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Peripheral constituents as generalized "hanging" topics

1 Core and periphery in syntax

From the beginning of formal and generative approaches to syntax, much successful effort has been devoted to describing what we could agree to call "core syntax¹", best illustrated by verbal tensed clauses like (1) : (1) le revêtement du sol du salon de ma mère est de la moquette 'the floor of the living room of my mother is carpet'

Fewer efforts have been made to analyze utterances like (2), easy to find in casual conversation in French:

(2) moi ma mère le salon c'est de la moquette le sol 'me, my mother, (as for) the living room, it is carpet (on) the floor' (1) and (2) describe exactly the same situation but with different syntactic organizations. The syntax of (1) can be viewed as a hierarchical network of dependency relations, or an embedding of projections of grammatical categories, the root of which is the verb *est*. On the contrary, we find in (2) surrounding the core verbal construction *c'est de la moquette* four constituents in what is now usually called the "left or right periphery". As these structures can only appear in main clauses, (1) versus (2) illustrates the fact that some syntactic structures can be found only in 'root sentences', in keeping with Emonds (1976) pioneering insights.

The problem is to define the relations that unite peripheral elements to the core one. The aim of this paper is thus twofold. First sections 2, 3 and 4 will establish a natural descriptive class of main syntactic constituents : the "hanging" peripheral constituents, the prototype of which are "hanging topics". Second, I will show (section 5), on theoretical and methodological grounds, that neither a purely syntactic onion skin model nor a solution combining "phonological concatenation" with pragmatic interpretation are satisfactory in describing this class, as they lead to ad hoc, if not self contradictory analyses. My own proposal will be that "macrosyntactic" relations independently needed to analyze (2) allow us to give an integrated description of all these peripheral constructions.

¹ "Core syntax", here, should be distinguished from "core grammar", as in Chomsky (1981). Core syntax is an informal way to designate the syntactic structures created by projections of a head via complement and adjunct relations.

2 A preliminary list of constructions with "peripheral" elements

The members of this list of constructions share one common property with utterance (2): they contain at least one immediate constituent which is not related to the rest of the utterance by a canonical grammatical relation : subject, complement or adjunct. Let us call it a "hanging" or non-dependent element. For the sake of the demonstration, this list has been built from two brand new comprehensive reference grammars of English : Longman Grammar of Spoken and Written English (LG) and the Cambridge Grammar of the English Language (CG). Our compilation is a collection of the structures described in those grammars as containing "peripheral" elements, roughly defined : "The peripheral elements introduced below share with stance and linking adverbials the characteristic that they cannot be elicited by question forms of the clause they are attached to" (LG : 136). The corresponding label in CG is "supplements" : "supplementation is a non-headed construction containing an anchor and a supplement, an element related semantically to the anchor but not integrated into the syntactic structure as a dependent." (CG: 66).

I will use, as the basis of my typology, the subcategories of LG and extend them by additional cases found in CG. The following heterogeneous list gives no feeling for any of the structural regularities that we will find in later sections. The main reason is that the structures we are interested in are not grouped in one specific chapter but scattered in various ones in these grammars. We use it to present some of the kinds of facts liable to be analyzed as peripheral and also to point out that the main source of their incoherent presentation in LG and CG is a biased approach towward utterances overly focusing on 'core' syntax. This point will be developed in a forthcoming extended review of the theoretical choices of these grammars.

In gross descriptive terms, we can group the "hanging" (peripheral or supplements) constituents found in the grammars in four main categories (the subcases are coded from [a] to [k]):

Class I : bare constituents (clausal or non-clausal, interjections not even pertaining to a grammatical category) that "obviously" cannot be assigned any grammatical role :

(a) **hanging non-clausal topics**. The basic property of not being integrated into the core of the utterance is obvious for initial NPs in 2. They are currently found under the heading "hanging topics"². In spite of the

² Note that analyzing them as hanging topics amounts precisely to saying that there is no grammatical link between them and the rest of the utterance. But what makes

numerous papers in current literature about such structures in many languages, it is hard to find them in reference grammars. Strangely for a corpus-based grammar, they don't even appear in LG. And the only mention of them in CG is to be found in footnote 24, p. 1413 :

"Examples are *occasionally* [emphasis mine] attested where there is no explicit anaphoric link at all between the prenuclear NP and the NP in the nucleus :

(3) the typical family today, the husband and the wife both work"

Some elements in non-verbal utterances, like those in bold in (4), mentioned by CG p. 921, should be analyzed as "hanging" topics :

(4) What a terrible thing, **that wailing wall in Berlin**.

CG proposes an analysis which consists in considering these structures as reduced verbal clauses. This arbitrary and non descriptive solution precludes their natural grouping with other non-verbal utterances :

(5) Everybody outside!³

In both cases there is a basic autonomous constituent *what a terrible thing*, *outside* and a hanging one *that wailing wall in Berlin, everybody*. To be consistent with the logic of the grammar, *that wailing wall in Berlin* and *everybody* should have been classified in CG as supplements of non-clausal grammatical structures. There is no reason to restrict the supplement-anchor relation to tensed verbal clauses. (b) **Parentheticals** (LG : 136-138)

(6) One of the first to make it in modern times (some Greeks had known it long before) was Leonardo da Vinci.
(7) If he checks my story - and he probably will - I will be sacked

them hanging is the point of view of looking at them through grammatical relations. We will on the contrary assume that they are not "hanging" but macro syntactically linked (if not grammatically linked) to the other parts of the utterance. ³ Note that *everybody* is not a topic but probably a vocative (quantifiers are excluded in topic position, not in vocatives: *Good night everybody*! vs **Everybody*, *good night*. This status does not modify its basic hanging status : we can find *Outside everybody*! and *Everybody*! *I am leaving*. (speaker addressing everybody in the situation) as a hanging vocative in a verbal context.

(c) **"Content" clauses**, main clauses in "apposition" are included in LG with peripherals as they are "added to" or "loosely attached to" the main clause:

(8) The excuse he gave – **that the train had been late** – seemed to satisfy the boss.

(9) I raised a more serious objection : it's against the law.

(d) **Comment clauses** Unexpectedly dealt with out of the peripheral section, we find (**LG : 197**) elements described as "**loosely** connected with the main clause... we choose to regard some of them as inserts..." which consequently should have been included in the list of peripherals :

(10) It is a nice approach, I think.

(e) Inserts (interjections, discourse markers)

(11) **Well**, that is true.

All these elements can be unequivocally and without hesitation classified as not integrated in the clause.

Class II : clausal or non-clausal constituents introduced by Prepositions, Complementizers or Coordinate conjunctions, including adverbs, which do not satisfy the properties of adjuncts integrated in the clause as compiled in section 3 below : They are described as peripherals "loosely attached" by LG, or supplements "not integrated in the syntactic structure" by CG.

(f) Stance, linking, modal adjuncts (non-clausal or clausal) (LG: 136):

"A variety of more peripheral elements can be added to the clause [...] **Stance and linking adverbials** could arguably have been included here (peripheral elements) rather than in the survey of major clause elements". They share [...] the characteristic that they cannot be elicited by questions forms of he clause they are attached to [...] very loosely connected with the clause and outside the predicate."

(12) **Frankly,** Kris didn't want to know.

(g) Marked topics. The CG says (p. 1410) that dislocations "must be distinguished from Marked Topics" as in (16):⁴

(13) As for the Hall, the architect excels himself.

Marked topics are analyzed as adjuncts without any syntactic argument. However, on the basis of the internal logic of the CG grammar, both of them should have been analyzed as supplements.

(h) Supplementive clauses "Loosely integrated clauses are found in initial, medial or final position" (LG : 201) :

(14) He walked with a lilting gait, his left Achilles tendon apparently shortened, **pulling his left heel up.**

(15) We called in to see Sue's parents, which made us rather late.

CG mentions in the section on relative clauses (p. 1064) the continuative use of supplementary relative clauses:

(16) They come to a cliff, where the deer suddenly stops and throws off the little boy, and the boy and the doff then fall into a pond.

