the 'resumptive element' can be a clitic in CILD but must necessarily be a gap in Topicalization. More are discussed in some detail in Cinque (forthcoming), to which I refer.

Against the background of this analysis, let us now turn to a brief examination of the 'topic' constructions found in the other languages mentioned at the outset.

The English construction referred to as 'Left Dislocation' by Ross (1967) and subsequent work is essentially the construction which we have called HTLD here, as it will be clear from a comparison of its properties with those listed in (7) above (cf. also fn. 7).

English has no syntactic analogue of CILD for principled reasons, since it lacks clitic pronouns which alone can enter (extended) 'chains'. See above the discussion about (34)-(35). The so called Topicalization construction in English appears to be syntactically identical with the Italian Topicalization construction discussed above, although the two differ pragmatically, English Topicalization corresponding pragmatically to the Italian CILD construction (cfr. the remarks above about the pragmatics of CILD and the pragmatic analysis of English Topicalization in Prince (1981)). The rarer construction of 'Focus-Movement' in English discussed by Prince (1981)) appears on the contrary to correspond in essence to the Italian Topicalization construction both syntactically and pragmatically.
French appears to have the three fundamental 'topic' constructions of Italian with (at least) one important distributional difference. In French CILD structures seem to be very rare (impossible for some speakers) in 'root' contexts, but possible to various degrees (and even better than corresponding HTLD forms) in embedded contexts (cf. Larsson (1979), especially pp. 76-78). In 'root' contexts, their place is taken by HTLD structures (which are also found occasionally in front of the complement of verbs of a limited class (croire, penser, etc.)). It is not unreasonable to view this property as a consequence, perhaps, of a functional specialization of the two constructions in French.

German and Dutch (and the Germanic languages in general) show a partially different situation. In the few brief remarks that follow I base myself on the description of the relevant phenomena in Vat (1981) van Haaften and Smits (this volume). See also Zaenen (1980) and Altmann (1981). These remarks are merely meant to suggest a possible line of analysis which brings out the similarities of these constructions with the comparable one in the Romance domain.

For a construction in German in part similar to Topicalization, in that a constituent is moved out of S into a special Topic position to the left of COMP, see the extensive discussion in Thiersch (1978). I will not pursue this issue here.

German and Dutch have the construction here referred to as HTLD, as shown independently in Vat (1981), Zaenen (1980), Altmann (1981). Its properties are in essence those indicated in (7) above. German and Dutch (as well as other Germanic languages) have also a special construction called in Zaenen (1980) and Vat (1981) Contrastive Left Dislocation (CILD), whose basic properties are as indicated in (45):

(45)a. There is a sentence peripheral NP followed by a d-pronoun

   at the beginning of the sentence associated with the sentence
   peripheral NP

b. The d-pronoun itself is matched with a gap (empty NP position)
inside the associated S

c. The relation between the d-pronoun and the associated gap is
typical of other 'wh'-constructions (it is 'unbounded', it
is sensitive to island constraints, it shows connectedness, etc.)

d. The relation between the sentence peripheral NP and the d-pronoun
is also one of connectedness

This means for example that in German, where Case is overtly marked,
there will be Case matching (one aspect of the more general property of
connectedness) between the sentence peripheral NP and the adjacent d-
pronoun and that whenever this kind of connectedness is found the other
kinds of connectedness (for example, those discussed in van Haften and
Seits (this volume)) will necessarily be present. In particular, given
the fact that the d-pronoun itself is connected to a sentence internal
position of Case assignment the sentence peripheral NP and the d-pronoun
will overtly show the Case which is assigned to the sentence internal
empty phrase. For example, accusative in (46):

\[
(46) [\_NP \_ Den Hans], \_ den habe ich [\_NP \_ gesehen 'Hans, that have I seen'

R1 \quad R2
\]

A possibility is to treat this construction in German (and other Germanic
languages) essentially in the way the CLLD construction was treated;
namely by assuming that the sentence peripheral NP and the d-pronoun and
the sentence internal gap may constitute a(n) (extended) 'chain', where
the d-pronoun may have the faculty of not being an argument (just like
clitic pronouns in Romance). The 'chain' would thus contain only one
real contentive element (argument), the full NP in TOP, and would thus
be licit.28

This hypothesis entails a number of consequences which could in principle
be tested but which will be left unexplored here. Note, however, that
there is one important difference between CLLD and CLD, namely, if the
above analysis of CLLD is correct, the absence in CLLD vs. presence in
CLD of Move α: for the relation between the overt d-pronoun and the gap *(R_2 of (46)) is the same as that of other Move α constructions of German^39^). So, for example, one should expect CLD to differ from CLD in that, in contrast to the latter, it does not allow for an unbounded number of lefthand topic (Noun) phrases, which appears to be the case.

