The Notion of Surface-Syntactic Relation Revisited
(Valence-Controlled Surface-Syntactic Relations in French)

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> We solemnly dedicate this paper to the approximately 40th anniversary of the (Iordanskaja + Mel'čuk) × Apresjan friendship.

1. The Problem Stated: What is a Surface-Syntactic Relation?

Although LABELED SURFACE-SYNTACTIC RELATIONS [= SSyntRels][1] have been used in the Meaning-Text approach for almost 40 years (cf. Mel'čuk 1962, 1963, 1974 [1999]: 219-235, 1988: 16-23, 69, Apresjan *et al.* 1978, 1984, 1989, Mel'čuk & Pertsov 1987: 85-156, etc.), the notion of SSyntRel itself has not been rigorously defined. Mel'čuk 1974 [1999]: 211-221 offers an informal characterization: a SSyntRel is conceived of as an 'optimal' bundle of correspondences between a set of semantic relations and a set of expressive means (word order, prosody, grammemes). This characterization was later developed and enriched in Apresjan *et al.* 1978: 255-265 and 1984 [vyp. 155]: 4-11. In what follows we will try to take another step forward and propose a definition of SSyntRel.

A SSyntRel is a particular type of syntactic dependency relation holding between two lexemes in a Surface-Syntactic Structure [= SSyntS], a G(overnor) and its D(ependent): G→D; a SSyntS based on SSyntRels is a tree (characterized by the unicity of the Synt-Governor and the presence of a unique Synt-head, or top node). What is important for us here is that any SSyntRel must be LABELED, that is, given an identifying name: **r**, so that we have G–**r**→D. Let it be emphasized that a labeled SSyntRel is language-specific. Its name **r** specifies a family of SSynt-constructions of language **L** that are described by the SSyntRel **r**; these constructions possess sufficiently similar properties, i.e. they show 'family resemblances.' A SSynt-construction, in its turn, represents a set of binary phrases (a binary phrase being, roughly, two wordforms linked by a direct SSynt-dependency). It is specified by indicating 1) its members—a pair of part-of-speech symbols, perhaps with some additional syntactic features (such as 'copula,' 'transitive,' 'anteposed,'etc.), supplied with corresponding inflectional markings, 2) their mutual linear order and 3) the direction of SSynt-dependency between them. Thus, the French construction 'adjective — noun,' showing obligatory agreement of A in **g**(ender) and **n**(umber) with N, appears as follows:

$$\text{ADJ}_{(\text{antepos})\mathbf{g},\mathbf{n}} + \text{N}_{(\mathbf{g})\mathbf{n}}$$

It represents such phrases as *différents éléments* 'different elements' and

belles fillettes 'beautiful little-girls'. Note that $N_{(g)n}$ + $ADJ_{(postpos)g,n}$ — *équation différentielle* 'dif-ferential equation', *gouvernement américain* 'American government', etc.—is a different SSynt-construction of French, because of a different word order.

A family of syntactic constructions of **L** covered by one SSyntRel is a 'construction-**eme**,' which is formally similar to all other X-emes we know in natural language—e.g., to phon-emes and morphemes. The elements of a constructioneme—concrete constructions—behave as all other allo-Xs do: they do not contrast semantically and obey certain regularities concerning their mutual substitutability and combinability. Therefore, the set of SSyntRels for **L** must meet the following three requirements, which have to be satisfied in the SSyntS:

• Ensure the preservation of all semantic contrasts which appear on the semantic level of utterance representation and are formally expressed on the surface, but which cannot be taken care of by other entities of the syntactic level (for instance, by the syntactic-communicative structure).

• Ensure the appropriate substitutability of concrete constructions described by one SSyntRel.

• Ensure the appropriate combinability of SSyntRels sharing the same SSynt-Governor.

These requirements can be formalized as three criteria for establishing the inventory of SSyntRels of **L**.

All this allows us to formulate a definition of Surface-Syntactic Relation (which has the same logical structure as the definitions of all other -emes in linguistics).

Definition 1: Surface-Syntactic Relation

A *Surface-Syntactic Relation* **r** of language **L** is a particular type of surface-syntactic dependency holding in a set of syntactic constructions of **L** such that this set simultaneously satisfies the following two conditions:

1) it is sufficiently homogeneous—i.e., all its constructions share a sufficient number of linguistic properties relevant in **L**;

2) it is 'saturated'—i.e., it contains all and only the constructions that can be brought to-gether in accordance with some pre-established general formal criteria (see Section **2** for three such criteria).

Relevant linguistic properties are language-specific; they are established empirically. But the formal criteria are language-independent; they are logically the same for all -emes in natural language. In order to proceed from general to specific, we start with the criteria for distinguishing SSyntRels (Section **2**) and then discuss the relevant properties of syntactic constructions (Section **3**), our illustrative data being from French. After this, we formulate a

method for establishing the inventory of SSyntRels in **ʟ** (Section **4**); this method is based on the concepts introduced in Sections **2** and **3**. Finally, we present a partial list of SSyntRels of French, supplied with some linguistic comments (Section **5**).

2. Formal Requirements to be Satisfied by a SSyntRel (Criteria 1-3)

A SSyntRel must satisfy Criteria 1-3, which are aimed at the differentiation of SSyntRels in **ʟ**; the application of these croteria presupposes that (i) the presence and (ii) the direction of SSynt-dependency between two lexemes under consideration is already established. (The criteria for (i) and (ii) are described in Mel'čuk 1977, 1988: 129-140 and 2000.) Criteria 1-3, introduced first in Mel'čuk 1977 [1979] and 1988: 141-144 and slightly reworked here, help the researcher to decide, for any pair of binary phrases of language **ʟ** (and of course for the pair of corresponding constructions) whether both CAN be described by the same SSyntRel **r**. These criteria formulate the requirements any SSyntRel must satisfy; if **r** does not satisfy all of them, it has to be split into **r'** and **r''**. If the criteria do not require such a split, this by no means entails the acceptance of **r**: it still can be undesirable for other reasons (more precisely, because **r** does not satisfy the requirement of similarity of relevant properties: see below, **3**, p. 00). Thus, Criteria 1-3 state only necessary but not sufficient conditions for grouping several SSynt-constructions under the same SSyntRel.

As stated above, these criteria are a specific variation of the three basic criteria used in linguistics for all -emes: Semantic Contrast, Mutual Substitutability, and Cooccurrence.

Criterion 1: Absence of Semantic Contrast
Notations: $\mathbf{w}(L)$ is a wordform of lexeme L ($\mathbf{w_i}$ and $\mathbf{w_j}$ can be different or identical); $\oplus$ is the operation of linguistic union, which links signs, in particular—wordforms, according to their syntactics [= data on combinatorics] and general rules of **ʟ**.

> A SSyntRel must not describe two different phrases
> $$\mathbf{w_i}(L_1) \oplus \mathbf{w_j}(L_2) \text{ and } \mathbf{w_m}(L_1) \oplus \mathbf{w_n}(L_2), \text{ where } L_1 {-}{\rightarrow} L_2,$$
> which 1) contrast semantically ['$\mathbf{w_i}(L_1) \oplus \mathbf{w_j}(L_2)$' ≠ '$\mathbf{w_m}(L_1) \oplus \mathbf{w_n}(L_2)$']
>   and 2) differ formally only by some syntactic means of expression (i.e. by word order, syntactic prosody, or syntactic grammemes).

Examples
1. Two French phrases *Alain←aime* ...'A. loves ...' and *... aime→Alain* '... loves A.' contrast semantically and their only formal difference is word order; therefore, they must be des-

cribed by different SSyntRels: the **subjectival** SSyntRel in the first phrase, and the **direct-objectival** in the second.

      2. In sentence (1):

   (1) *Ivre, Alain semble fatigué* 'Drunk, A. seems tired',

we have phrases *ivre←semble* and *semble→fatigué*; can both be described by the same SSyntRel **r**? No, because this **r** would contradict Criterion 1: there is a possible semantic contrast expressed by purely syntactic means (word order and prosody); cf. (2):

   (2) *Fatigué, Alain semble ivre* 'Tired, A. seems drunk'

('Fatigué, ... semble ...' ≠ '... semble fatigué').

Two different SSyntRels are needed here: the **modificative-adverbial** SSyntRel in *ivre←semble* and the **copular-attributive-completive** SSyntRel in *semble→fatigué*.

      3. Given the semantic contrast in (3):

   (3) *Alain me **dit trois mots*** 'Alan says to me three words'.

      vs.

    *Alain me **dit : « Trois mots »*** 'Alan says to me: 'Three words'',

Criterion 1 requires for boldfaced phrases two different SSyntRels: the **direct-objectival** one in *dit* →[*trois mots*] and the **quotative-objectival** SSyntRel in *dit* →[*« Trois mots »*].

      Criterion 1 corresponds to what is known as the '***minimal pair test***,' which is used in phonology (= two phones cannot be relegated to one phoneme if they are the only distinguishers of the signifiers of two semantically contrasting wordforms), morphology, and semantics.

Criterion 2: SSynt-substitutability

      The first formalization of the SSynt-substitutability of syntactic subtrees as a means for establishing SSyntRels was proposed by the German researcher J. Kunze (Kunze 1972: 23; see also Kunze 1975: 5.3, p. 235*ff*.): the so-called Kunze property. We start with presenting it here, in order to show that a weaker version of it must be preferred.

      Let there be, in **L**, lexemes $L_{(X)}$, $L_{(Y)}$, ... of syntactic classes X, Y, ..., complete SSynt-configurations $\Delta_{(Z)}$ and $\Delta_{(W)}$ (i.e. subtrees having as their top nodes lexemes $L_{(Z)}$ and $L_{(W)}$), and a SSyntRel **r**.

Definition 2: The Kunze Property

> A SSyntRel **r** has the ***Kunze Property*** if, and only if, for any pair of SSynt-configurations $L_{(X)}-\mathbf{r}→\Delta_{(Z)}$ and $L_{(Y)}-\mathbf{r}→\Delta_{(W)}$, substituting $\Delta_{(Z)}$ for $\Delta_{(W)}$ and vice versa does not affect their SYNTACTIC[2] well-formedness.

      To put it differently, for a SSyntRel that has the Kunze property, any of its potential Ds can be attached to any of its potential Gs (i.e. all Ds of such a SSyntRel are mutually substitutable in all SSyntSs *salva correctione*). In Mel'čuk 1988: 142 it was required that a

SSyntRel must have the Kunze property.[3] Now, however, we think that the Kunze property is too rigid, since it does not allow for some desirable generalizations. For instance, it does not admit the same SSyntRel for nominal and infinitival Subjects, as in (4):

   (4) **a**. *La course←–**r**–fatigue*, lit. 'The running tires'.

       b. *Courir←––**r**––fatigue*, lit. 'To-run tires'.

Since far from any verb in French can take an infinitive as its Subject (**Pleuvoir m'a surpris*, lit. 'To rain has caught me out'), the SSyntRel **r** in the phrases of (4) does not possess the Kunze property: with $L_{(X)}$ = SURPRENDRE '[to] catch N (out)', $\Delta_{(Z)}$ = NP [e.g., *La pluie←**r**–surprend*] and $L_{(Y)}$ = FATIGUER, $\Delta_{(W)}$ = Infinitival Phrase [e.g., *Courir←**r**–fatigue*], the replacement produces the syntactically ill-formed configuration $*V_{inf}$←**r**–SURPRENDRE.

As a result, using the Kunze property leads to having two different SSyntRels: one for nominal and the other for infinitival Subjects (as stated in Kunze 1975: 279). But we think that the SSynt-Rel **r** in (4) should not be split: all the Subjects, whether nominal or infinitival, share a set of important unique properties, and we prefer to describe all of them by the same SSyntRel.