(i) "Unembedded subordinate" clauses "Just as phrases can be used without being attached to larger structures, so can dependent clauses" (LG : 223) [the 'cos clause in the example]⁵

⁴ The distinction would have been still more awkward if hanging topics such as in (3) had been taken into account. So called "marks" on topics and coreference links definitely appear as irrelevant tools in syntactic analysis

⁵ How is it possible to say that a dependent clause is "not attached" to a larger structure? The polysemy of *dependent* is a real problem leading to, unfalsifiable assertions. Here "dependent" is used morphologically, meaning : "having the same internal form as a dependent generally has". But from the point of view of external relation, the constituents are not grammatically dependent ("without being attached"). This confusing terminology can be compared to another, later in the text : "Subordinates in form but with no syntactical link to the main clauses (1073)". To avoid confusion, dependent could have been specified as : discourse dependent. Discourse dependency as opposed to syntactic dependency was noted by Miller (1998) "spoken language is organized into discourse units which cannot always be captured syntactically but by discourse rules "(p.32).

(17) A You will be careful with that won't you? B Yeah! A Cos it costs a lot of money.

"Sentential relatives" introduced by which are also included here :

(18) A. Well – the good news for the environmentalists is the bike runs on the unleaded.B Mhm A Which is good news. Cos like that it's not so expensive.

These constructions come up again (p.1078) in the chapter "Grammar of conversation" as results of a specific production strategy : "The body of an utterance can be a single clausal unit, which can be elaborated through add-on strategy...used too **to add one clausal unit to another.** This can happen by coordination... Also relevant are the conjunctions *so* and *because*... these behave in some ways like coordinators in conversational discourse"

CG does not mention this type of clause in the chapter on supplements. Surprisingly, these are mentioned in other chapters, where they are indeed analyzed as supplements. For instance it is said in the adjunct chapter (p. 732) :

"these restrictions indicate that the PPs headed by *since*, *as*, etc are not integrated into the structure of the clause as *because* PPs : they are not constituents of the VP but are attached at a higher position in the constituent structure, or else have the status of supplements"⁶ There appear to be many contradictory statements about the status of these elements : Peripherals or not ? Supplements or not?

Class III : detached bare constituents that are coreferentially related to some grammatical function (left and right detachment). (j) **Prefaces**

(19) **This woman,** she is ninety odd.

(k) Tags

⁶ An example of *because* used as a supplement is given (p. 774) : *Its going to be a hard winter, because the storks are migrating early.* It could have been more descriptively adequate to take into account examples such as this one, which are largely documented in the literature and to state more accurately (p. 732): "as *because* PPs **can** be".

(20) It makes you wonder, all this unemployment.

There is no agreement on this point either : they are peripherals for LG but included in the clause –with many qualifications - for CG.

Class IV: a medley of prosodically detached constituents mixing both elements not integrated in the clause (appositions) and integrated ones ("end attachment" coordinates)

"A subclausal coordinate may be attached at the end of a construction following a clause. It may but need not have the informational status of a afterthought, in which case it has the status of a supplement. The difference with the integrated version is that the attached coordinate construction divides the overall message into two separate pieces of information" (CG "coordination" chapter, p. 1345-46) :

(21) I spoke with her, but only briefly.

(22) I'll drive you there, but only if you pay for the petrol.

The integration of those constructs in the supplement class seems to face a major problem. The conclusion (p. 1347) : "Usually the added element is very often interpreted as an adjunct, but it can also be a complement" seems to be self contradictory (a complement cannot be a supplement)⁷. The source of the contradiction is that there is a confusion between grammatical and prosodic integration, which are not necessarily linked. A dependent may or may not be prosodically autonomous, as I will point out later.

My conclusion is that these grammars cannot succeed in isolating a clear "natural class" of linguistic facts based on the following properties :

- a) being grouped in an utterance with a clausal or not clausal unit
- b) not being integrated in the grammatical structure of the unit (not being a dependent).

If such a natural class would be taken into account, it would be possible to further the analysis : What are the criteria for grammatical integration ? What is the exact nature of the relation "being grouped with" ? The main obstacle to such a query is that scholars often have a "core syntax" or IP-biased point of view, that the syntactic organization of any utterance should be described as a mere extension of the "simple sentence"

⁷ In the example given in the text *He was reading but nothing very serious*. the coordinate could easily be assigned the status of an afterthougt. If so, this coordinate is both a complement and a supplement.

or IP model. From a more specific and technical point of view, these "hidden" a priori assumptions on linguistic structure should be pointed out :

- a) Considering that elements in Class II are as straightforwardly out of the clause as hanging topics will amount to concluding that some constituents introduced by functional categories like prepositions and conjunctions are not grammatically related to the clause they are grouped with. This will in turn question one assumption that grammarians consider as a proven theorem : "the **internal** form of a constituent determines the type of syntactic relation it can be involved in". (Subordinators necessarily subordinate, coordinators coordinate).
- b) Assuming in Class III that dislocated elements are not in the clause would imply that an assumed parallelism between semantic and syntax be broken : "an element semantically related to the core clause (being coreferent to the subject) must be syntactically related to it."
- c) Considering that proven dependents in Class IV are out of the clause on the mere basis of their prosodic autonomy reveals a third hidden assumption : prosodic autonomy means syntactic autonomy.

These underlying assumptions can be summed up in the following Congruence of Components Principle :

The more morphologically marked, the more semantically related, the more prosodically integrated, the more syntactically integrated.

My contention is that this correlation, which is challenged by a number of empirically based studies in the current literature (see references in section 4.2) does not hold. It would be more adequate to consider that constituents in I, II, III, IV above (excluding "end attachments") form a natural class of non-dependents constituents on the basis of their external syntactic properties, and independently of their morphological, semantic and prosodic status. In what follows, I will outline what could be an integrated chapter on "peripherals" as non-dependents in a grammar. The major task is to start with an investigation of the characteristic properties of the members of the class. After a study of the prototypical case of hanging elements, hanging topics (section 3), I will attempt to integrate the descriptive class in a theoretical framework. I suggest that the opposition between approaches still assuming Congruence of Components Principle and approaches switching to what Jackendoff (2002) calls a Parallel Architecture of Components, may indicate the growing emergence in linguistics of a new "paradigm" in the sense of Kuhn (1962). This new

intellectual frame, which we can call "phemocentric"⁸, will facilitate the integration in linguistic descriptions of the new data made available via electronic corpora of spoken and written spontaneous productions, which is rendered very awkward by the old "graphocentric" paradigm.

3 Descriptive properties of hanging elements

To compare the properties of the hanging and the grammatically integrated elements let us examine their behavior in utterances (1) and (2) repeated below as (23) and (24) :

- (23) le sol du salon de ma mère est de la moquette
- (24) moi ma mère le salon c'est de la moquette le sol

In spite of their paraphrastic meaning, these utterances evince very different formal and semantics properties. As regards a comparison of their formal properties, my purpose is to challenge the traditional approach which underlines their similarities by pointing out their differences. My conclusion will be that the two utterances have very few common properties, and consequently that it is impossible to derive (24) from (23) through any kind of dislocation transformation or, as we find in more recent formalisms, by considering that (24) is an enhancement of a basic lexical projection by means of some kind of functional ones based on topic or focus nodes, as in Rizzi (1997) or Kiss (1998). The differences pertain to formal as well as interpretive levels of the structure of these utterances.

3.1 Role of grammatical categories and relations

My basic assumption is that neither grammatical relations nor categories play any role in the syntactic organization of the main constituents of (24). **3.1.1 No category needed**

Whereas utterance (23) relies syntactically on the presence of a tensed verb and would cease to be an instance of tensed verb construction without a verb, the presence of a verb in the second last constituent of (24) is not at all obligatory. The verbal construction can be substituted for by a NP (as in 25) or in the attested (26) or even a gesture (27) without any major structural loss :

(25) moi ma mère le salon une super moquette !

⁸ I use the radical of ancient Greek *phemi*, in the sense of "utter", because the radical *logo* would have been too close to *grapho*, semantically speaking, and therefore unsuitable for my intended "spontaneous speech" meaning.