For the other construction that Vat (1981) calls Mixed Left Dislocation (MLD), of which (47) is an example:

(47) Der Hans, mit dem spreche ich nicht mehr

'Hans, with that speak I no more'

the following analysis seems possible. The NP in TOP is base generated in place and receives the same (unmarked) Case which is assigned to the NP in TOP in the HTLD construction. Move α then applies to a corresponding d-pronoun in the associated sentence, which moves it to absolute initial position. The minimal difference between this construction and CLD is that, the superscript coindexing convention (which I assume to be optional) operates in the latter but not in the former^30^31^.

NOTES

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1) Cf. Chomsky (1981a, 2.7).

2) For a brief discussion of a fourth (pragmatic) 'topic' construction in Italian, which is syntactically non distinct from the construction here referred to as 'Topicalization', see fn. 25.

3) For a particularly clear discussion of the pragmatics of (some) 'topic' constructions in English, which is in part at the basis of the cross-linguistic correspondences drawn here, see Prince (1981).

4) HTLD may also differ intonationally from CLLD in that the lefthand phrase in the former is generally separated from the associated sentence by a longer pause and may have a rising intonation. CLLD differs from Topicalization in that the topic nucleus of the utterance is within the associated sentence in the former but on the lefthand phrase in the latter.

5) This statement is somewhat simplificatory. More accurately, all those phrases which are not dependent on the predication contained in the associated sentence for assignment of a themetic role can appear in the lefthand position of the HTLD construction. Thus, typically, 'topic' bare NPs, but also those PPs which are not subcategorized by the predicate in the associated sentence, for example, can appear in HTLD with a topic resumptive pro-form (if there is one). Cf.
   (i) A Parigi, invece... Conosco più dì una persona che dice che là piøve pochissimo
   'In Paris, on the other hand, I know various people who say that there it rains very little'

As a further example, note the following contrast in English:
   (ii) Him, come with us to the cinema, I don't like that.

   (iii) 'That he comes with us to the cinema, I don't like that.'
The first alternative is wellformed as a HTLD structure in that Him, come with us to the cinema can appear in isolation and thus need not be subcategorized by the V like, whereas that he comes with us to the cinema is not autonomous in the same way. In fact it needs to be linked to a predicate that subcategorizes for Šs. Hence its illformedness as a HTLD constituent. (7a) is thus only a first approximation, but should do no harm if it is interpreted as expressing the fact that the range of lefthand phrases is more limited (in the suggested ways) than those allowed for in the CILD construction.

6) If it is a pronoun. In those instances where there is no corresponding pro-form for the lefthand phrase, there is simply a gap. Also, apart from lefthand object NPs, for which a resumptive clitic pronoun within the associated sentence is obligatory, all other phrases that have a corresponding clitic pro-form do not require it obligatorily. They may also be matched with a gap. This asymmetry between object NPs and the other phrases is in itself interesting but will not be further discussed here. See Cinque (forthcoming) for extensive discussion. All that is necessary for our purposes here is that the CILD construction admits only clitic pronouns in the associated sentence.

7) Here, there may be some limited variation among languages. For Italian, the 'root' character of HTLD is almost exceptionless. But other languages, like English, seem to marginally allow the topic to be embedded in the complement clause to some verbs. In this case the relation of the 'topic' to the resumptive element will still be taken to be one discourse grammar, even though the two belong to the same sentence, much as the discourse grammar rule of VP deletion studied by Williams (1977), and others, can apply within a single sentence.

8) See the remarks made in fn. 5.


10) Kroch (1981) apparently accepts cases similar to (18b). He in fact concludes that English resumptive pronoun relatives are essentially
parallel to (HT) Left Dislocation cases. If so, there may be a problem for the discourse grammar analysis of HTLD suggested here. In this case one could resort to Chomsky's (1981b) analysis. Note, however, that relative clauses with the resumptive pronoun strategy in English are merely 'suppletive'. That is, they are possible just in those cases where the movement strategy is precluded for independent reasons. Thus they may be unsufficiently representative. A more definite answer should await an examination of relative clauses in those languages that employ the resumptive pronoun strategy as the only strategy or at least as a systematic strategy.