     Therefore, we propose to use the *quasi-Kunze Property*, which is weaker: substitutability is required only in one direction and only by at least one particular subtree (which is not a substitute pronoun, since substitute pronouns—IL/ILS/ELLE/ELLES—constitute a 'secondary' syntactic class: they are introduced by the operation of pronominalization), rather than in both directions and by any subtree. (Another weaker version of the Kunze Property was considered in Mel'čuk 1977: 261.)

Definition 3: The Quasi-Kunze Property

A SSyntRel **r** has the *quasi-Kunze Property* if, and only if, there exists in **L** a syntactic class (≈ part of speech) X, which is different from substitute pronouns and such that, for any SSynt-configuration L–**r**→$\Delta_{(Y)}$, replacing $\Delta_{(Y)}$ by $\Delta_{(X)}$ (but not necessarily vice versa!) in any SSyntS does not affect the syntactic well-formedness.

     The element $\Delta_{(X)}$ that 'passes' with any Governor of the SSyntRel **r** is nothing else but the PROTOTYPICAL D of the SSyntRel **r.**

Definition 4: Prototypical Dependent of a Given SSyntRel

A *prototypical D* of a SSyntRel **r** is a D of such a syntactic class (≈ part of speech) that this D can be used with any G(overnor) possible for **r**.

     Thus, the prototypical D of the subjectival SSyntRel is a noun; although a D of this SSyntRel may be not only a noun, but also an infinitive or a subordinate clause (***Fumer** nuit à la santé*, lit. 'To smoke harms the health'; ***Qu'Alain ne soit pas là** nous inquiète*, lit. 'That A. should not be here bothers us'), any Main Verb [= MV] in French admits a noun (or an impersonal pronoun) as its Subject.

The SSyntRel **r** in (4) possesses the quasi-Kunze property, since **r** has a prototypical D: a prepositionless noun/(non-substitute) pronoun—because in French any finite verb admits a nominal Subject.[4] As a result, the SSyntRel **r** in (4) is allowed: this is the **subjectival** SSyntRel.

Let it be emphasized that, while the G in Definitions 2 and 3 is a particular lexeme, the D is considered UP TO ITS SYNTACTIC CLASS. Thus, for instance, different prepositions are not distinguished: the SSyntRel **r** in *insister–**r**→sur* '[to] insist on', *dépendre–**r**→de* '[to] depend on' and *comparer–**r**→avec* '[to] compare to' has the quasi-Kunze property—because a PREP+N phrase (= $\Delta_{(PREP)}$) can be substituted for its D with any of these verbs, provided the appropriate preposition is chosen according to the verb's Government Pattern. Cf. the discussion of the **oblique-objectival** SSyntRel, **5.3.7**, p. 00*ff*.

Now we can formulate Criterion 2:

‖Any SSyntRel must possess the quasi-Kunze property.

Or, to put it differently:

‖Any SSyntRel must have a prototypical D.

Two French phrases *pouvoir respirer*, lit. '[to] be able to breathe', and *couper le bâton* '[to] cut the stick', cannot be described by the same SSyntRel **r**, since French has no element that could be used as the D of this **r** with any modal and any transitive verb; that is, such a SSyntRel would have no prototypical D (thus, **pouvoir→N* and **couper→V_{inf}*).[5] Consequently, these two phrases require two different SSyntRels: the **direct-infinitival-objectival** SSyntRel for *pouvoir→respirer* and the **dir(ect)-obj(ectival)** SSyntRel for *couper→[le bâton]*.

On the other hand, Criterion 2 does not forbid to use the **dir-obj** SSyntRel for the infinitives with such verbs as INTERDIRE '[to] forbid' or PRÉFÉRER '[to] prefer', cf. (5):

(5) **a**. *interdire–**dir-obj**→de partir* '[to] forbid to leave',

   *préférer–**dir-obj**→partir* '[to] prefer to leave'.

Here, a substitution of the infinitive by a prototypical—nominal—Dir(ect)O(bject) is possible:

   b. *interdire–**dir-obj**→[le] départ* '[to] forbid the departure',

   *préférer–**dir-obj**→[le] départ* '[to] prefer the departure'.

With the Kunze property, the description shown in (5a) would not be allowed because of (5c):

   c. *couper–**dir-obj**→[le bâton]*, but **couper–**dir-obj**→de partir*

In other words, since there are many French transitive verbs that do not take infinitives as DirOs, as COUPER above, the Kunze property disallows us to treat an infinitive as DirO with any verb.

Nor does Criterion 2 forbid the use of the same **copular-attributive-completive** SSyntRel to describe the phrases *être→[avec Helen]* '[to] be with H.' and *sembler→malade* '[to] seem ill': although **sembler→[avec Helen]* is impossible, it suffices that the adjective, which is the prototypical D of the **copular-attributive-completive** SSyntRel, passes with both Gs (*être→malade*

and *sembler→malade*). Again, should we use the Kunze property, we would have to split the **copular-attributive-completive** SSyntRel into at least two different SSyntRels.

An important warning: Criterion 2 should not be applied to the phrases that realize the SSynt-constructions which do not have direct DSynt-correlates: such constructions are obtained from underlying DSynt-constructions by special rules (≈ 'transformations') and they do not possess 'normal' properties. Such is, for instance, the construction of the type *Il est venu trois étudiants*, lit. 'There came three students', produced by the impersonalization transformation from the DSynt-structure describing the sentence *Trois étudiants sont venus*.

Criterion 2 is similar, although not identical to, the commutation test (see, for instance, Le Goffic 1993). Criterion 2 can forbid the unification of some constructions under one SSyntRel, but it cannot impose such a unification; therefore, for us, the possibility of commutation entails no more than the POSSIBILITY of unification (a substantial difference in the properties of the constructions in question may prevent us from unifying them under one SSyntRel). Thus, Le Goffic (1993: 169) mentions the fact that with a phasal verb, the infinitive commutes, more or less freely, with an obvious DirO: *commencer à travailler* '[to] begin to work' ≈ *commencer le travail*) '[to] begin the work'; he concludes that this infinitive is a DirO. For us, however, such commutation cannot be a decisive argument, since it is typologically well known that the same Deep-Syntactic Actant [= DSyntA] can be expressed by different SSynt-elements. Consider, for instance, *l'aide **du Canada*** 'the aid of Canada' ≈ *l'aide **canadienne*** 'the Canadian aid'; here the DE-phrase and the adjective express both the same DSyntA (= **I**) of AIDE '[the] aid'. Criterion 2 does not forbid subsuming these two constructions under the same SSyntRel, since in such cases the substitution by the DE-phrase is always possible. However, the defining properties of the Ds in both constructions do not warrant such a unification. An agreeing adjectival modifier and a prepositional phrase are so dissimilar in their SSynt-properties that there is not the slightest temptation to describe them with the same SSyntRel. (Adjectival agreement and the use of a preposition are among the most relevant syntactic means in French.)

Criterion 2 corresponds to what is known in linguistics as the '***substitution test***.' Thus, in morphology, the notions of gender and grammatical case are often defined as substitution classes (cf., e.g., Gladkij 1983). Here we deal with substitution of SSynt-subtrees which depend, in a given SSyntS, on the same G via the same SSyntRel **r**.

## Criterion 3: Repeatability with the Same SSynt-Governor
With respect to the possible number of occurrences of a given SSyntRel **r** with the same G, we put forth the following requirement:

‖Any **r** of language **L** must be either non-repeatable or unlimitedly repeatable.

1. A SSyntRel **r** is *non-repeatable* if, and only if, no more than one branch labeled **r** can start from any G. In other words, in **L**, a G of a non-repeatable **r** can have in a given SSyntS only one D (= one clause element) of the corresponding type.

For instance, actantial SSyntRels whose Ds are marked by purely syntactic means (word order, prosody, inflection)—such as the **subj** and the **dir-obj** SSyntRels in French or in English—are obligatorily non-repeatable: otherwise, they would violate Criterion 1, because their Ds would contrast semantically, while differing only in syntactic means. (Actantial SSyntRels whose Ds are marked by lexical means, that is, by different prepositions—such as the **oblique-objectival** SSyntRel— can be repeatable.)[6]

In some languages, a clause element can be DUPLICATED by a pronoun; as a rule, this pronoun is a *resumptive clitic*. Such is, for instance, the D of the **dir-obj** SSyntRel in Spanish, where we have the construction of the type (6a):
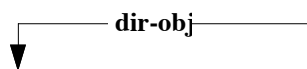
(6) **a**. Sp. *A Alain* **le**←**dir-obj**–*veo*, lit. 'To-Alan him [I] see'.

We do not consider pronominal duplication of a clause element as repeatability, since such duplication has a (more or less) grammaticized character and is 'orthogonal' to the genuine cooccurrence of SSyntRels; in spite of the expressions of the type (6a), the **dir-obj** SSyntRel is considered non-repeatable in Spanish. Similarly, in spite of (6b), the **indir-objectival** SSyntRel is also non-repeatable in French:
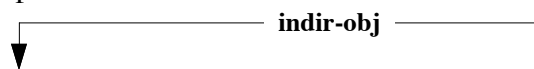
b. *À mes enfants*, *je* **leur**←**indir-obj**–*permets tout*,

lit. 'To my children, I permit them everything'.[7]

2. A SSyntRel **r** is *unlimitedly repeatable*—or, for short, *repeatable*—if, and only if, several branches labeled **r** can start from a G such that their possible number is theoretically unlimited; in practice, this number can be limited by pragmatic considerations or by the properties of particular Gs, as a rule—by their Government Pattern. Thus, the **modificative** and the **circumstantial** SSyntRels in French and English are unlimitedly repeatable; so is also the **obl(ique)-obj(ectival)** SSyntRel (although the actual number of possible OblOs is obviously controlled by the Government Pattern of the G).

Criterion 3 means that a SSyntRel cannot be LIMITEDLY repeatable, i.e. its repeatability cannot be constrained to a particular number by general syntactic factors. To illustrate 'limited repeatability,' consider the French sentence (7):

(7) *Ils lisent tous ce roman très jeunes*, lit. 'They read all this novel very young'.

If we try to describe the phrases *lisent→tous* and *lisent→jeunes* by the same SSyntRel **r**, it would be repeatable exactly two times, since no more non-actantial adjectives can be added to the construction in question as attributes of the MV; but this is by no means determined by the Government Pattern of the MV. Thus, **r** is neither non-repeatable nor repeatable, and this is not allowed by Criterion 3. Therefore, we need here two different SSyntRels.

Another example:

(8) *Il est venu trois étudiants*, lit. 'It has come three students'.

One could think that both nominal Ds of the verb (the impersonal *il* and the noun *étudiants*) are Subjects, so that the phrases *il est venu* and *est venu trois étudiants* can be described by the same **subj** SSyntRel. (Some actually say so, treating *il* and *trois étudiants* as two Subjects.) Criteria 1 and 2 do not prevent us from doing so: they are not applicable. (More specifically, Criterion 1 is not applicable, because the phrases *il est venu* ... and ... *est venu trois étudiants* cannot be contrasted semantically, and Criterion 2 is not applicable because the construction in question has been produced by a 'transformational' rule, see above, p. 00.) However, Criterion 3 is not satisfied: in (8), the **subj** SSyntRel would be limitedly repeatable (again exactly two times, and this not because of the Governement Pattern of the MV). Therefore, we have to use here two different SSyntRels:

$$il ← \textbf{subj} − [\textit{est venu}] − \textbf{quasi-subj} → [\textit{trois étudiants}].$$

This decision agrees well with our linguistic intuition, which is based on the following considerations (a specific and a general one):

• The relevant properties of *il* and *trois étudiants* in this construction are very different; see the properties of the **subj** SSyntRel (p. 00) *vs.* the properties of the **quasi-subj** SSyntRel (p. 00).