'me, my mother, the living, a super carpet'

- (26) la voiture ce matin le moteur nickel
 - 'the car, this morning, the engine (it was) perfect (as nickel)'
- (27) moi ma mère le salon [gesture symbolizing thickness, comfort]

To put it bluntly, under these various substitutions, the main syntactic structure remains unchanged :

Hanging Topic, Hanging Topic, Hanging Topic, Comment Whereas in (23), if the verb is replaced by a noun, under the same prosodic pattern, the sequence becomes agrammatical (28) : a noun cannot head an IP. If the verb is omitted, the structure becomes a mere NP (29):

- (28) *le sol du salon de ma mère la moquette
- (29) le sol du salon de ma mère

This is a first clue that grammatical structure plays a limited role in the syntactic organization of (24). Grammatical structure shows up only inside the minimal "chunks", NP and *C'est* IP, it doesn't link these chunks.

3.1.2 No possible projection of a head category

It could be argued that (24) is still a possible subject predicate structure, assuming that it is a « small clause », based on a nominal projection with *une super moquette* as head. But this is an illusion. In French, there are neither nominal nor adjectival main small clauses like in Latin or Russian (Deulofeu 2003a). Besides, it is easy to ascertain that some "nominal" utterances are impossible as NPs or Nominal predicate small clauses (no articles, scrambled word order) :

- (30) ma mère le salon, moquette partout !
- 'my mother, the living, carpet everywhere'
- (31) ma mère, moquette partout ! le salon

Another remarkable fact is that a Hanging Topic can take in its scope more than one IP as in (32), where *il* y a functions as topic marker :

(32) il y a des personnes [vous allez les voir elles pleurent et - pendant deux ou trois heures elles vous pleurent dans les bras et vous repartez elles pleurent encore]

'some people, you go to see them they cry for three or four hours they cry in your arms and you go away they are still crying' The comment includes all the material in brackets. It would be semantically absurd to posit a cut after the first or second IP in the brackets. The comment characterizes the referent of a NP and the characteristic is precisely that these persons go on weeping after you leave. To be congruent with the interpretation, the syntactic structure must present a comment made of more than one non-coordinated IP. It seems impossible to say that the topic is a projection of this sequence of IPs.

3.2 Syntactic constraints

The formal constraints observed in these structures are very different from those in grammatical structures.

3.2.1 « Topical » constraints on negation and quantifiers

The NP positions meet all the properties of a Topic. For example negative elements or quantifiers, which are possible in the corresponding grammatical slots are impossible as hanging NPs (33 b., 34 b.):

(33) a. Ici rien n'est de la moquette
'here nothing is carpet'
(33) b. *ma mère rien c'est de la moquette
'my mother nothing it is carpet'
(34) a. dans cette entreprise chacun est le top du top
'in this firm each person is the best'
(34) b. * cette entreprise chacun c'est le top du top
'in this firm each person it is the best'

What should be noticed is that these constraints hold between the topic and the comment independently of the grammatical realization of the comment (verb , noun or even significant gesture).

3.2.2 Constraints on modal operators

Contrary to integrated constituents, these cannot be put under the scope of modal operators linked to the verb, which can be viewed as a consequence of independence from the verb projection :

a) Interrogative pronouns :

(35) a. le sol du salon de qui est de la moquette?'the floor of the living of who is carpet?(35) b. *qui le salon le sol c'est de la moquette'who the living the ground it is carpet'

b) Focalisation devices (clefting [36], contrast [37]) :

(36) a. c'est le sol du salon de ma mère qui est de la moquette'
'it is the ground of the living of my mother that is carpet'
(36) b. *c'est le sol que ma mère le salon c'est de la moquette
'it is the ground that my mother the living it is carpet'
(37) a. le sol du salon mais pas celui de la cuisine est de la moquette
(37) b. *ma mère le salon mais pas la cuisine le sol c'est de la moquette

3.2.3 Combination with clause level anaphors

Verbal modifiers or prototypal adjuncts can be linked to a clause via an anaphoric element representing the clause (*cela, ça 'that'*), as in (38). This is not the case for the hanging topics (in [39]-[40]) :

(38) a. le sol c'est de la moquette en été

'the ground it is carper in summer'

(38) b. le revêtement c'est de la moquette et **cela seulement en été** 'the ground it is carpet and that (so) only in summer'

(39) *ma mère le salon c'est de la moquette et cela le sol

(40) *le salon le sol c'est de la moquette et cela ma mère

3.2.4 Embedding⁹

Utterance (31) is not fully embeddable in larger constructions. It can mainly form a "root" construction :

(41) a. il faudrait tout refaire pour que le sol du salon de ma mère soit enfin de la moquette

(41) b. ? il faudrait tout refaire pour que moi ma mère le salon ça soit enfin de la moquette

This observation underscores the root nature of these structures. Not only are their parts not linked by any grammatical relation, but the "grouping" they constitute is not of the same nature as that of a canonical syntactic constituant. These structure have no head in a grammatical category.

⁹ This property is very difficult to study in detailed arguments because of the need for a strict definition of "embedding" in the presence of such interfering factors as : "presentential" use of verb + complementizer sequences, the specific behavior of some parentheticals, and the "pragmatic" behaviour of connectives, which can lead to apparent unexpected cases of main clause phenomena in embedded clauses.

3.3 Prosodic patterns

Martin (1978) points out a basic prosodic difference between the two utterances. In (23), which is entirely shaped by grammatical relations, the slope of stressed syllables in each constituent is determined contrastively, starting from the slope of the last one. This observation can be generalized : there is interdependence between prosodic contours and "core" syntactic structure. On the contrary what characterizes utterances like (24) is that the grammatically non-integrated constituents have their own contour (a raising one in the default case) independent of the slope of the last constituent of the utterance. Prosodic dependency mirrors grammatical integration. Another important point is that prosody separates sharply the utterance (24) into two independent parts: the hanging constituents are characterized by the fact that no significant contrast of contours is possible. There is no sense in which we could contrast an interrogative with an assertive contour on moi, ma mère, le salon. Conversely, the "comment" constituent is characterized by the fact that a significant opposition of contours (assertive vs. interrogative...) affects it. These data show that the comment part possesses an illocutionary force, which is carried over to the entire utterance, while "topic" constituents are devoid of illocutionary force.

3.4 Interpretation : inferential versus compositional mode of interpretation

I have till now assumed that the two utterances (22)-(23) are almost paraphrases. This is the case in a default context, but in fact their modes of interpretation are basically different.

The "core syntax" version (23) has a fixed interpretation of a relation between the subject and the predicate, based on simple semantic compositionality : it might be called the copular interpretation (the property of the predicate is assigned to the subject). In (24) the relationship can be more indirect, not determined by semantic composition but by inferences taking the context into consideration. So besides the "copular interpretation", still possible in a context in which the discourse topic is the type of ground surface :

(42) la chambre c'est du parquet et le salon c'est de la moquette 'the room it is wood and the living it is carpet'

(43) can be interpreted in another context as establishing a relation of the "purchase" semantic type between the topic and the comment :

(44) la chambre j'ai acheté du parquet mais le salon c'est de la moquette 'for the room I purchased wood but for the living room (I purchased) carpet'

So, in structures like (23), the semantic organization is determined by the verb, whereas in structures like (24), the links are established by inference, as it is the case in discourse sequences.

3.5 The two utterances are irreducibly distinct structures

I hypothesize that this difference in descriptive properties makes it impossible to describe the two types of utterances by means of the same set of analytic or theoretical tools. In section 5, I will show that attempts to do so necessarily fail, and I will make a counterproposal.

4 The natural syntactic class of non-dependent constituents

4.1 Extending the "hanging" status to non-canonical peripherals

A survey of the particular structures listed in section 2 under cases (a) to $(k)^{10}$ shows that these elements share one crucial aspect of the behavior of hanging topics. They respond negatively to any relevant¹¹ diagnostic test listed in section 3 that could argue in favor of their integration into the grammatical structure of the utterance. They have no link of syntactic dependence with any grammatical category of the rest of the utterance. The only " syntactic" argument that can be and is advocated¹² in favor of a "loose form of syntactic dependency" on the main verb boils down to a suppression test, presented by CG p. 1354. CG deals there with supplement clauses and observes the following acceptability pattern:

(45) He has been dismissed (clause), which I approve (supplement)

(46) *which I approve

¹⁰ The "end attachment" cases are excluded. They require a specific analysis, which will be given later (after table 1).