12) This is, for example, the intuitive judgement on which the analyses of Rodman (1974), Gundel (1975), Chomsky (1977) and many others are based.

13) The distinction between sentence grammar and discourse grammar is explictly made in Chomsky (1975) and is given interesting content in, among others, Williams (1977) and the various contributions contained in Ronat (1979).

14) For example Ba, 8b, 8c, 8d.

15) No clitic resumptive pronounal is found in subject position (here, or elsewhere) due to the fact that Italian is a (so-called) pro-drop language. On the pro-drop phenomenology, see for example the extensive discussion found in Chomsky (1981a, b), Rizzi (1982, chapt. IV), Burzio (1983).

16) The more precise content of the notion 'higher up in the tree', utilized here, is the notion of c-command, for which, see, among others, Chomsky (1981a).

17) This notion of 'chain' is an extension of Chomsky's (1981a) notion of 'chain' which is restricted to sequences of categories which are all in argument position (in the obvious sense) within the sentence.
18) In this connection, see the discussion in Kayne (1982), Cinque (forthcoming).

19) Similar conventions have been proposed in Guéron (1979), Belletti and Rizzi (1981).

20) For further differences between the two constructions which can be argued to be further consequences of the presence vs. absence of Move α in Topicalisation and CLLD respectively, I refer again to Cinque (forthcoming).

21) Jim Higginbotham helped in strengthening this argument. He pointed out that if the lefthand phrases 'originating' in the most deeply embedded clause were all to the left of the matrix clause, rather than being at different levels of embedding, then the argument would be weakened by the possibility that some kind of absorption-like process (cf. Higginbotham and May (1981)) would take place in the most deeply embedded clause making a single constituent (in COMP) out of the three constituents of the lower clause, which then could move successive cyclically to the matrix S in a block, with no violation of subycency. This possibility is however ruled out, at least to some (and apparently sufficient) degree, in (41).


25) A fourth 'topic' construction may be isolated in Italian from a purely pragmatic point of view. Such construction is identical to Topicalization (it leaves a gap, it is "unbounded" it is sensitive to island constraints) but is pragmatically rather different from Topicalization. Once again, the two components appear to lack a one-to-one correspon- dence. The pragmatic conditions under which such construction is employed recall but are more restricted than those of CLLD. Apparently, the lefthand phrase is either a repetition of a previously mentioned
phrase (cf. (i) below) or a phrase which is anaphoric to a previously mentioned proposition (cf. (ii)):

(i) Fece loro la proposta di assumere un nuovo ufficiale. Tale proposta poi con lo stesso direttore discussa.
"He put forward the proposal that they take on a new porter. This proposal he then discussed with the director himself."

(ii) Il presidente giurò di non avere avuto contatti con esponenti del governo straniero e la stessa cosa giurò anche il suo segretario.
"The Chairman swore he had never been in contact with members of the foreign government and his secretary swore the same thing too."

Note that the presence of a gap in direct object position precludes these sentences from being interpreted as cases of CILD, which requires a resumptive clitic for that position. (cf. fn. 6). Moreover the construction is stylistically rather formal in contrast to CILD which belongs to the colloquial and ordinary accurate styles.

26) Another difference between CILD in Italian and French is that in the latter the resumptive clitic appears to be obligatory with all phrases that have a corresponding clitic form, (cf. Larsson (1979, p. 88)), whereas in Italian only direct objects require resumptive clitics (cf. fn. 6 above).

27) Cf. van Riemsdijk (1978, 3.2.2.).

28) Vat (1981), Van Haaften and Smits (this volume) contain a different analysis of this construction.

29) I am assuming here that the 'topic' NP is instead base generated in place and superscript coindexed with the sentence internal empty NP.

30) Such sentences as:

(i) "Mit dem Hans, mit dem spreche ich nicht mehr."
are ruled ungrammatical in the approach discussed here if d-pronouns alone may count as non arguments but not sequences of preposition + d-pronoun, where the preposition is lexical. In that case no 'chain' can be constructed which links mit dem Hans with a corresponding sentence internal phrase.

31) Vat (1981 p. 22) contains a brief discussion of a further, somewhat marginal, construction in Dutch and German which is like HTLD but for the presence of a sentence internal resumptive d-pronoun in place of an ordinary pronoun and which shows marginal connectedness. In the terms of the proposal put forth here, this may mean that a 'chain' can be (marginally) constructed in such case. The facts, however, do not seem to be clear enough to justify proposing anything specific. It may be that some form of analogy is involved.

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