• One of the tenets of syntactic typology is the uniqueness of the Subject in a clause; we would like to retain this feature.

Criterion 3 corresponds roughly to the '***cooccurrence test***,' used in linguistics on all levels of analysis. Thus, two phones cannot be included in the same phoneme if one of them contradicts the general conditions for phonemic cooccurrence in **L**. In morphology, an element of a morphological category is either non-repeatable (tense or number in English or French) or unlimitedly repeatable (the causative in Turkish). When we see, for instance, just two possible repetitions —like nominal case suffixes in Basque or Georgian, we speak of two different case categories (semantic case *vs.* syntactic case; governed case *vs.* agreeing case).

Criteria 1 and 2 are paradigmatic, while Criterion 3 is syntagmatic.[8]

3. The Substantive Requirement to be Satisfied by a SSyntRel

The relevant linguistic properties of SSyntRels, that is, of their Ds, are linked to the fact that the SSyntRels are subject to three types of constraints. First, a SSyntRel is associated to the semantic role its D fulfills—via the corresponding DSyntRel (which, in its turn, is related to a semantic role). Therefore, a SSyntRel must be convenient to compute from the corresponding DSyntRel (and the syntactic context, of course). Second, SSyntRels are combined within the SSynt-structure, where they show a particular behavior with respect to each other (omissibility, cooccurrence, paraphrastic relations). So, SSyntRels must be such as to allow for convenient verification of the well-formedness of the SSyntS. And third, SSyntRels are aimed at linearization, prosodization (punctuation, in written texts) and morphologization of the SSyntS. That is, a SSyntRel must ensure convenient computation of word order for its D, along with syntactically induced prosody/punctuation and syntactically induced inflections (= agreement and government, cf. Mel'čuk 1993). As a result, the SSyntRels are constrained from 'below' (= by the DSyntS), from 'the side' (= by the SSyntS), and from 'above' (= by the Deep-Morphological Structure [= DMorphS] of the sentence).

Therefore, all possible Ds of a SSyntRel must possess identical or very similar properties with respect to these three types of constraints. Following E. Keenan's classic work (1976), we distinguish three types of relevant properties of the Ds of SSyntRels:

1) Syntactico-semantic properties (Keenan's 'semantic interpretation properties'): properties of Ds from the viewpoint of the correspondence to a deeper level of representation—in our case, to the DSynt-level (and further to the Sem-level).

2) Purely syntactic properties (Keenan's 'behavior/control properties'): properties of Ds from the viewpoint of the SSyntS.

3) Syntactico-morphological properties (Keenan's 'coding properties'): properties of Ds from the viewpoint of their expression in the DMorphS.

Now, the D of a particular SSyntRel is nothing else but a particular CLAUSE ELEMENT (cf., e.g., Quirk *et al*. 1991: 59*ff*.): the D of the **subj** SSyntRel is the Subject, the D of the **dir-obj** SSyntRel is the Direct Object [= DirO], and so on.[9] Thus, establishing different SSyntRels boils down to defining different clause elements. For this task, we can avail ourselves of two interesting results obtained in syntactic typology:

• A clause element is defined by a BUNDLE of properties of the above-mentioned types (Mel'-čuk & Savvina 1974 [1978], Keenan 1976, Borg and Comrie 1984;[10] cf. Quirk *et al*. 1991: 723*ff*., where such definitions are supplied for main clause elements in English, and also Lazard 1994b: 101*ff*., with a list of relevant properties of subjects, mainly, but not exclusively, in French).

Therefore, the corresponding SSyntRel must be defined by the same BUNDLE of properties—SSyntRels will be 'multi-factor' (Keenan 1976: 323), or 'cluster,' concepts.

• Clause elements form a hierarchy such that an element of a higher stand has some relevant properties which no lower element possesses—but not vice versa (Keenan & Comrie 1977: 66, 1979):

Subject > DirO > IndirO > OblO > Gen(itival)Co(mplement) > Compar(ate)

The corresponding SSyntRels of **L** must form the same hierarchy. At the end of Section **5** (p. 00), we will briefly return to this hierarchy, p. 00.

As stated above, relevant linguistic properties of SSyntRels are language-specific. In this paper, we are dealing with French, limiting ourselves to a subset of the SSyntRels that are necessary in order to describe the SSyntS of all verbal constructions that involve the surface realizations of the verb's DSyntAs. In other words, we consider only the VALENCY-CONTROLLED SSYNT-Ds of a verb.

Until today, we have isolated the following sixteen linguistic properties, or parameters, relevant for the description of the SSyntRels (and, of course, of clause elements) in French within the limits stated above.

**Relevant Properties
of the Dependents of Valency-Controlled SSyntRels in French**

The properties on the list are parameters admitting some pre-established values; most of them admit just two values: yes (= the property in question is present) or no. For each property P we indicate the syntactic classes (roughly, parts of speech) to which P is applicable—except for the cases when P is applicable to all classes (the default case).

Syntactico-semantic properties of Ds
  1. Corresponding to a particular DSynt-Actant (of the Governor).
Purely syntactic properties of Ds
  2. Being obligatorily present in any full-fledged clause (of course alongside the MV[11]).

To avoid a misunderstanding, let us emphasize that we really mean ANY clause; thus, for instance, a Direct Object, even if it is obligatory with some verbs, is not found in any clause of French.

  3. Being the dependent of the MV only (that is, being unable to depend on anything but a finite verb).
  4. Being implicated in SSynt-promotion/demotion (applicable to nouns, infinitives and subordinate clauses).
  5. Being the target of cliticization of a specific type.
  6. Being the target of relativization (applicable to nouns).

7. Being the target of clefting (applicable to nouns and infinitives).

8. Being the controller/target of reflexivization (applicable to nouns).

9. Being the controller of the SSynt-role of the Secondary Actor in the causative FAIRE-construction, namely imposing on it the SSynt-role of IndirO. (For more on the representation of the causative construction in French, see p. 00.)

10. Being the controller of an actantial-attributive complement (applicable to nouns).

Syntactico-morphological properties of Ds

11. Being the target of non-specific morphological or lexical government.

We speak of '*non-specific*' *government* when a particular case form or a particular preposition is imposed on the D of a SSyntRel **r** by **r** itself—rather than by the lexical entry of its G, i.e. by G's Government Pattern. Cf., for instance, case forms of the clitics **le**$_{ACC}$ vs. **lui**$_{DAT}$ and the relative pronouns **qui**$_{NOM}$ vs. **que**$_{ACC}$ as a function of the subordinating SSyntRel (**dir-obj**, **indir-obj** and **subj**); or else the selection of PAR 'by' for the D of the **agentive** SSyntRel. (For non-specific government, see Mel'čuk 1993: 321-322.)

12. Being the target of morphological agreement (applicable to adjectives: *Alain le trouve **intelligent*** vs. *Alain la trouve **intelligente*** 'A. finds him/her intelligent').

13. Being the controller of agreement of the MV.

14. Linear position with respect to G and/or to other dependents of this G (not applicable to clitics and relative pronouns, whose ordering does not depend on the subordinating SSyntRel).

15. Impossibility of left dislocation. (In what follows we deal with 'pure' left dislocation—namely, prosodic separation of the clause element from the rest of the clause, without use of a resumptive clitic.)

16. Particular prosody/punctuation (applicable to Direct Speech).[12]

These properties logically correspond to the general notion of ***distinctive features***. In phonology, acoustic or articulatory distinctive features are used to identify the allophones of the same phoneme and to oppose different phonemes. Distinctive features, as is well known, are also successfully applied in morphology and semantics.

Since we are working with four major parts of speech—N(ouns), V(erbs), A(djectives), and ADV(erbs), we group the SSyntRels into four major classes according to the part of speech of their prototypical D (see above, Definition 4, p. 00); to this, we add a fifth class with the D being a full utterance (for Direct Speech). All 16 properties on our list are not relevant to all of the 5 classes of SSyntRels: this is the MAXIMAL set of properties, but for a particular class of SSyntRels only a subset of these properties is applicable—in conformity with the prototypical D of this class. Thus, if the prototypical D of a SSyntRel is an A, the property 'being the controller/target of reflexivization' is simply not applicable: adjectives in French do not trigger

reflexivization and cannot be reflexivized. Therefore, when introducing a SSyntRel **r**, we characterize it according to the properties which are relevant for its prototypical D. We indicate first those properties—or combinations thereof—whose positive values accrue only to (all Ds of) this **r** and which thus distinguish it from all the other SSyntRels of the same prototypical-dependent class: these are DEFINING PROPERTIES of **r**. Afterwards, we supply other relevant properties, which are, however, not exclusive to (the Ds of) **r** within the same prototypical-dependent class: DESCRIPTIVE PROPERTIES. (Lazard 1994b: 68-77 a similar, although different, distinction between 'prime' and 'secondary' properties.)

The subdivision of SSyntRels into five prototypical-dependent classes is similar to the subdivision of phonemes into vowels, consonants, and glides; or to the subdivision of inflectional categories into nominal, verbal, adjectival, and adverbial ones; or else to the subdivision of lexemes into semantic classes 'action,' 'event,' substance,' etc.

Now we can formulate the substantive requirement a SSyntRel must satisfy:
Similarity of Relevant Linguistic Properties

Any D of a SSyntRel **r** 1) must share at least some defining properties with the prototypical D' of **r** and 2) must not contradict any property of **r**.

A D of **r** does not contradict a property P of **r** if either it has the same value of P as the prototypical D' of **r** or P is inapplicable to this D. Thus, if two Ds of a SSyntRel **r** belong to different parts of speech, some of the properties of **r** may simply be inapplicable to one of them and so there is no contradiction.

Let us illustrate the above requirement. The prototypical Direct Object in French—an N—has the following four defining properties:

1) It can be promoted (to the Subject) by passivization.

2) It controls the SSynt-role of the Secondary Actor in the causative FAIRE-construction (= does not admit the expression of the Secondary Actor as Direct Object).

3) It can be replaced with a clitic in the accusative.

4) When replaced with a clitic or a relative pronoun, it controls the number/gender agreement of the past participle in compound verbal forms.

Based on these properties, we can consider as Direct Objects not only nouns, but some infinitives as well. Let us take the infinitive in sentence (9):

(9) [*Tout le monde*] *propose*−**dir-obj**→*de partir* '[Everybody] proposes to leave'.

This infinitive possesses all four defining properties of the prototypical DirO: 1) ***Partir** a été proposé par tout le monde* 'To leave was proposed by everybody'; 2) *Cela **lui** ‹*le› fait proposer de partir demain*, ʟɪᴛ. 'It makes to-him propose to leave tomorrow'; 3) *Partir, tout le monde **le***

propose, lit. 'To leave, everybody proposes it'; 4) *Partir, tout le monde l'a **proposé*** [MASC, SG], lit. 'To leave, everybody has proposed it'). At the same time, this infinitive does not contradict any property of the prototypical DirO: it either shares a property with the prototype (= has the same value of it) or the property is inapplicable to the infinitive at all. Thus, in French an infinitive, whatever its syntactic role, cannot be the target/controller of reflexivization, but this does not prevent us from considering some infinitives as DirOs, along with nouns, which do control reflexivization and can be reflexivized.

The requirement of similarity of relevant properties calls for two important provisos. When checking the values of relevant properties for a given SSyntRel, one must always bear in mind the following two important facts about natural languages.