¹¹ *Relevant* means that we must distinguish the properties common to all nonintegrated constituents from those specific to the sub cases of topic-like elements. Negatives and quantifiers for instance are only excluded in the topic reading of hanging elements, not in the "if…then" reading : *nobody today, I cancel the lecture.* I assume that topical and frame setting hanging elements are pragmatic subtypes in a syntactically motivated subclass of section 5.3. : Prefixes.

¹² Note that this argument is also valid for hanging topics, which is an additional reason not to treat them separately from peripherals.

Such a contrast generally leads grammarians to draw the conclusion that the *which* clause is syntactically loosely dependent on the main clause.

Now what does exactly the pseudo dependency test show in (45)-(46)? Basically, that supplements need some other linguistic material to appear in an utterance. What is then the nature of the link that connects them to the utterance? *The Cambridge Grammar* gives a first answer : they are semantically linked to the main clause (p. 1350). They need a "semantic anchor", not a syntactic head to form an utterance. And this anchor is provided by the main clause.

But stating that the anchor is required only semantically overlooks the point that it has in fact a syntactic existence as is shown by the suppression test above : it is not only a meaning that is required for the sentence to be acceptable but a form, since this meaning is necessarily connected to a form. It is a linguistic sign (form + meaning) which licenses the hanging constituent¹³. This established fact explains the claim that supplement and anchor form a "construction".

One may wonder what kind of licensing this construction is based on. As it could not be a grammatical category licensing, it seems impossible to imagine a different one. This dilemma can be overcome if we accept that this licensing is syntactic but involving relations different from grammatical category projections.

In other words, we are faced with a case of parataxis or syntax by concatenation. But parataxis and concatenation are still syntactic relations, not "pragmatic or semantic" relations. What builds these relations are not grammatical structures but, bluntly, discourse patterns. Even if they can appear as based on "loose" syntactic relations, these patterns still belong to the class of syntactic structures¹⁴. My conclusion is that the contradiction is due to the fact that the old "graphocentric" paradigm still extant in new grammars is responsible for their inability to deal consistently with the new

¹³ It could be pointed out that there are cases of purely pragmatic "anchors". When for example, at the beginning of an interaction, somebody shakes vigorously somebody else's hand and says : "because I was told you thought I had something against you". But I maintain that even in this case there is a sign as anchor, which is not linguistic in nature but a communicative indexical sign (in the sense of a Pierce index-symbol distinction). Indexes are not mere actions or things, but actions or things that the "communicator" points out as relevant communication units. There is a syntax of indexes but obviously not a grammar of indexes.

¹⁴ The fact that the constraints that bear on parataxis are mainly of a semanticopragmatic nature does not entail that parataxis is *in itself* a pragmatic relation.

data (of spontaneous speech), which require the new paradigm to be properly processed.

In order to avoid any misunderstanding or confusion between description and theory, and to clarify this apparently clumsy notion of a semantically licensed syntactic constituent, I propose that a careful distinction be made between the observational level and the theoretical level of linguistic description. In what follows I will attempt to establish the natural syntactic classes of hanging elements on the basis of descriptive properties and in a further section I will discuss the possibility for theoretical approaches to integrate these classes.

4.2 The empirical basis of syntactic analysis

At an observational level, the only property common to all hanging elements is that they are not communicatively autonomous¹⁵: they cannot stand as complete communicative actions in a linguistic interaction¹⁶. They require or "entail" that some other communicative unit (grammatical construction or sound or significant gesture) be present in the context. A relevant test could be that they cannot be used as a turn opening an interaction "out of the blue", without negative feedback of the addressee: What ? I don't follow you.... This is exactly how the suppression test above must be interpreted. All the analytic difficulties stem from the widespread assumption that this communicative non-autonomy implies grammatical non-autonomy, via some kind of loose dependency relation (loose adjuncts). But the problem is that, contrary to what is suggested by the "graphocentric paradigm", communicative non-autonomy does not imply grammatical dependency. It has been demonstrated at length (Goethals 2002, Deulofeu 1999, Debaisieux 2002, Hopper 1988, Ono and Thompson 1995) that "insubordinate" elements like those in Class II (section 2 above) are not grammatically dependent, since they respond negatively to syntactic dependency tests.

¹⁵ The term "autonomous" has been chosen, in order to avoid using only one term ("dependency") for two different steps in linguistic analysis : establishing the facts and integrating them in a theoretical frame. Communicative autonomy is meant to designate a basic observed fact. "Discourse (or pragmatic) dependency" can be misleading because the term implies an interpretation of the facts.

¹⁶ The contention that linguistic constructs should be analyzed syntactically at the same time as grammatical constructions and communicative units is specific to the "phemocentric" paradigm.

Those facts are not considered important in the graphocentric paradigm, not sufficiently so to do away with the misuse of the category adjunct. Those linguists who adhere to the new "epocentric" paradigm, conversely, will find there good reasons to sharply distinguish adjuncts (in grammatical structure) from "hanging" or "peripheral" elements (outside grammatical dependency but still in syntax).

I will therefore endeavor to point out that grammatical dependency and "entailment" of a communicative unit are distinct sources for the lack of autonomy of linguistic segments. This will allow us to define disjoint descriptive classes for the observed data :

Table 1		
	C-auto. (communicatively autonomous) : possible as discourse initial utterance	C- non-auto. (communicatively non- autonomous) : entails another communicative unit
G-auto. grammatically autonomous	main utterances (of any maximal projection : IP, CP, PP)	"hanging" constituents Classes I, II, III, (Section 2)
G-non-auto . grammatically non- autonomous	pragmatically impossible	dependents : complements, adjuncts

This classification leaves aside Class IV of section 2. We will turn now to one of its members : the "end attachment coordination". As mentioned in section 2, the status of this construct must be clarified. As for C-autonomy, as far as it always appears after another communicative unit, it is clearly C-non-autonomous. More problematic is its status as regards G-autonomy : it seems to be both grammatically linked to the main verb as a modifier and separated from the clause by the prosodic contour (the period symbolizes a major prosodic break). On one side, with this prosodic break, the construct cannot be in the scope of modal operators of the main clause:

- (47) a. I spoke with her. (But) only very briefly
- (47) b. I didn't speak with her briefly but rather taking my time
- (47) c. ?I didn't speak with her. Very briefly

This property could be used as an argument for lack of dependency relationship with the main verb. But, on the other side, the construct can be substituted for by a wh-word, which argues for dependency :

(48) I spoke with her. How ? well, very briefly indeed.

It is possible to propose a coherent description of such constructs by considering that there exists another source of autonomy : enunciative autonomy (E-auto).

A chain of grammatical categories can be said to be autonomous enunciatively iff it can be uttered as a separate unit (with an independent prosodic contour and bounded by prosodic breaks), whether it be communicatively or grammatically autonomous.

If we assume that an operator cannot extend its scope above a prosodic break, the argument against grammatical dependency fails, and we can conclude that "end attachment" structures are enunciatively autonomous, but grammatically non-autonomous (they can be adjuncts or even complements). It must also be borne in mind that there are cases of grammatically autonomous but communicatively non-autonomous elements ("hanging") that can be enunciatively (prosodically) non-autonomous : *hopefully* in *he is hopefully absent*. This tends to confirm that prosodic and syntactic integration are two independent dimensions of syntactic analysis. In this extended framework, all the data of section 2 fall in disjoint descriptive classes, as shown in Table 2 :

	C –auto	C- non-auto.	
	E-auto	E-auto	E- non-auto
G-auto.	Main utterances of any category (IP, CP, PP)	"hanging" detached : default case	"hanging" integrated : <i>He is hopefully</i> absent
G -non- auto.	pragmatically impossible	"detached" adjunct "end attachment" I spoke with her, (but) only briefly. He didn't marry her. Because she was rich.	"integrated" adjunct I spoke with her very briefly. He didn't marry her because she was rich.

Table 2

•	

For lack of space, I will exclude E-auto adjuncts from further discussion. Let me just point out that, although being grammatically dependent, they can share, as the table shows, some communicative and enunciative properties with "hanging" elements. This shows again how pointless it is to oppose "core" and "peripheral" syntax.

Focusing now on the class of "hanging" elements (C-non auto, Gauto), I will show that it is possible to split it into descriptively motivated subtypes. I will use first a feature [+/-illoc]. This feature can be attributed by means of the test of possible meaningful contrast of prosodic contours (section 3.3). It codes whether the construct has a specific illocutionary force or not. This feature distinguishes two main subtypes of "hanging" units : the topic-like detachments in section 2 above, which are [- illoc], and the clause enhancing ones ("parentheticals", "unembedded subordinates" and "supplementive" which are [+illoc] :

Table 5 a.		
	C-autonomous	C-non-autonomous
With specific	Main	b)Parentheticals :
illocutionary force	utterances	One of the first to make it in modern
[+illoc]	of any category	times (some Greeks had known it long
	(IP, CP, PP)	before) was Leonardo da Vinci.
		h) Supplementive clauses
		He walked with a lilting gait, his left
		Achilles tendon apparently shortened,
		pulling his left heel up.
		i) Unembedded subordinates
		A You will be careful with that won't you
		?B Yeah ! A Cos it costs a lot of money.
Without specific	Pragmatically	a) Hanging topics
illocutionary force	impossible	What a terrible thing, that wall in Berlin
[- illoc]		d) Comment clauses
		It is a nice approach, I think
		e) Inserts
		Well, that is true.
		f) Stance and linking adverbials
		Frankly, Kris didn't want to know.
		g) Marked topics
		as for the hall
		j)Prefaces
		This woman, she is ninety years old.

Table 3 a.

	k)Tags
	It makes you wonder, all this
	unemployment

I will use a last descriptive feature : [+/- initial] to refer to the following : a C-non autonomous unit can appear either before or after the beginning of the communicative unit it is grouped with. The data show that [+ illoc], C-non auto units are only found after the beginning of the main C-unit, whereas [- illoc] units have both possibilities¹⁷. By combining these two features, we can build a descriptive grid of the major syntactic types of "hanging " elements:

Table 3 b. Major types of C- non auto, G-auto units

C-non auto	+ illoc	+ init	Not attested
G-auto		- init	A You will be careful with that won't you?
			B Yeah !A Cos it costs a lot of money
	- illoc	+ init	This woman, she is ninety odd
			Frankly, Kris didn't want to know.
		- init	It makes you wonder, all this unemployment.

As a result, we are provided with a coherent descriptive presentation of the facts dealt with in the reference grammars. The subtypes of "hanging" elements that they establish, in comparison, appear as ad hoc. Far from being syntactically motivated, they illustrate only the categorical realizations of C-non-auto elements allowed by The Congruence of Components Principle. Our descriptive tools help us offer an alternative to this inconsistent description. Table 4 includes, on the basis of already mentioned and additional data, all the possible realizations in major phrases of the basic formal types of "hanging" elements from the Table 3 b. The main result is that we can make the following generalization: almost every combination is possible¹⁸, although some may be statistically infrequent :

¹⁷ This positional feature represents only one of the observable formal properties of these units, arbitrarily chosen at the observational level for convenience of presentation. We will see in section 5.3 that "macrosyntactic" theoretical frameworks use more elaborated criteria for their descriptions.

¹⁸ At categorial level : there is at least one instance of the category that can fill a given C- unit slot. This does not hold at the lexical level. The table could have been

	clausal		Non-clausal	
	IP	CP PP	NP	PP
C-autonomous	Canonical		– The hammer,	On your marks.
[+ illoc]	Main clause	If only you	please!	
		had told me	– What a terrible	
		that earlier!	thing!	
C-non-		You will be		Many points
autonomous	It is raining :	careful with	He's had a blind	remain unclear:
[+ illoc]	you are	that won't	put up, a special	For future
	drenched	you? Cos it	blind that leads	investigations!
		costs a lot	across the fan	
		of money.	light	
C-non-auto	Come as he	Since he		
[- illoc]	may , I won't	agrees, I	The typical	As for me, it is
+ init	see him	accept.	family today, the	ok.
			husband and the	
			wife both work.	
C – non-auto	It is a nice	I accept,	– It makes you	Nothing can be
[- illoc]	approach I	since he	wonder, all this	done, in my
- init	think.	agrees.	unemployment.	opinion.
			– What a terrible	
			thing this wall in	
			Berlin.	

Table 4 : Categorical realization of C-units and the IP-bias

I assume that a descriptive grammar should consider as equally basic all the structures which appear in the slots of the chart above. There is no reason to take some of these structures as deviations from a canonical model. But the grammars criticized here do not follow this descriptive approach. They adopt instead a presentation based on normative assumptions which can be formulated as this :

-an utterance must be a bare IP clause

-No bare nominal, no bare clause can function as non-autonomous communicative units.

Therefore, only structures with shaded background in the chart above are felt as "natural" clusters of grammatical properties, even at the cost of an arbitrary extension of the IP model to C-autonomous structures in the case

extended to other classes of elements such as discourse particles or interjections, which can also function as C-units.

of the "hanging" PPs¹⁹. They are all described as canonical structures, whereas the other cases are felt marginal and integrated in the overall description through the ad hoc devices pointed out earlier. If we assume, conversely, that the three types of autonomies established on descriptive grounds are related to independent levels of the syntactic structure, it is expected that the forms which derive from their free combinations are more numerous than those allowed by the normative bias of Congruence of Components Principle.

5 Strategies of theoretical integration of the non-dependent elements

As just seen, some constructs used as utterances do not fit into any major grammatical structure in terms of category projections or grammatical relations. The problem can be clarified as follows : in order to specify the "other mode" of organizing the utterances, it is necessary to redraw the limits of grammatical and non-grammatical organization in the syntactic structure of utterances. There are basically three answers in the literature. **The first one** maintains that it is possible to reduce drastically the types of root structures that are not standard projections. The idea is that some kind of extended projection syntax, specially by means of functional heads, can cover all these facts. It is the extended projection model.

The second answer consists in laying the stress on pragmatic component of the grammar, thereby limiting the role of syntax in organizing the structure of utterances. Syntax is equated to grammatical syntax : lexical category projections and grammatical relations. The somewhat unnatural device of abstract functional head is not used. There is also an important information structure level in the pragmatic component, which we might call the "pragmatic mood model".

The third one consists in attempting to strike a balance between the first two by acknowledging the dual nature of syntactic structures. It implies a two component syntactic level with rich interactions. I will explain briefly why I consider that in fact these theoretical models are complementary and not mutually exclusive.

¹⁹ The fact that marked topics, but not hanging ones, are quoted in reference grammars, in spite of the fact that their syntactic status is the same, is probably due to the assumption of normative grammar that coherence cannot exist without morphological or lexical so called "marks" of cohesion. A stylistic choice of professional pedagogues has become a rule of grammar.

5.1 Extended projection model

This approach amounts to a formalization of the traditional view that utterances must be fully analyzed on the model of "core syntax". This can be achieved first by extending the grammatical relations to "loose" dependency in order to analyze reluctant hanging elements. As we saw in preceding sections, this leads to internal contradictions : adjuncts that are both outside and inside the clause they are "concatenated" with.²⁰ Another possibility is not to extend the relational component but the constituent structure : specify the "concatenation" relation as "extended constituency". In the Minimalist Program, the cost of extending constituency is to use "functional" projections, the heads of which are constructed to give some rigor to the loose syntactic links that connect "hanging" elements. Rizzi (1997) is a good example of this solution. He admits, as I have done, that a [+ illoc. Force] feature must be used in syntactic description, but far from considering that it characterizes communicative units of any categorical form, (IP, NP, PP, interjections...) involved in non-headed patterns, he attaches it to an abstract categorical head governing extensions of IP. This way of dealing with the problem is perfectly "logical" and certainly can allow insightful analyses. Instances of these are Rebuschi (2002) on correlative constructions and the revisited Ross approach to illocutionary forces by Speas and Tenny (2003) in terms of "Speech Act Phrase" or "Evaluative Phrase" as functional projections in the left periphery.