• If we say something true about a language, it is true everywhere—except for some particular cases, which must be explicitly identified. This happens, for instance, in all types of PHRASEOLOGIZED expressions, where general rules and properties of the language can be 'suspended.' Thus, in the notorious phrase *kick the bucket* the DirO *bucket* cannot be promoted to Subject—which is one of defining properties of DirOs (**The bucket was kicked*, although the verb [*to*] KICK has the passive). However, even in a phraseme, a DirO remains a DirO. Thus, in the French phrasemes *faire pipi* '[to] go peepee', or *faire dodo* '[to] go beddy-bye', PIPI and DODO have almost none of the properties of DirOs—and yet in the causative FAIRE-construction they behave as DirOs, requiring that the SSynt-expression of the Secondary Actor be an IndirO: *Alain **lui** ‹*le› fait faire pipi/dodo* 'A. made to-him go peepee/go beddy-bye' (Morin 1980: 206; for the representation of the causative FAIRE-construction, see below, **5.3.3**). In the same vein, we find individual cases of impossible cliticization which run counter to our general statements. All such particular cases must of course be described in lexical entries of the corresponding units, but we must ignore them in the process of establishing the set of SSyntRels of ʟ.

• In many cases, a given clause element seems to lack a relevant property which it 'should' possess. This happens because other factors of a completely different nature intervene and muddle the picture. Thus, cliticization of a concrete phrase can be precluded by its semantic and communicative features (for instance, by its non-referentiality). The same holds for left dislocation.

4. The Notion of SSyntRel in Action: Establishing SSyntRels for a Given Language

What has been said in the preceding sections allows us to sketch a GENERAL METHOD for establishing an inventory of Surface-Syntactic Relations for a given language ʟ. This method boils down to 1) determining the set of SSyntRels in ʟ and 2) distributing relevant SSynt-

constructions among them (i.e. deciding by which SSyntRel a given SSynt-construction must be described). As a test case, we have chosen a particular subset of SSyntRels in French—all SSyntRels controlled by the active valency of the verb.

In conformity with the definition of SSyntRel, the proposed method can be formulated as follows:

A SSyntRel is postulated for a particular family of SSynt-constructions $G_i \rightarrow D_j$ of **L** if, and only if, all these constructions

1) satisfy the requirement of the similarity of the relevant properties of their Ds

and 2) satisfy Criteria 1-3.

Now, we want the method for establishing the SSyntRels/the clause elements in **L** to be satisfactory from the viewpoint of the general linguistic theory. More precisely:

• The method must produce a set of SSyntRels/clause elements for **L** such that it would be TYPOLOGICALLY valid. For instance, consider the hierarchy of major nominal clause elements established by Keenan and Comrie (1976), see above, beginning of Section **3**, p. 00; it is preferable to obtain such SSyntRels/clause elements that satisfy this hierarchy. To meet the requirement of typological plausibility, we need a 'good' selection of relevant properties.

• The method must (more or less) correspond to the UNIVERSALLY ACCEPTED METHODS for establishing linguistic units at all levels. Criteria 1-3 constitute an attempt to ensure such universality.

Note that the similarity of relevant properties, on the one hand, and Criteria 1-3, on the other, play different roles in the process of establishing the SSyntRels in **L**:

—sufficient similarity of relevant properties of the constructions A and B argues for using the same SSyntRel **r** to describe them, that is, it RECOMMENDS uniting A and B under the same **r**;

—Criteria 1-3 argue for not using the same SSyntRel **r** to describe A and B, that is, they FORBID uniting A and B under the same **r**.

5. SSynt-Relations Between a Verb and its Valency-Controlled Dependents in French

5.1. General Remarks

In the framework of dependency syntax, lists of labeled SSyntRels have been proposed for various languages: Russian (cf. Mel'čuk 1963: 490-493, 1964: 20-24 and 1974 (1999): 221-235); English (Mel'čuk & Pertsov 1987: 85-156, Apresjan *et al*. 1989: 71-121); German, Polish, Danish, Bangla, Finnish, Hungarian, Japanese, and Esperanto (Maxwell and Schubert (eds) 1989); and French (Apresjan *et al*. 1984-1985, Isaac 1986, Candito 1999). If we feel the need to return to the task, it is because we find the following three drawbacks in previous attempts:

First, the decisions made with regard to specific SSyntRels were not systematically justified. Now we would like to supply the reasons for postulating this or that SSyntRel according to relevant linguistic properties of phrases and to the formal criteria for distinguishing SSyntRels.

Second, SSyntRels were established for each language under analysis more or less in isolation from typological considerations and with no particular regard for the general theory of surface syntax. Now the time seems ripe for taking into account modern developments of syntactic theory and thus making the inventory of SSyntRel we are proposing theoretically 'clean' and linguistically substantiated.

Third, in the Meaning-Text approach, verb-to-actant SSyntRels were 'too semantic': they were excessively tailored to fit the DSyntRels (we mean, for instance, such SSyntRels as "1st completive," "2nd completive," etc., which were in one-to-one correspondence with DSyntAs). On the other hand, several other approaches seem 'too formal:' the SSyntRels are defined mostly by the distribution classes of their Ds. Now we would like to reconsider previous solutions under the angle of strict separation of levels—such that the SSyntRels be isolated based mainly on SYNTACTIC considerations, striking a necessary balance between the two extremes.

Speaking more specifically about French, the topic of establishing/distinguishing clause elements is quite well studied. Again, it is impossible for us to undertake a survey of existing works. As a principal source of our data we have made extensive use of the classic reference book Grevisse 1993 and a monograph by P. Le Goffic (1993). Also, we have drawn some additional data from Gross 1975, 1986, Boons *et al*. 1976, Kayne 1977, Apresjan *et al*. 1984-1985, and Candito 1999.

The method we propose has been systematically applied to French data in the domain of valency-controlled verb dependents. It has produced 17 SSyntRels, grouped into five classes, according to the syntactic class of the prototypical D of each SSyntRel. Below we give a list of these SSyntRels with examples (**5.2**) and a detailed description of the SSyntRels of Class I, i.e. SUBJECTIVAL and OBJECTIVAL SSyntRels (**5.3**).

5.2. List of SSyntRels for Valency-Controlled Verbal Constructions in French

A SSyntRel is designated by an adjective derived from the name of the SSynt-role of its D, that is, the name of the corresponding clause element. For instance, we call the SSyntRels linking *John* to *have* and *children* to *have* in (10) **subjectival** and **direct-objectival**, respectively:

   (10) *John*←**subj**−*has*−**dir-obj**→*children*,

because *John* is the Subject, and *children*, the Direct Object of the MV [*to*] HAVE.

CLASS I: The prototypical D is an N (without or with a preposition)

1. **Subjectival**: ***Alain** lit* 'A. is-reading'; ***Travailler trop et boire** sont mauvais pour la santé* 'To work too much and drink are bad for your health'.

2. **Quasi-subjectival**: *Il tombe **des pierres***, lit. 'It is-falling stones'; *Il semble qu'Alain est malade* 'It seems that A. is sick'.

3. **Direct-objectival**: *Alain lit **notre article*** 'A. is reading our paper'.

4. **Indirect-objectival**: *Alain donne son livre **à Igor*** 'A. gives his book to I.'.

5. **Pseudo-direct-objectival**: *Alain mesure **180 cm***, lit. 'A. measures 180 cm.' = 'A. is 180 cm tall'; *Ce pain sent **le hareng*** 'This bread smells of herring'.

6. **Agentive**: *Notre article a été lu **par Alain*** 'Our paper has been read by A.'.

7. **Oblique-objectival**: *Alain insiste **sur ce restaurant*** 'A. is insisting on this restaurant'.

CLASS II: The prototypical D is a V (in the infinitive, with or without preposition)

8. **Direct-infinitival-objectival**: *Alain peut **comprendre** ce problème* 'A. can understand this problem'.

9. **Oblique-infinitival-objectival**: *Alain commence **à lire*** 'A. begins to read'; *Alain cesse **de lire*** 'A. ceases to read'.

10. **Copredicative-infinitival-objectival**: *Alain entend Igor **parler** avec ses étudiants* 'A. hears I. talk with his students'.

CLASS III: The prototypical D is an A

11. **Copular-attributive-completive**: *Alain est **généreux*** 'A. is generous'.

12. **Actantial-attributive-completive**: *Alain est considéré **généreux*** 'A. is considered [to be] generous'; *Alain considère Suzanne **très généreuse*** 'A. considers S. very generous'.

13. **Predicative-attributive-completive**: *Ce savon sent **bon*** 'This soap smells good'.

CLASS IV: The prototypical D is an adverbial expression (= Adv, a prepositional phrase or a phrase introduced by the comparative conjunction COMME 'as')

14. **Circumstantial**: *Alain se comporte **bien*** 'A. behaves well'; *Alain cuisine **pour Helen*** 'A. cooks for H.'; *Alain met le livre **sur la table*** 'A. puts the book on the table'.

15. **Comparative**: *Alain reçoit ses amis **comme un roi*** 'A. receives his friends as a king'; *Alain reçoit Helen **comme une reine*** 'A. receives H. as a queen'.

CLASS V: The prototypical D is any expression used as direct speech

16. **Quotative-objectival**: *« **Tu es déjà là ?** », s'étonna Helen*, lit. ''You are already here?'—became-astonished H.' = ''You are already here?'—exclaimed H., astonished'.

5.3. SSyntRels of Class I (the prototypical D is a noun)

Each SSyntRel **r** is described in three steps:

• Relevant properties of **r**. (When a property is not applicable to all types of Ds of a given **r**, but only to some of them, we indicate its value for the prototypical D. Properties 11 and 16 are not applicable to nouns and therefore they will not be mentioned below.)

• Formal types of the Ds of **r**.

• Comments, which discuss (where appropriate) the reasons for the introduction of **r** and its demarcation with respect to other SSyntRels, justify the inclusion of concrete constructions under **r**, etc.

For the SSyntRels considered here two general statements concerning Criteria 1 and 3 hold:

—Criterion 1 is satisfied 'automatically' for all Class I SSyntRels (except for the **oblique-objectival**): all Ds of any Class I SSyntRel correspond to the same DSyntA of the governing verb, and within the limits of the SSyntRels considered in this paper there is no semantic contrast between the expressions of the same DSyntA. (Generally speaking, semantic contrast between different expressions of the same DSyntA which is implemented by purely syntactic means is possible, even if not current. Such a contrast requires the introduction of two different SSyntRels, cf. *He said the truth* vs. *He said: 'The truth.'*)

—Criterion 3 is also satisfied 'automatically' because all Class I SSyntRels (again except for the **obl-obj**) are non-repeatable.

However, Criterion 2 is not 'automatic' in the same sense: each construction subsumed under a given SSyntRel **r** must be checked for substitutability by **r**'s prototype.

The order of the presentation of the SSyntRels in this group is in conformity with the syntactic hierarchy of the corresponding clause elements (with the exception of the **quasi-subjectival** SSyntRel). This hierarchy is established according to the number of positive values of linguistic properties each clause element possesses; as we will see, it is slightly different from the Keenan-Comrie hierarchy (see **5.4**, p. 00).

5.3.1. Subjectival SSyntRel: G–subj→D
Properties

Its dependent member is the Subject, which is the most privileged clause element depending on a verb in **L**. In French, the SSynt-privileges of the Subject are the following seven properties that accrue to the Subject only and thus may be considered its defining properties:

1) Only the Subject corresponds to DSyntA **I** of the Main Verb.

1. A Subject may correspond to no DSyntA at all, as the so-called 'formal' Subject, i.e. an impersonal IL 'it', or the Subject of idiomatic expressions of the type *Quelle **mouche** l'a piqué ?*, lit. 'What fly bit him?' = 'Why is he so irritated?'.

2. The Quasi-Subject, which is obtained by the Impersonalization DSynt-rule, also corresponds to DSyntA **I**, see **5.3.2**, p. 00.

2) Only the Subject is obligatorily present in (the SSyntS[13] of) any full-fledged clause. (Let it be recalled that we consider here only full-fledged clauses with a finite verb form as SSynt-predicate; such clauses as *Voilà Alain* 'Here is A.' do not have a Subject.)