From the standpoint of the new "phemocentric" paradigm", such analysis appear not "natural". The model handles the facts but it blurs the difference of nature of the two syntactic modes involved. And in spite of the fact that the constituents related by peripheral functional projections do not share any common property with the elements related by complement or adjunct relationships, as evidenced in section 3 above, the formalism remains the same : headed structure, where there are no head properties. Even if these approaches have weak descriptive adequacy comparable to macrosyntactic or pragmatic approaches, my point is that their unnaturalness causes a lack of strong descriptive adequacy. It is unclear, for instance, how the abstract head analysis can be extended to the whole structure of examples like (10). This means that the natural class of C-nonautonomous units will be split in two distinct structures for theory-internal

²⁰ A way of circumventing the contradictions is to posit a gradient for organizing the periphery, limiting the core to complements. This amounts to stating that adjuncts are not dependents and that their distribution can be predicted from their semantico-pragmatic properties. Nice challenge to take up !

reasons only. Abstract heads are the way in which the old paradigm accommodates the recalcitrant facts. An exploration of how to describe them in the new paradigm seems to be preferable, even if it is still useful for us all when detailed studies keep on using additional functional projections.

5.2 The "pragmatic mood" model

Hopper (1988) has developed a conception of grammar as 'emergent' from discourse. He has argued that rather than taking grammar as preexistent (what he calls 'a-priori grammar'), and then possibly seeing how discourse can affect grammar after it is established, linguists should see discourse as prior to grammar, and giving rise to grammar, as repeated discourse patterns develop into what we think of as grammar (Ono & Thompson 1995).

More recently, this basic functional approach has been reoriented in an interesting formal perspective by means of a non-relational syntactic level in Jackendoff's (2002) Parallel Architecture model. Utterances like (2) *moi ma mère le salon c'est de la moquette le sol* follow, in the parallel architecture model, from an extended use of "primitive syntax" fossilized in full language structure. The primitive character of this syntax is definitely the direct connection between pragmatic structure and phonology. This primitive syntax has various common points with Hopper's discourse pattern-based syntax or with the macrosyntactic approach, as we can see in the following excerpts of Jackendoff (2002) :

"it [the parallel architecture]retains some direct connections between syntax and conceptual structure. The idea is that the grammatical function tier (GF) provides a sort of supercharger on the syntactic expressions of semantic relations but like tiers in phonology, it deals only with parts of the structures it relates, ignoring the rest. In this case, the rest is all the periphery / Chômeurs / obliques plus matters as the determiner and auxiliary system. These aspects of syntax and semantics are "invisible" to the interfaces that engage grammatical functions. Hence the tier of GF is not a full level (as in LFG and RG), rather it is a very limited little accounting system that only has to push around a few pieces of structure." (p. 151)

This representation appears correct and I propose to extend it to the case of constituent structure, phrasal syntax, in terms of Jackendoff (2002 : ch. 4). There is no reason why constituent structure should cover the entirety of the construct in example (2). As for relational structure, this tier will only analyze the little "chunks" like : *ma mere, le salon, c'est de la moquette.* There is no point in analyzing the relation between these chunks in terms

either of grammatical dependencies or of phrasal structure. Jackendoff could argue that the link between them is provided by pragmatic structure, as it is the case for sentence adverbials, along the lines of his analyses of

"the very productive system of sentential adverbials of various syntactic categories that appear freely at the beginning of the sentence after the subject, or at the end²¹. Consider examples in : *Obviously / In my opinion, Fred left town , obviously /in my opinion.* The use of these expressions is governed only by rudimentary syntactic principles. As long as the semantics is all right, a phrase of any syntactic category can go in any of the major breakpoints of the sentence: the front, the end, or the break between the subject and the predicate. [...] it follows that the relation of each phrase to the sentence is determined more or less pragmatically, using the meaning of the phrase as a guide." (p. 255)

Jackendoff then goes on to write (p. 248) :

"Like Agent first and Focus last, Grouping (semantically related words) is a purely semantic based principle that maps into linear adjacency without using anything syntactic like noun phrase. I suggest, then, that Agent first, Focus last, and Grouping are "fossil principles " from protolanguage, which modern languages often observe and frequently elaborate. [...] Crucially these principles correlate linear order with semantic roles. They do not require syntactic structure : the linear order of words can be determined directly in terms of phonological concatenation."

This model is nonetheless not fully in keeping with the new paradigm. It uses the terminology of evolutionary theory and the concept of primitivism to hierarchize the two syntactic organizations as W. Humboldt used to posit a hierarchy between languages as a whole (primitive vs complex ones). Methodologically, it oversimplifies the second syntactic level in considering it as mere concatenation of phonological units, ignoring that there can be found hierarchical relations among these units.

5.3 The two level approaches to syntax

The assumption that elements which are not dependent are not only pragmatically but syntactically linked to the rest of the utterance can be traced back to the traditional views on parataxis (Meillet & Vendryès 1924) and has been developed so as to fit in with new syntactic frameworks. Basically, one possible way consists in specifying a new type of syntactic relation (the "insertion" relation) allowing the addition of elements to the

²¹ Espinal's (91) proposal, although less radical, is in the same vein.

structure of the clause, still considered as the main syntactic frame for any utterance. Another view (macrosyntactic approach) more radically posits an additional full level of syntactic analysis in interaction with the dependency or "core syntax" level.

5.3.1 The "insertion" relation

Some current approaches oppose "inserted" to integrated constituents via the definition of a new type of syntactic relation : the insertion relation (Espinal [91]). But they still situate themselves in the old paradigm, in that they assume that an element needs a host grammatical construction to be inserted (all the examples are of inserts in IPs). In this model, It is impossible to deal with hanging elements in terms of insertion if there is not a clear categorical basis, and consequently utterances are viewed as adding some constituent to one specific linguistic category (mainly IP), still considered as the core of the utterance, instead of positing that the core of the utterance can be any kind of communicative behavior. This author's insight stops short of agreeing that linguistic categories as well as nonlinguistic elements can be "associated" to form an utterance, as the macrosyntactic approaches will do.

5.3.2 The macrosyntactic approaches

These consist in developing the study of interface rules between phonology and pragmatics. The ongoing variants (see Andersen & Nolke 2002) concur in the opinion that the link between them is not direct but mediated by some kind of syntactic structure without grammar. The grouping or the concatenation relation can be clarified into a full autonomous level of linguistic description, comprising specific units (communicative units or enunciations) and combinatorial rules. Interface rules between macroyntactic level and microsyntactic level²² are provided.

The basic idea of these approaches (see Deulofeu 2003b for an overview and Berrendonner 2002, Blanche-Benveniste & al. 1990, Danon-Boileau and Morel 1998, Perrot 1994, for details) is that concatenation is not sufficient to describe the interrelations of the units of the "primitive syntax", that is, syntax without categories. We must account for their

²² Under the name of "online mechanisms", Iwasaki and Ono (2002) gives a list of possibilities of expanding the body of an utterance by adding various kinds of supplements : incrementation, interpolation, bridging. This approach can be considered as a performance model for macrosyntactic structures.

"grouping" patterns with an internal hierarchy between obligatory (Cautonomous) and optional (C-non-autonomous) units.

In keeping with those principles, Table 5 displays the basic units of one of these frameworks (Blanche Benveniste & al. 1990). These units are meant to be tentative descriptive tools defined by means of the already discussed [+/- illoc.] feature and additional prosodic (type of contour) and positional ones : position by reference to the "noyau" ['kernel'], the "obligatory" unit in the macrosyntactic patterns. In the last line of the table, are listed the corresponding units used in chapter 14 of LG on "the grammar of conversation"²³:

Table 5

Maximal unit : "regroupement" 'grouping'				
Minimal units	C-autonomous	C-non-auto		
	+illoc	-illoc		+illoc
		contour : non conclusive	contour : flat	
		before kernel	after kernel	after kernel
Blanche-	Kernel	Prefix	Postfix	Suffix
Benveniste				
Longman grammar	Body	Preface	Tag	extension by add-on
				strategy

The set of units, internal combinatory rules and interface constraints between micro and macro units constitute a full level of description of utterances as maximal syntactic units. An utterance is fully analyzable into macrosyntactic units and patterns. In many cases, conversely, microsyntax, as said before, doesn't permit a full analysis of the overall structure of utterances. Let's show how microsyntactic and macrosyntactic components can be combined to give a full syntactic analysis of the key examples of my paper (from [2] to [22] in section 2). The first example will be (2), rewritten as (2 b.) where the round brackets indicate the limits of the microsyntactic units and the scope of dependency relations:

(2) b. (_{NP}moi) (_{NP}ma mère) (_{NP}le salon) (_{IP} c'est de la moquette) (_{NP} le sol)

²³ Even if LG's perspective is closer to Jackendoff's in that its units are based on direct connection between pragmatics and phonology, the segmentation of text is close to the one observed in macrosyntactic approaches.

At the microsyntactic level, nothing can be said about the way these chunks are grouped in an utterance. The "grouping" is then defined at the macrosyntactic level by means of a macrosyntactic pattern, that is a well formed chain of macrosyntactic basic units.

According to the description given in section 3, example (2) is fully analyzable into the pattern Prefix-Kernel-Postfix as in (2 c.) :

(2) c. [Prefix (moi) (ma mère) (le salon)] [Kernel (c'est de la moquette)] [Postfix (le sol)]

The same analysis with a pattern reduced to Prefix-Kernel applies to :

- (3) **The typical family today**, the husband and the wife both work.
- (11) **Well**, that is true.
- (12) **Frankly**, Kris didn't want to know.
- (13) As for the Hall, the architect excels himself.
- (19) **This woman**, she is ninety odd.

All these examples have the same macrosyntactic structure. They differ only at the pragmatic level : In (2) the prefix is interpreted as a sequence of topics, in (5) as a stance operator, in (8) as an interaction marker and in (4) as a combinaison of pragmatic types, according to the lexical properties of the items that instantiate it.

The Kernel -Postfix pattern is relevant for :

- (4) What a terrible thing, that wailing wall in Berlin.
- (10) It is a nice approach I think.
- (20) It makes you wonder, all this unemployment.

The Kernel - **Suffix** one deals with (17) by grouping as (17 c.) the sequence (17 b.) of micro autonomous units:

(17) b. ($_{IP}$ You will be careful with that?) ($_{PP}$ 'cos it costs a lot of money)

The Macrosyntactic analysis of the whole utterance comes out as :

(17) c. [Kernel (You will be careful with that?)] [Suffix ('cos it costs a lot of money)]

This analysis can be extended to the others "unembedded subordinates" :

(14) We called in to see Sue's parents, which made us rather late.
(16) They come to a cliff, where the deer suddenly stops and throws off the little boy, and the boy and the doff then fall into a pond.
(18) A.well the good news for the environmentalists is the bike runs on the unleaded. B mhm A Which is good news 'Cos like that it's not so expensive.

This approach follows a "parallel" architecture of the relation between macro and microsyntax, so that the Kernel-Suffix analysis can be extended to examples of "end attachment", where the suffix is a dependent. The microsyntactic analysis of (21) is :

(21) b. (I spoke(complement with her (adjunct but very briefly))

The macro pattern breaks up the micro construction :

(21) c. [Kernel (I spoke(complement with her] [suffix (adjunct but very briefly))]

Only two types of key examples are left aside by the model : Full utterances parentheticals (6) and (7) and Paratactic-equational ones (9) :

(6) One of the first to make it in modern times (some Greeks had known it long before) was Leonardo da Vinci.

- (7) If he checks my story and he probably will I will be sacked.
- (9) I raised a more serious objection : it's against the law.

Full utterance parentheticals can be considered as parts of a specific (Cauto+ C-non auto) macrosyntactic pattern, in which the parenthetical belongs to a different enunciative space than the main line of discourse. As for (9), further studies will decide whether it is amenable to a general pattern or it should be analyzed as a "constructional idiom" (see below).

Therefore, in order to characterize the set of syntactic well formed utterances, the syntactic component must stipulate both the possible microsyntactic constructions and the possible macrosyntactic patterns. Needless to say a lot of work remains to be done to complete this program in the different variants of macrosyntactic approaches. The list of key examples is only a restricted sample of the types of utterances generated by the interaction of macrosyntactic patterns and microsyntactic constructions.

5.3.3 Macrosyntax as Occam's razor : towards a non-ad hoc analysis of non-canonical syntactic structures.

If we assume that the macrosyntactic units are composed of well formed microsyntactic constituents, we see that the attested utterances appear as constructions built from all possible combinations of these elements. This amounts to giving an integrated analysis of all the facts in Table (4) above, overcoming the shortcomings observed in the presentations based on the "graphocentric" paradigm. I gave in the previous section examples of the way it can be done.

The syntactic structures underlying utterances can be characterized sometimes as simply "inheriting" the properties of the basic micro and macro constructions and patterns of which they are composed. But I agree with some insights of Construction Grammar, that there are cases in which the resulting structure is better viewed as a "constructional idiom", that is a syntactic "sign" associating specific syntactic and pragmatic properties in a conventional way. Examples of this kind can be found in the so-called correlative comparative, cleft sentences or pseudo relatives constructions (respectively in Beguelin [2002], Blanche Benveniste [2002], Deulofeu [1999]) and perhaps in the Paratactic-equational construct.

6 Natural classes of syntactic phenomena

On both theoretical and empirical grounds the development of a macrosyntactic component is going to be a major challenge in linguistic description. Far from considering that grammatical categories provide the only means of defining natural classes of syntactic phenomena or constructions, we claim that macrosyntactic units should be taken in consideration in this respect and that we are faced with two complementary means of classifying syntactic structures. Linguistic description from only the point of view of "core syntax" leads to dead ends, preventing the description of natural classes of linguistic facts. Moreover, a natural syntactic class of non-dependent constituents can be matched with a natural pragmatic class itself : Prefixes, for instance, include all the instructions for the addressee to build the appropriate context, in order for the "kernel" to be a maximally relevant informative contribution.

Another consequence of this analysis is obviously to bring about a radical change in our conception of "connective" categories like prepositions or conjunctions. For the current conception derived from the assumptions of the old paradigm, these elements are basically means of marking grammatical dependencies. We suggest that within the new

paradigm, they appear as much more polyfunctional, in that they link communicative units as well as grammatical units. This conclusion based on English and French interestingly meets Mithun's (2005) comment about more exotic languages:

> "in a number of languages the prosodic, morphological, and semantic cues that might characterize the sentence do not always converge. Dependent clause markers appear pervasively in what seem, on prosodic and semantic grounds, to be independent sentences. A closer look shows that these markers are being used to signal *pragmatic dependency* [emphasis mine] among larger elements in discourse. The markers of dependency serve several recurring functions in discourse. The Yup'ik Participial and Barbareno nominalized sentences contribute background, descriptive, subsidiary, explanatory, or evaluative information, [...]. The Yup'ik Subordinative and the Hualapai switch-reference markers signal textual cohesion, marking statements that together compose a larger discourse unit."

This conclusion meets our observations: grammatical categories (prepositions, complementizers, non-finite verb forms) build macrosyntactic patterns as well as grammatical constructions. Our macrostructures can be viewed as conventionalized and basic discourse patterns; Mithun's "pragmatic dependency" matches with our C-non autonomy.

As for the theoretical integration of these facts, much is left to be done, but fortunately enough we have good guidelines already. I retain of the formal approach the idea that some formal device must generate the products of micro and macro interface rules. The challenge is difficult to meet, as it amounts to finding a formalism which combines formalization of symbols and of indexes. Some promising steps have been made in generating basic discourse patterns as an ordered set of linear positions in which microstructures are projected according to interface rules between micro and macro components (Gerdes and Kahane : in print).

The specific contribution of the macrosyntactic approach, consists in assuming that syntax "emerges" partly from our ability to construct social conventionalized ways of schematizing the external world through grammatical categories (microsyntax) and partly from conventionalizing communicational strategies (macrosyntax). What is aimed at is a global morphosyntax (Perrot 1974), extending the formal environments necessary to determine the distribution of linguistic signs.