3) Only the Subject can depend on nothing but the MV. (This means that in no situation a clause element different from the finite verb—for instance an infinitive or a participle—can govern a Subject.)

Exception

The Quasi-Subject can also depend on nothing but the MV, *idem*.

4) Only the Subject can be the target of demotion by passivization (to the agentive phrase).[14]

5) Only the Subject can be the target of a particular non-specific morphological government—namely, if it is replaced by a clitic or a relative pronoun, the latter is in the nominative: ***Il*** [= *le vin*] *est bon* 'It [= the wine] is good', [*le pain*] ***qui*** *nous nourrit* '[the bread] that feeds us', *C'est partir* ***qui*** *m'inquiète* 'It is leaving that bothers me', *C'est que Jeanne soit là* ***qui*** *nous intéresse* 'It is that Jeanne should be here that interests us'.

6) Only the Subject controls the agreement of the finite MV: ***Vous êtes chez vous*** 'You are at home'; ***Alain et Helen*** *sont chez eux* 'A. and H. are at home'; ***Travailler trop et boire beaucoup*** *sont mauvais pour la santé* 'To work too much and drink a lot are bad for your health'.[15]

Exception

With the Subject CE 'this' and the MV ÊTRE '[to] be', it is the Copular-Attributive Complement that controls the agreement of the MV, cf.: *Ce sont **mes amis***, lit. 'This are my friends'.

7) Among valency-controlled dependents of the MV, only the Subject normally precedes it.

Exception

The Subject may follow the MV in a well-defined set of constructions, such as interrogative inversion, inversion with the introduction of Direct Speech, etc. (Of course, certain circumstantials, sentential adverbs, connectors, etc. also precede the MV—optionally or obligatorily, but these are not valency-controlled.)

In addition, the Subject has seven more relevant properties that it shares with other clause elements:

8) The Subject can be the target of cliticization by a personal clitic: *Est-**elle** venue ?* 'Has she come?'.

9) The Subject can be the target of relativization: *J'aime ce livre,* ***qui*** *décrit les voyages d'Amundsen* 'I like this book, which describes Amundsen's travels'.

10) The Subject can be the target of clefting: *C'est* (***de***) ***partir le plus vite possible*** *qui m'intéresse*, lit. 'It is (to) leave as soon as possible that interests me'.

11) The Subject can be the controller of reflexivization: *Alain **se rase*** 'A. shaves himself'.

12) The Subject cannot be the controller of the SSynt-role of the Secondary Actor in the causative FAIRE-construction.

13) The Subject can be the controller of an actantial-attributive complement: ***Cette nouvelle*** *est considérée comme intéressante*, lit. 'This piece of news is considered as interesting'.

14) The Subject cannot be the target of 'pure' left dislocation: ****Alain***, *est venu hier* 'A., has come yesterday'.

Formal Types of Subject

1. A prepositionless noun in the broad sense:

   a. A noun (including the subclass of stressed pronouns): ***Alain*** *travaille* 'Alain is-working'; ***Celui de mon père*** *est plus grand* 'That of my father is bigger'.

   b. A SSynt-equivalent of a noun: a substantivized adjective (***Le plus sage*** *est de tout oublier* 'The wisest [thing to do] is to forget everything'), a headless relative (***Qui veut y aller*** *doit faire une demande*, lit. 'Who wants to-go there should make an application') or a quantitative phrase of the type ***Beaucoup de livres*** *ont été perdus* 'Many books have been lost'.

   c. The impersonal clitic IL or a personal clitic in the nominative: ***Il*** *pleut* 'It rains'; ***Elle*** *lit* 'She reads'.

2. An infinitive (with or without preposition): ***Courir*** *fatigue Alain* 'To run tires A.'; ***De voir ça*** *m'a bouleversé* 'To see this has upset me'; ***Se plaindre*** *passe pour un signe de faiblesse* 'To complain is considered a sign of weakness'.

3. A subordinate clause:

   a. A QUE-clause (with the MV in the subjunctive): ***Que Helen soit arrivée*** *étonne Alain*, lit. 'That H. should have arrived amazes A.'.

   b. A clause with an interrogative pronoun: ***Pourquoi Alain a dit cela*** *reste un grand mystère* 'Why A. has said this remains a great mystery'.

4. Direct Speech: ***« On doit partir le plus tôt possible »*** *est la consigne que tout le monde comprend* ''We have to leave as soon as possible' is the slogan that everyone understands'.

Comments

Nominal Subjects and non-nominal Subjects show two types of differences:

1) Different behavior with respect to word order: thus, inversion rules do not apply to non-nominal Subjects (= formal types 2-4).

2) A nominal and a non-nominal Subjects are not easily coordinated with each other, even where semantics allows this coordination: ??***Courir*** *et **le travail physique*** *fatiguent Alain* 'To-run and physical work tire A.'. Such coordination, however, does not seem to be completely

ungrammatical, and it is better in some cases: [?]**Manger trop de fraises** *et la sieste sont mes deux péchés* 'To-eat too many strawberries and the siesta are my two sins'. Coordination of two non-nominal Subjects is possible without problems: **Travailler deux jours** *et* **qu'on me paye le double** *m'arrange* 'To-work two days and be paid the double suits me'.

Facts of this type are irrelevant for SSyntRels as such; they must be taken care of in DSynt-rules, which carry out the DSyntS $\Rightarrow$ SSyntS transition.

5.3.2. Quasi-subjectival SSyntRel: G–quasi-subj→D

Properties

Its dependent member is the Quasi-Subject: an element that corresponds—in an impersonal construction—to DSyntA **I** of the MV, but is not the Subject, the Subject being the impersonal clitic IL 'it' or the demonstrative pronoun CELA/ÇA 'this' (**Il est raconté beaucoup d'histoires bizarres**, lit. 'It is told many strange stories'; **Cela m'étonne qu'Alain soit venu**, lit. 'This amazes me that A. should have come'). The Quasi-Subject is introduced, together with IL or CELA, in the SSyntS by the Impersonalization rule—under the control of communicative information. Let it be emphasized that with certain verbs the application of this rule is obligatory: *Il semble ‹paraît› qu'Alain soit venu* 'It seems that A. has come' ~ **Qu'Alain soit venu semble ‹paraît›*.

The Quasi-Subject shares with the genuine Subject no defining properties—except for the correspondence to DSyntA **I** of the MV and the ability to depend on the MV only; therefore, it can by no means be considered a Subject. In French grammatical tradition, the Quasi-Subject is called *sujet réel* 'real subject', while the impersonal IL is *sujet apparent* 'apparent, or dummy, subject'. These terms show the failure to distinguish the semantic and the syntactic levels: from the viewpoint of pure syntax, it is rather IL which is the 'real' subject, while our Quasi-Subject is an 'apparent' subject.

The Quasi-Subject has one defining property:

1) The Quasi-Subject corresponds to DSyntA **I** of the MV, being the product of DSynt-rule of Impersonalization.

Its descriptive properties are:

2) The Quasi-Subject is not obligatorily present in any full-fledged clause.

3) The Quasi-Subject can depend only on the MV.

4) The Quasi-Subject cannot be promoted/demoted.

5) A nominal Quasi-Subject can be the target of cliticization by the clitic EN: *Il en* [= *bâtiments de ce type*] *a été construit en France en 1970*, lit. 'It has been built thereof [= buildings of this type] in France in 1970', *Il en* [= *des coups*] *pleuvait*, lit. 'It rained thereof [= blows]', *Il en* [= *des camions*] *arrive*, lit. 'It arrives thereof [= trucks]'.

6) The Quasi-Subject cannot be the target of relativization: *toutes ces histoires ***qu'il a été racontées***, lit. 'all these stories that it has been told'.

7) The Quasi-Subject can be the target of clefting: *C'est **des étudiants** qu'il est venu*, lit. 'It is students that it has come'.

8) The Quasi-Subject can be the controller of reflexivization: *Tous les ans, à la même période, il **se baigne dans le Gange des miliers de fidèles***, lit. 'Every year, at the same period, there bathe themselves in the Ganges thousands of the faithful'.

9) The Quasi-Subject cannot be the controller of the Secondary Actor in the causative FAIRE-construction.

10) The Quasi-Subject cannot be the controller of an actantial-attributive complement: **Il est considéré **de telles théories** comme fort intéressantes*, lit. 'It is considered such theories as very interesting'.

11) The Quasi-Subject cannot be the target of non-specific morphological government. (Non-specific morphological government manifests itself in French only with personal clitics, which distinguish cases; however, the Quasi-Subject is not cliticizable by personal clitics.)

12) The Quasi-Subject cannot be the controller of the agreement of the MV.

13) The Quasi-Subject always follows the MV.

14) The Quasi-Subject cannot be the target of 'pure' left dislocation (i.e. without the resumptive clitic): *****Des étudiants**, il est venu*, lit. 'Students, it has come'.

ɴ: A nominal Quasi-Subject has an additional important property: it must be indefinite.

Formal Types of Quasi-Subject

1. An indefinite prepositionless noun: *Il pleuvait **des coups***, lit. 'It was raining blows' = 'Blows were raining'.
2. The clitic EN.
3. An infinitive (with the preposition DE): *Il/Cela fatigue Alain **de courir***, lit. 'It/This tires A. to run'; *Il n'est pas difficile **de savoir** quand Alain partira* 'It is not difficult to know when A. will leave'.
4. A subordinate QUE-clause: *Il semble **qu'Alain est venu*** 'It seems that A. has come', *Il /Cela m'étonne **qu'Alain soit venu***, lit. 'It/This amazes me that A. should have come'.
5. Direct Speech: *Il a été annoncé: **« Restez tranquilles !»*** 'It has been announced: 'Remain calm!''.

Comments

1. Although the constructions listed above do not possess a common prototypical D, this does not prevent us from subsuming all of them under the same SSyntRel. Criterion 2 is simply not

applicable in this case: the constructions in question do not have DIRECT DSynt-correlates, being produced by a lexically restricted DSynt-rule of Impersonalization.

2. G. Lazard (1994a) considers only nominal expressions as possible Quasi-Subjects (*actant H*, in his terms); actually, he describes these as something intermediate between Subjects and Direct Objects, with which they share several properties (Lazard 1994a: 9), but, in any rate, as a separate SSynt-role. We do the same thing, with the difference that we include under the label of **quasi-subjectival** SSyntRel four other constructions, which have been not considered by Lazard.

3. Nominal and non-nominal Quasi-Subjects show the following important difference: The presence of a nominal Subject with a given verb by no means entails the possibility of the impersonalization transformation, which will produce a Quasi-Subject; only some existential verbs and all the verbs in the passive admit it. However, the presence of a non-nominal Subject with a given verb automatically entails the possibility of impersonalization, and, in some cases, as indicated above, this is even obligatory.

4. Another important difference cuts across nominal and non-nominal Quasi-Subjects: some of them correlate with genuine Subjects possible on the surface while others do not. For instance: *Il pleuvait **des coups*** 'It rained blows' ~ ***Des coups** pleuvaient* 'Blows rained' or *Il fatigue Alain **de courir***, lit. 'It tires A. to run' ~ ***Courir** fatigue Alain* 'To run tires A.', but *Il semble **qu'Alain est venu*** 'It seems that A. has come' ~ **Qu'Alain est venu** semble*, lit. 'That A. has come seems'.