References

- Andersen, Hanne-Leth et NØlke, Henning, (eds .)
 - 2002 *Macro-syntaxe et macro-sémantique*. Actes du colloque international d'Aarhus, 17-19 mai 2001.

Aroui, Jean-Louis (ed)

- 2003 *La rime et la raison*. Hommage à Benoît de Cornulier. Paris, Champion.
- Bally, Charles
 - 1944 *Linguistique générale et Linguistique française*. Berne, A. Franck AG Verlag.

Beguelin, Marie-Josée

2002 Routines macro-syntaxiques et grammaticalisation : l'évolution des clauses en *n'importe*. In Hanne-Leth Andersen, Henning NØlke, (eds.), 43-70, *Macro-syntaxe et macro-sémantique*. Actes du colloque international d'Aarhus, 17-19 mai 2001. Berne, Peter Lang

Berrendonner, Alain

- 1991 Pour une macro-syntaxe. In Dominique Willems (éd.) 25-31.
 Données orales et théories linguistiques. Paris Louvain, Duculot.
- 2002 Morpho-syntaxe, pragma-syntaxe, et ambivalences sémantiques.
 In . *Macro-syntaxe et macro-sémantique*. Hanne-Leth Andersen,
 Henning NØlke, (eds), 23-42.(Actes du colloque international d'Aarhus, 17-19 mai 2001.) Berne, Peter Lang.

Biber Douglas, Johansson Stig, Leech Geoffrey, Conrad Susan, and Finegan Edward

1999 :Longman Grammar of Spoken and Written English. London, Longman

Blanche-Benveniste, Claire

- 1990 *Le Français parlé: Etudes grammaticales*. Avec Mireille Bilger, Christine Rouget et Karel van den Eynde. Paris, Editions du C.N.R.S.
- 2002 Macro-syntaxe et micro-syntaxe : les dispositifs de la rection verbale. In *Macro-syntaxe et macro-sémantique*. Hanne-Leth Andersen, Henning NØlke, (eds .), 95-118. (Actes du colloque international d'Aarhus, 17-19 mai 2001.) Berne, Peter Lang.
- Bybee, Joan and Noonan, Michael (eds.)

2003 *Complex sentences in Grammar and Discourse.* Essays in honour of Sandra A. Thompson. Amsterdam, John Benjamins

- Chomsky, Noam
 - 1981 Lectures on goverment and binding. Dordrecht, Foris publications
- Danon-Boileau, Laurent et Morel, Marie-Annick,

Debaisieux, Jeanne-Marie

2002 Le fonctionnement de *parce que* en français parlé : étude quantitative sur corpus. in *Romanistische Korpuslinguistik -Korpora und gesprochene Sprache*. Claus D. Pusch, Wolfgang Raible (eds), 349-362. (*Romance Corpus Linguistics, Corpora and Spoken Language*,) Tübingen, Gunter Narr Verlag.

Deulofeu, José

- 1999 Questions de méthode dans la description morphosyntaxique de l'élément *que* en français contemporain. *Recherches sur le français parlé* (15): 77-101.
- 2003a Lontan degli occhi lontan dal cuore : Les énoncés non verbaux sont des énoncés comme les autres. In *La rime et la raison*. Jean-Louis Aroui (ed), 171-193. (Hommage à Benoît de Cornulier) Champion, Paris.
- 2003b L'approche macrosyntaxique en syntaxe : un nouveau modèle de rasoir d'Occam contre les notions inutiles? *Scolia*, (16): 112-125.

Di Sciullo, Anna-Maria. (ed.)

2003 *Asymmetry in grammar* (vol. 1.: syntax and semantics) John Benjamins, Amsterdam.

Emonds Joseph

1976 *A transformational approach to English syntax.* Academic Press, New York.

Espinal, Teresa

- 1991 The representation of disjunct constituents, *Language* (67-4): 726-762.
- Frayzingier, Zygmund, Hodges, Adam and Rood, David S. (eds.) 2005 *Linguistic diversity and language theories.* Studies in language Companion series, Amsterdam, John Benjamins.

Gerdes, Kim and Kahane, Sylvain

In press L'amas verbal au cœur d'une modélisation topologique du français. Actes des journées de la syntaxe : ordre des mots dans la phrase française, Kim Gerdes, claude Muller (eds.)

Goethals, Patrick

2002 *Las conjunciones causales explicativas españolas como, ya que, pues, y porque .Un estudio semiótico-linguístico.* Peeters,

		Leuven, Paris.			
		ney D, Pullman Geoffrey K., and Pullum Geoffrey			
	2002	<i>The Cambridge Grammar of the English Language.</i> Cambridge, Cambridge University Press.			
	Haegeman, Liliar	e ,			
	1997	Elements of grammar. A Handbook of generative syntax.			
	1997	Dordrecht : Kuiver			
	Hopper, Paul				
	1988	Emergent grammar and the A Priori Grammar Postulate. In			
		Linguistics in context: Connecting observation and			
		understanding, Deborah Tannen (ed), 117-134. Norwood, NJ,			
		Ablex.			
	Iwasaki, Shoichi.	and Ono, Tsuyoshi			
	2002	Sentence in spontaneous spoken Japanese language. in Complex			
		sentences in Grammar and Discourse. Bybee, J., Noonan			
		M.(eds), 176-202. Amsterdam, John Benjamins.			
	Jackendoff, Ray				
	2002 King Katalam F	Foundations of language. Oxford, Oxford University Press			
	Kiss, Katalyn E. 1998	Identificational Focus versus Information Focus. Language (74):			
	1998	245-273.			
	Kuhn, Thomas S.				
	1962	The structure of Scientific Revolution. International Encyclopedia			
	1702	of Unified Science, Chicago, Chicago University Press.			
	Martin, Philippe				
	1978	Questions de phonosyntaxe et de phonosémantique en français.			
		Linguisticae investigationes. (Vol.2): 93-126.			
	Meillet, André, a	nd Vendryes, Jules.			
	1924	Traité de grammaire comparée des langues classique. Paris,			
		Champion.			
	Miller, Jim and V				
	1998	Spontaneous spoken Language : syntax and discourse. Oxford,			
	Mithun Maniana	Clarendon Press.			
	Mithun, Mariane 2005	On the assumption of the sentence as the basic unit of syntactic			
	2003	structure. in <i>Linguistic diversity and language theories</i> . Zygmund			
		Frayzingier, Adam Hodges and David S. Rood (eds.), 169–			
		183.(Studies in language, Companion series.) Amsterdam, John			
		Benjamins.			
Ono, Tsuyoshi and Thompson, Sandra A					
	1995.	What can conversation tell us about syntax? In Alternative			
		linguistics, Philip W. Davis (ed) 213-271. Amsterdam &			
		Philadelphia, Benjamins			

Perrot, Jean

- 1994 Eléments pour une typologie des structures informatives. *Mémoires de la Société de Linguistique de Paris*.Séries thématiques II: La phrase : énonciation et information : 13-26.
- Pusch, Claus D and Raible, Wolfgang (eds.) 2002 Romanistische Korpuslinguistik - Korpora und gesprochene Sprache. (Romance Corpus Linguistics, Corpora and Spoken Language,) Tübingen, Gunter Narr Verlag.
- Rebuschi, Georges
 - 2002 Coordination et subordination (II) : la co-jonction généralisée. Bulletin de la société de linguistique (97, 1): 37-91.

Rizzi, Luigi

- 1997 The fine structure of the left periphery. In *Elements of grammar*. L. Haegeman (ed), 281-337.(*A Handbook of generative syntax*) Dordrecht : Kuiver.
- Speas, Peggy, and Tenny, Carol
 - 2003 Configurational properties of point of view roles. In *Asymmetry in grammar*, Di Sciullo, A. (ed.), 315-344.(vol. 1.: syntax and semantics) John Benjamins, Amsterdam.
- Tannen, Deborah (ed.)
 - 1988 *Linguistics in context: Connecting observation and understanding.* Norwood, NJ, Ablex.
- Willems, Dominique (ed.)
 - 2001 *Données orales et théories linguistiques.* Paris Louvain, Duculot.