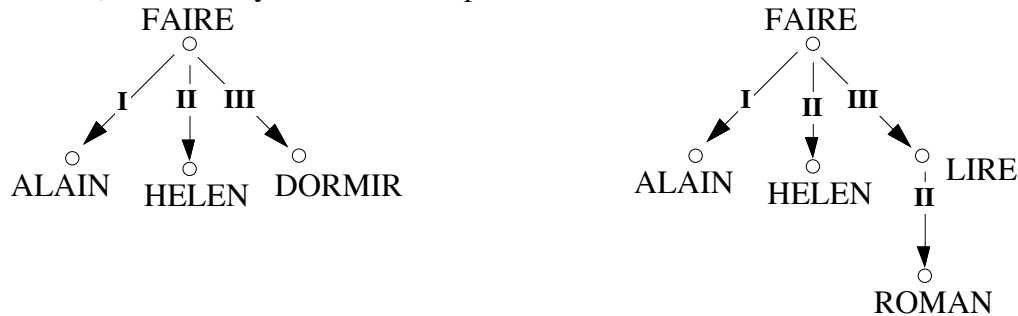### 5.3.3. Direct-objectival SSyntRel: G—dir-obj→D
Properties

Its dependent member is the Direct Object [= DirO]. It is the second most privileged clause element depending on a verb in **L**. In French, the SSynt-privileges of the DirO are the following four defining properties:

1) The DirO can be the target of promotion (to Subject—by passivization).

Note that if the verb governing a DirO is not passivizable as such (= has no passive form), this property is taken to be not applicable. Thus, this property is not applicable, for instance, in the case of *avoir **ce livre*** '[to] have this book', since AVOIR (in this sense) does not have the passive; the same holds for *comporter **trois parties*** '[to] contain three parts'. But the case of *Alain a commencé à travailler* 'A. has begun to work' vs. *(À) travailler a été commencé (par Alain)* is different: here this property is applicable and not satisfied, since COMMEN-CER—in this same sense—has a genuine passive: *Le travail a été commencé* 'The work has been begun'. (As a result, the construction COMMENCER + V_{inf} cannot be described by the **dir-obj** SSyntRel: the SSyntRel here is the **direct-infinitival-objectival** one, see below, Comment 5, p. 00.)

2) The DirO is the controller of the SSynt-role of the Secondary Actor in the causative FAIRE-construction (Kayne 1977: 202-211, Morin 1980).

In order to explain this property, we have to say a few words about the syntactic representation of the French causative construction FAIRE + V_{inf} (*Alain **fait dormir** Helen*, lit. 'A. makes sleep H.', *Alain **fait lire** un roman à Helen*, lit. 'A. makes read a novel to H.' = 'A. makes H. read a novel'). At the DSynt-level, it is represented as follows:

```
        FAIRE                                    FAIRE
          o                                        o
        / | \                                    / | \
      I  II III                               I  II III
      ↙   ↓  ↘                                ↙   ↓  ↘
     o    o   o                              o    o   o  LIRE
  ALAIN HELEN DORMIR                      ALAIN HELEN  II
                                                       ↓
                                                       o
                                                     ROMAN
```

The causative FAIRE is considered to have three DSyntAs: its DSyntA **I** is the Primary Actor, or the Causer, the DSyntA **II** the Secondary Actor, i.e. the demoted Actor of the lexical verb V (*Helen* in our examples), and the DSyntA **III** the lexical verb itself (in the infinitive).

The SSynt-role of the corresponding clause elements depends on the transitivity of V and the presence of a DirO with this V.

• If V is intransitive or, being transitive, has no DirO, the Secondary Actor is realized as a DirO of FAIRE; cf.:

(11) **a**. *Helen sort de sa chambre* [Oblique Object = OblO] 'H. goes out of her room'.

vs.

b. *Alain fait sortir Helen* [= DirO of FAIRE] *de sa chambre* [= OblO of SORTIR],

lit. 'A. makes go out H. from her room'. ~

*Alain **la** ‹*lui› fait sortir de sa chambre*, lit. 'A. makes go out her from her room'.

c. *Helen lit chaque soir* 'H. reads every night'.

vs.

d. *Alain fait lire Helen* [= DirO of FAIRE] *chaque soir*, lit. 'A. makes read H. every night'.

~

*Alain **la** ‹*lui› fait lire chaque soir*, lit. 'A. makes read her every night'.

• If V is transitive and has an expressed DirO, the Secondary Actor is realized as an Indirect Object of FAIRE; cf.:

(12) *Alain fait lire le roman* [= DirO of LIRE] *à Helen* [= IndirO of FAIRE] ‹*Helen›

lit. 'A. makes read the novel to H.' ~

*Alain **lui** ‹*la› fait lire le roman*,

lit. 'A. makes read the novel to her' = 'A. makes her read the novel'.

Cf. also:

(13) *J'ai fait comprendre **à Alain*** [= IndirO of FAIRE] ‹*Alain› que c'était inutile* [= DirO of COMPRENDRE], lit. 'I have made understand to A. that this was useless' ~ *Je **lui** ‹*l'›ai fait comprendre que c'était inutile*, lit. 'I have made understand to him that this was useless'.

Thus, when we say that a DirO is the controller of the SSynt-role of the Secondary Actor, we mean that in the presence of the DirO of the lexical verb, the Secondary Actor in a causative construction must be realized as an IndirO of FAIRE and in its absence, as a DirO of the latter.[16]

3) The DirO can be the target of non-specific morphological government—the clitic/the relative pronoun replacing the corresponding noun is in the accusative: *Je **le*** [= *le vin*] *bois* 'I drink it [= the wine]', [*le pain*] ***que** j'ai acheté* '[the bread] that I have bought'.

> Exceptions
>
> 1. An indefinite DirO can be replaced with the clitic EN (*J'ai trouvé des livres intéressants* 'I have found interesting books' ~ *J'**en** ai trouvé*; *Je n'ai pas trouvé de livres* 'I haven't found books' ~ *Je n'**en** ai pas trouvé*).
>
> 2. A partitive DirO can also be replaced with the clitic EN and the relative pronoun DONT (*Je mange **du pain** noir* 'I eat dark bread' ~ *J'**en** mange*; *le pain **dont** j'ai mangé*, lit. 'the bread of which I have eaten').

4) The DirO is the controller of the agreement of the past participle in compound forms of the MV in case the DirO precedes the participle (the DirO is the relative pronoun or a clitic): *les lettres **que** j'ai écrites* 'the letters that I have written', *Je **les** ai écrites* 'I have written them'.

> Exception
>
> The DirO implemented by the clitic EN does not control the agreement of the past participle, so that we have *Des lettres, j'**en** ai écrit ‹*écrites› dans ma vie*, lit. 'Letters, I have written thereof in my life'.[17]

In addition, the DirO has ten descriptive properties:

5) The DirO corresponds exclusively to DSyntA **II** of the governing verb.

> Exception
>
> A DirO in an idiomatic expression [= full phraseme] of the type *faire **l'amour*** [*avec qqn.*] '[to] make love [with someone]' or [to] *kick **the bucket*** (cf. p. 00), where—under sentence production—the governing verb appears first only in the SSyntS (in the DSyntS, the whole phraseme is represented as one node) and therefore has no DSyntAs.

In order to avoid cluttering our presentation with non-relevant details, we will not discuss a complication related to the DSynt-representation of constructions with an 'internal' DirO, as in *vivre sa vie* '[to] live one's life' or *suer la sueur de tes nuits* [Verlain] '[to] sweat the sweat of your nights', where the verb receives—by a semantic rule—the DSyntA **II** that does not correspond to any of its SemAs.

6) The DirO is not necessarily present in (the SSyntS of) any clause.

7) The DirO does not necessarily depend on the MV. (It can, unlike the Subject and the Quasi-Subject, depend on an infinitive or a present participle.)

8) The DirO can be the target of personal cliticization: *Je les* [= *les conditions*] *considère* 'I consider them [= conditions]'.

9) The DirO can be the target of relativization: *J'aime le livre **que** j'ai acheté à Paris* 'I love the book that I have bought in Paris'.

10) The DirO can be the target of clefting: *C'est ce livre **que** je veux lire* 'It is this book that I want to read'; *C'est **travailler la nuit** que je déteste* 'It is to work at night that I hate'.

11) The DirO can be the controller/the target of reflexivization: *Helen a forcé Alain à **se raser*** 'H. has forced A. to shave himself'; *Helen a fait **se raser** Alain* 'H. has made A. to shave himself'.

12) The DirO can be the controller of an actantial-attributive complement: *Il considère cette nouvelle **comme intéressante*** 'He considers this piece of news as interesting'.

13) The DirO follows the governing verb.

> Exception
> A DirO expressed by a quantifying pronoun TOUT 'everything' or RIEN 'nothing' can precede the governing verb.

14) The DirO cannot be the target of 'pure' left dislocation (without the resumptive clitic): ****Les romans**, Alain lit* 'The novels, A. reads'.

> Exception
> In colloquial speech, a few verbs admit 'pure' left dislocation of the DirO, cf. ***Ce film**, j'ai aimé* 'This film, I have loved'; ***Les mille-feuilles**, Alain adore* 'The mille feuilles, A. adores'; ***Nager le matin**, j'ai beaucoup aimé* 'To swim in the morning, I have loved a lot'.

Formal Types of DirO

1. A prepositionless noun (in the broad sense):

   a. A genuine noun (including the subclass of stressed pronouns): *Alain a trouvé **un livre*** 'A. has found a book'; *Je trouve **cela** dangereux* 'I find this dangerous'; *Je vois **celui de mon père*** 'I see that of my father'.

   b. A SSynt-equivalent of a noun, such as a substantivized adjective, a headless relative (*J'embrasse **qui je veux*** 'I kiss who I want'; *Alain sait **qui sa femme voit*** 'A. knows who his wife is seeing'; *Alain chassera **qui apparaîtra*** 'A. will chase who will appear'), a subordinate clause of the type *Helen a invité **tu ne devineras jamais qui*** 'H. has invited you will never guess who',[18] a quantitative phrase (*Alain lit **beaucoup de livres*** 'A. reads many books'), etc.

   c. A personal clitic in the accusative: *Alain **la** trouvait partout* 'A. was finding it everywhere'; *Alain ne **me** quitte jamais* 'A. never leaves me'.

2. A noun without article introduced by the preposition DE—with a negated verb: *Alain n'a pas trouvé **de livre*** 'A. has not found a book'.

3. The clitic EN: *Alain **en*** [= des légumes frais] *trouve partout*, lit. 'A. finds thereof [= fresh vegetables] everywhere'.

4. An infinitive:

   a. Without preposition or with the preposition À or DE: *Alain préfère **partir*** 'A. prefers to leave'; *Alain propose **de partir*** 'A. proposes to leave';*Tous les étudiants apprennent **à parler chinois*** 'All students learn to speak Chinese'.

   b. Governing an interrogative pronoun: *Alain sait **combien lui donner**/**à qui parler** /**qui inviter*** 'A. knows how much to give him/to whom to speak/whom to invite'.

5. A subordinate clause:

   a. Including a relative/interrogative pronoun: *Alain sait **quand son ami part*** 'A. knows when his friend is leaving'.

   b. Introduced by the conjunction QUE: *Alain sait **que Helen est là*** 'A. knows that H. is here'.

   c. Introduced by the interrogative conjunction SI: *Alain veut savoir **si nous travaillons ce vendredi*** 'A. wants to know whether we work this Friday'.

   All Ds indicated above are substitutable by the prototypical DirO—a noun, so that Criterion 2 is satisfied; for instance: *Alain propose **de partir*** 'A. proposes to leave' ~ *Alain propose **le départ*** 'A. proposes the departure'; *Alain sait **quoi lui répondre***, lit. 'A. knows what to answer to him' ~ *Alain sait **la réponse*** 'A. knows the answer'; etc.

Comments

1. A prepositionless noun that corresponds to DSyntA **II** of the governing verb is not necessarily a DirO: it may be an OblO. This is, for instance, the case of the noun that designates the topic of the discussion with the verbs PARLER '[to] speak' and CAUSER '[to] chat': *parler **politique*** '[to] talk politics' or *causer **argent***, lit. '[to] chat money' (cf. *to talk shop*), cf. **5.3.7**, p. 00. The noun in question does not possess three of the four defining properties of a DirO: it does not forbid to implement the Secondary Actor of the causative construction as a DirO (*Alain **la**/**lui** fait parler politique*) and, since it does not allow either cliticization (*la parler) or relativization (**politique que nous parlions*), it cannot be the target of non-specific morphological government and does not control the agreement of the past participle in compound verb forms (**politique qu'on a parlée*). It does not passivize, either (**Politique a été parlée*), but this is because the verbs PARLER and CAUSER do not have a genuine passive form.

2. Another controversial case is a prepositionless quantitative phrase that corresponds to DSyntA **II** of the governing verb of measure and designates the value of a parameter: *coûter **300 francs*** '[to] cost 300 francs'/***toute une fortune*** 'a whole fortune'/***une somme rondelette*** 'a nice little sum'/*mesurer **4 mètres***, lit. '[to] measure 4 meters' = '[to] be 4 meters long', etc. The

traditional French grammar (e.g., Grevisse 1993: 1336) does not consider this phrase as a DirO, and we agree, since it violates two of DirO's defining properties:

• It allows the Secondary Actor in the causative FAIRE-construction to be in the accusative if it is cliticized, which a genuine DirO does not allow: *Ce régime **la**/**lui*** [= *Helen*] *fera peser 45 kilos* 'This diet will make her weigh 45 kilos' [measure verbs do not readily admit the causative construction, so that this example is a bit far-fetched] vs. *Ce régime **lui** ‹*la› fera perdre 5 kilos* 'This diet will make her lose 5 kilos'.

• It does not control the agreement of the past participle in compound verb forms: *300 francs que cette robe m'a coûté(*s)* '300 francs that this dress has cost me', *la somme que cette robe m'a coûté(*e)* 'the sum that this dress has cost me'.

As for two other defining properties of the DirO, the picture is as follows:

• This construction does not passivize (**300 francs est/sont coûté(s) par cette robe*), but this is because the verbs involved do not have passive forms.

• Although the accusative cliticization in this construction is not readily done (because of the inherent non-referentiality of the noun), it is possible: e.g., *300 francs ! Cette robe **les** coûte*, lit. '300 francs! This dress costs them'; *Le sac **les** pèse, ses 15 kilos*, lit. 'The bag weighs them, its 15 kilos'. In addition, the quantitative phrase admits of relativization via the accusative **que**: *les 300 francs **que** cette robe m'a coûté/les grosses sommes **que** ces voitures m'ont coûté* 'the 300 francs that this dress has cost me/the big sums that these cars have cost me' (but note the lack of agreement in the past participle!). Because of this, the quantitative phrase with measure verbs is fairly close to DirO, so that the distinction is really tenuous (especially if we take into account the fact that the agreement of the past participle with these verbs would be purely orthographic). However, in conformity with what has been said above we declare it a special clause element which we call *Pseudo-Direct Object* [= Pseudo-DirO], and the corresponding SSyntRel is **pseudo-dir(ect)-obj(ectival)**.

A similar, but actually different case is represented by sentence (14):

(14) *Nous avons payé cette robe **300 francs***, lit. 'We have paid this dress 300 francs'.

On the one hand, since the **dir-obj** SSyntRel is non-repeatable in French, the quantitative phrase *300 francs* cannot be a DirO—*cette robe* 'this dress' is the DirO. On the other hand, unlike the Pseudo-DirO, the phrase *300 francs* expresses DSyntA **III** of PAYER '[to] pay' and does not admit cliticization.[19] We consider the phrase *300 francs* in (14) to be an OblO: it is substitutable by a prototypical OblO—a noun introduced by a preposition, cf. *Nous avons payé cette robe **avec les 300 francs** d'Alain* 'We have paid this dress with A.'s 300 francs'.

3. The infinitive in a construction of the type *préférer partir*, *apprendre à parler*, *proposer de partir* and *savoir quand partir* is considered a DirO since it satisfies all four defining properties of DirOs:

1) Passivization (in many cases, additional Impersonalization is required, as is typical of infinitives):

(15) **a**. *Tout le monde préfère **partir***   ~ ***Partir** a été préféré par tout le monde*

     'Everybody prefers to leave'.   'To leave has been preferred by everybody'.

   b. *Ils apprennent **à parler** chinois*   ~ *Il est appris par eux **à parler chinois***

     'They learn to speak Chinese'.   'It is learned by them to speak Chinese'.

   c. *Il a proposé **de partir***   ~ $^?$***Partir** a été proposé par lui*

     'He has proposed to leave'.   'To leave has been proposed by him'./

     *Il a été proposé par lui **de partir***

     'It has been proposed by him to leave'.

   d. *Tout le monde sait **quand partir***   ~ $^?$*Il est su de tout le monde **quand partir***

     'Everybody knows when to leave'.   'It is known to everybody when to leave'.

2) Control of the SSynt-role of the Secondary Actor in the causative FAIRE-construction (Morin 1980: 206): the Secondary Actor cannot be realized as a DirO. Here are some relevant examples:

(16) **a**. $^?$*J'ai fait apprendre **à parler** chinois à Alain* ‹*J'ai fait apprendre à parler chinois Alain›

     'I have made A. learn to speak Chinese'.

   b. $^?$*Cela fait proposer à Alain **de partir*** ‹*Cela fait proposer Alain de partir ›

     'It makes A. propose to leave'.

   c. *J'ai fait promettre à Alain **de partir*** ‹*J'ai fait promettre Alain de partir ›

     'I have made A. promise to leave'.

However, for the infinitive with the verb PRÉFÉRER this property is not distinctive: if the Secondary Actor is a noun, the causative FAIRE-construction is impossible; but if it is expressed by a clitic both realizations (the accusative and the dative one) are possible, although judged awkward:

   d. **Cela fait préférer **partir** à Alain* ~ **Cela fait préférer partir Alain*

     'It makes A. prefer to leave'.

     vs.

     $^?$*Cela **lui** fait préférer **partir***   ~ $^?$*Cela **le** fait préférer partir*.

     This makes the infinitive that depends on PRÉFÉRER 'less' of a DirO.

3) Accusative cliticization (the infinitive is substitutable by the accusative 'neuter' clitic LE):

(17) **a**. *Tout le monde préfère **partir***.   ~ *Tout le monde **le** préfère*.

   b. *Ils apprennent **à parler** chinois*.   ~ *Ils l'apprennent*.

   c. *Il a proposé **de partir***.   ~ *Il l'a propose*.

   d. *Tout le monde sait **quand partir***.   ~ *Tout le monde **le** sait*.

4) Control of the agreement of the past participle in compound forms (masculine singular):

(18) *Partir, tout le monde l'a préféré*; *Partir a été préféré par tout le monde*.

Moreover, this infinitive possesses the descriptive properties of the prototypical DirOs that are applicable to the verb: it corresponds to DSyntA **II** of the governing verb, follows the governing verb, admits clefting and cannot be the target of 'pure' left dislocation.

Criterion 2 does not forbid us to consider the infinitive in these constructions a DirO since it is substitutable by the prototypical DirO—a noun: *Il préfère le départ* 'He prefers the departure', *Il propose le départ* 'He proposes the departure', *Il sait l'heure du départ* 'He knows the time of the departure'.

4. However, Criterion 2 precludes treating the infinitival complement of the modal verbs POUVOIR 'can' and DEVOIR 'must' as a DirO, since it is not substitutable by a noun: *Alain peut/doit partir* 'A. can/must leave' ~ **Alain peut/doit le départ* 'A. can/must the departure'.

From the viewpoint of the defining properties of the DirO, the modal-governed infinitive could be considered a DirO. The first and the second properties are not applicable to it: POUVOIR and DEVOIR have no passive forms, and they do not readily admit the causative construction (**Alain lui /l'a fait pouvoir partir*). The third and the fourth properties are satisfied: the infinitive with POUVOIR/DEVOIR can be cliticized via the accusative 'neuter' clitic LE (*Alain peut/doit partir* 'A. can/must leave' ~ *Alain le peut/ ?le doit* 'A. can/must it'), which controls the agreement of the past participle (*Alain l'a pu*: masculine singular). Nevertheless, for us the fact that POUVOIR/DEVOIR do not accept nominal objects outweighs the similarity of their infinitives with DirOs. Their DSyntA **II** inherently designates an action, a state, etc.; therefore, their prototypical D must be verbal rather than nominal, while the prototypical DirO is the name of an entity. As a result, the construction POUVOIR/DEVOIR–**r**→V$_{inf}$ is described by the **direct-infinitival-objectival** SSyntRel.

The situation with the modal verb VOULOIR '[to] want' is different: with it, the infinitive is substitutable by a noun (*Je veux ce départ* 'I want this departure'), so that Criterion 2 does not forbid us to treat it as a DirO. The VOULOIR infinitive also admits limited passivization (*Qu'Alain vienne est voulu par tous* 'That A. should come is wanted by everybody') and the accusative cliticization—with the resulting control of past participle agreement in masculine singular (*Alain l'a voulu* 'A. has wanted it'). True, with respect to the FAIRE-construction, VOULOIR behaves like the semantically close PRÉFÉRER (see above)—that is, for VOULOIR this property is not distinctive:

(19) **Cela a fait vouloir partir à Alain/Alain* 'This has made A. want to leave' ~

  ?Cela lui /l'a fait vouloir partir 'This has made him want to leave'.

However, since the other three defining properties of DirOs are satisfied, the dependency of an infinitive on VOULOIR is described by the **direct-objectival** SSyntRel—like that with PRÉFÉRER (as well as with DÉSIRER '[to] desire' and SOUHAITER '[to] wish').

5. Not all infinitives that correspond to DSyntA **II** of the governing verb and are introduced by the preposition À or DE are DirOs: they can also be Oblique Objects, Direct-Infinitival Objects or Oblique-Infinitival Objects (see above, the list of SSyntRels). For instance, the infinitive with a phasal verb such as COMMENCER '[to] begin', CONTINUER '[to] continue', or CESSER '[to] cease', is not a DirO (*contra* Le Goffic 1993: 169). This is so because such an infinitive violates the defining properties of DirOs: it does not admit passivization (*(À) travailler **a été commencé***, *Il **a été commencé** à travailler*),[20] does not control the realization of the Secondary Actor as IndirO in the causative construction (*Alain **la** ‹*lui› fait commencer à travailler* 'A. makes her begin to work'), and disallows cliticization with the 'neuter' LE (**Alain **l'**[= à travailler] a commencé*).

For better clarity, let us give examples of verbs governing an infinitive with a preposition as a DirO, as an Oblique Object, and as an Oblique-Infinitival Object:

V−**dir-obj**→V$_{inf}$ (the infinitive is substitutable by the prototypical D—a prepositionless noun):

apprendre à [parler chinois] '[to] learn to [speak Chinese]', *attendre de* '[to] wait to',[21] *chercher à* '[to] try to',[22] *craindre de* '[to] be afraid of', *decider de* '[to] decide to', *demander à* [être admis] '[to] ask to [be admitted]', *exiger de* '[to] require to', *jurer de* [dire la vérité] '[to] swear to [tell the truth]', *promettre de* '[to] promise to', *proposer de* '[to] propose to', *regretter de* '[to] regret to', ...

V−**obl-obj**→V$_{inf}$ (the infinitive is substitutable by the prototypical D—a noun introduced by a preposition): *consentir à* '[to] agree to', *se décider à* '[to] bring oneself to', *douter de* [pouvoir venir] '[to] doubt to [be able to come]', *inviter à* '[to] invite to', *obliger à* '[to] oblige to', *parler de* [partir] '[to] talk of [leaving]', *soupçonner de* '[to] suspect of', ...

V−**obl-inf-obj**→V$_{inf}$ (the infinitive is the prototypical D): *commencer à* '[to] begin to', *continuer de* '[to] continue to', *se dépêcher de* '[to] hurry to', *essayer de* '[to] try to',[23] *se hâter de* '[to] hasten to', *hésiter à* '[to] hesitate to', *persister à* '[to] persist to', *réussir à* '[to] manage to', *tâcher de* '[to] attempt to', *tarder à* '[to] be long V-ing', ...

5.3.4. Indirect-objectival SSyntRel: G−**indir-obj**→D

Properties

Its dependent member is the Indirect Object [= IndirO]. It is the third most privileged clause element depending on a verb in **L**. In French, the SSynt-privilege of the IndirO is the following defining property:

1) The IndirO can be the target of non-specific morphological government—that is , if it is replaced with a clitic, this clitic is in the dative: *Je **lui** donne ce livre* 'I give this book to him'.

Other relevant properties are descriptive:

2) The IndirO corresponds to DSyntA **II** or **III** of the governing verb: *Helen plaît **à Alain*** [= DSyntA **II**] 'A. likes H.'; *Helen donne une poire **à Alain*** [= DSyntA **III**] 'H. gives a pear to A.'.

As is the case with the DirO, we will not discuss here in detail two complications related to the DSynt-representation of the following constructions with IndirOs:

• The IndirO expresses a 'raised' Possessor of the Subject or of the DirO: *La gorge **lui** brûlait*, lit. 'The throat was burning to him'; *Alain **lui** a touché l'épaule*, lit. 'A. has touched the shoulder to her'; *Se fâcher avec Helen a gâché la vie **à Alain***, lit. 'To quarrel with H. has spoiled the life to A.'.

• The Indirect Object expresses a Beneficiary : *Alain a acheté une glace **à Helen***, lit. 'A. has bought an ice-cream to H.'.

In both cases the governing verb receives—as a result of the application of a special semantic rule—an additional DSyntA (= **III**), which does not correspond to any of its SemAs.

3) The IndirO is not necessarily present in any clause.

4) The IndirO does not necessarily depend on the MV.

5) The IndirO cannot be promoted/demoted.
> Exceptions
> With the verbs OBÉIR '[to] obey', DÉSOBÉIR '[to] disobey' and PARDONNER '[to] pardon' the IndirO—which corresponds to DSyntA **II** of the verb—can be promoted to the Subject by Passivization: *Alain obéit à Helen* 'A. obeys H.' ~ *Helen est obéiée d'Alain* 'H. is obeyed by A.'; *Alain pardonne à Helen* 'A. pardons H.' ~ *Helen est pardonnée par Alain* 'H. is pardoned by A.'.

6) The IndirO can be the target of personal cliticization: *Alain **lui** [= à Helen] envoie un cadeau* 'A. sends a present to her'.

7) The IndirO can be the target of relativization: *le garçon **à qui** j'ai envoyé ce livre* 'the boy to whom I have sent this book'.

8) The IndirO can be the target of clefting: *C'est **à Alain** que je donne mon texte à lire /que je fais lire mon texte*, lit. 'It is to A. that I give my text to read/that I make read my text'.

9) The IndirO can be the controller/the target of reflexivization: *Helen a ordonné **à Alain** de se [= 'Alain', which is the controller] raser* 'H. has ordered A. to shave himself'; *Alain se [= 'à Alain', which is the target] parle* 'A. talks to himself'.

10) The IndirO cannot be the controller of the Secondary Actor in the causative FAIRE-construction (that is, the presence of an IndirO of the lexical verb does not impose the realization of the Secondary Actor as an IndirO of FAIRE: *Alain **le** ‹*lui› [= le chien] fait obéir à son maître* 'A. makes him [= the dog] obey his master').

11) The IndirO cannot be the controller of an actantial-attributive complement.

12) The IndirO cannot be the controller of the agreement of the MV.

13) The IndirO follows the governing verb.

14) The IndirO can be the target of left dislocation: *À mes enfants, j'envoie des livres* 'To my children, I send books'.

Formal Types of IndirO

   a. A noun (including the subclass of stressed pronouns) with the preposition À: *Alain a donné son livre à Helen* 'A. his given his book to H.'.

   b. A phrase equivalent to a noun with preposition À: *Alain donne son livre à qui le veut* 'A. gives his book to who wants it'.

   c. A personal clitic in the dative: *Alain lui parle souvent* 'A. often speaks to him/her'.

Comments

   1. The IndirO plays quite a special role in French syntax:

   • The IndirO can express the Beneficiary, which is represented, at the DSynt-level, as DSyntA **III** of the governing verb: *Alain a fait un bon repas à Helen*, lit. 'A. has made a good meal to Helen' ~ *Alain lui a fait un bon repas*, lit. 'A. has made a good meal to her'.

   • The IndirO can express the raised Possessor in the French possessive construction of the type *Alain a lavé la tête à Helen*, lit. 'A. has washed the head to Helen' ~ *Alain lui a lavé la tête*, lit. 'A. has washed the head to her', where the IndirO is a surface-syntactic realization of DSyntA **I** of DSyntA **II** of the governing verb (HELEN is DSyntA **I** of TÊTE 'head').

   • The IndirO can express the Secondary Actor of the causative FAIRE-construction with a transitive verb having an expressed DirO: *Alain fait lire le roman à Helen*, lit. 'A. makes read the novel to H.' ~ *Alain lui fait lire le roman*, lit. 'A. makes read the novel to her'.

   • The clitic IndirO can express DSyntA **II** of the verbs that govern adjuncts DESSUS 'on ...' and APRÈS 'behind ...': *On lui a tiré dessus*, lit. 'They to him have fired on' = 'They have fired at him' or *Alain lui court après*, lit. 'A. to her is running after' = '... is courting her'. (If DSyntA **II** is not cliticized, it is implemented as an OblO: *On a tiré sur Alain* 'They have fired at A.' and *Alain court après Helen*, lit. 'A. is running after H.'.)

   The IndirO is typical in French of animate nouns only; its very existence is one of a manifestations of the category of animacy.

   These considerations enhance our decision to introduce the IndirO as a clause element different from the Oblique Object (**5.3.7**, p. 00; in Comment 2, it is shown that the IndirO and the OblO have different relevant properties). The traditional French grammar does not make this distinction, subsuming all prepositional nominal Ds of a verb which are its actants under the name of 'complément d'objet indirect,' so that this term is much broader that our 'Indirect

Object.' (In general typological studies, the IndirO is carefully distinguished from OblOs; cf., e.g., Comrie 1974: 4 and *passim*, Keenan & Comrie 1977, 1979. For a discussion of the opposition 'DirO *vs.* IndirO' in a vast typological perspective, see Dryer 1986.)

2. In the Meaning-Text description of the SSynt-structure of French sentences, a non-subject pronominal clitic depends syntactically on its host[24]—rather than on the clause element on which its source depends; for instance:
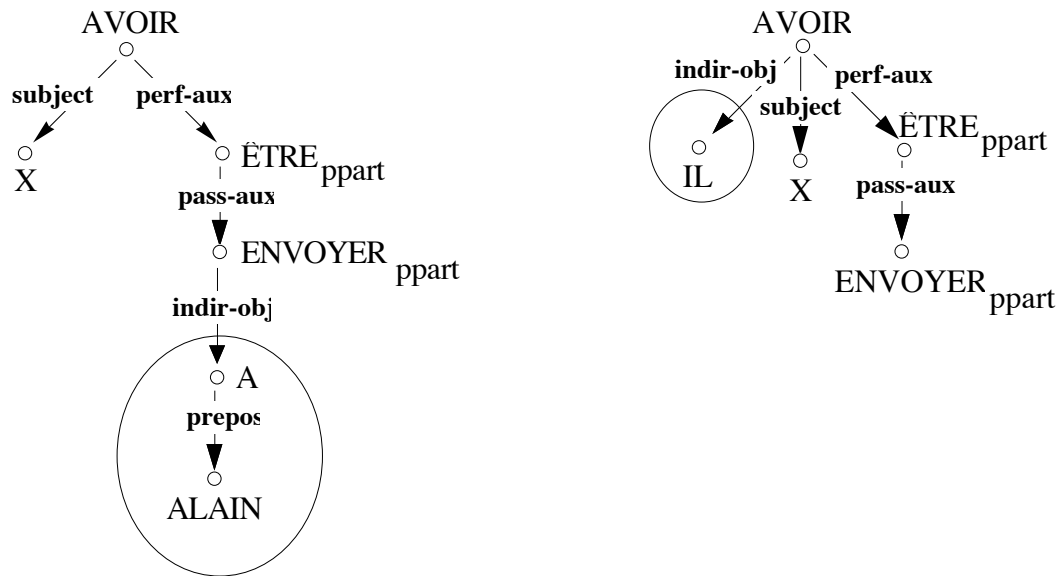
*X a été envoyé **à Alain***	*X **lui** a été envoyé*
'X has been sent to Alain'.	'X has been sent to him'.

The clitic is, so to speak, transferred from its 'genuine' G (= ENVOYER '[to] send') to its host (= the auxiliary AVOIR '[to] have')—retaining the same subordinating SSyntRel, in our case, the **indir-obj**; we do not posit here a new SSyntRel. This solution is adopted because the linear position of French clitics in general does not depend on the subordinating SSyntRel—it is determined by the nature of the clitic itself (a property which is 'orthogonal' to the properties of SSyntRels). At the same time, the grammatical case of the clitic—the accusative *vs.* the dative— must be computed from the name of the subordinating SSyntRel, since the Government Pattern of the new G (i.e. of the host) should not contain the necessary information; thus, AVOIR by no means governs the dative. This fact constitutes another argument in favor of distinguishing the IndirO *vs.* the OblO.

3. Criterion 3 does not allow us to consider the so-called 'Dativus Ethicus' of the type *Ne **me** fais pas de bêtises !*, lit. 'Don't do me stupidities!', as a particular case of IndirO, since these clause elements can be combined:

(20) *Alain **te*** [= Dat. Ethic.] *recite trois poèmes en trois minutes **à qui veut l'écouter*** [= In-dirO], lit. 'A. recites you three poems in three minutes to who wants listen to him'.

Uniting them under the same SSyntRel would create an **r** which would be limitedly repeatable (exactly two times, and that, without intervention of the Government Pattern of the verb).

5.3.5. Pseudo-direct-objectival SSyntRel: G–pseudo-dir-obj→D

Properties

Its dependent member is the Pseudo-Direct Object [= Pseudo-DirO]—the expression of the value of a parameter or a property; it appears with verbs of measure—PESER '[to] weigh', COÛTER '[to] cost', etc.—and a few verbs of the type SENTIR '[to] smell [intrans.]': *Ça coûte une fortune /300 francs* 'This costs a fortune/300 francs'; *Ça sent le hareng* 'This smells of herring'.

It is the fourth most privileged clause element depending on a verb in **L**. In French, the SSynt-privileges of the Pseudo-DirO—with respect to the Agent and to the Oblique Object—consist in that it shares more linguistically relevant properties with the DirO than the Agent or the OblO namely, the Pseudo-DirO has the same type of cliticization and the same case government as the DirO.

The Pseudo-DirO is defined by the following combination of properties:

1) The Pseudo-DirO can be the target of personal cliticization: *Le poisson, la caisse le sent encore*, lit. 'The fish, the box still smells of it'; *Cette grosse somme, ma robe la coûte*, lit. 'This big sum, my dress costs it'; *La table les mesure, ses deux mètres*, lit. 'The table measures them, its two meters'.

2) The Pseudo-DirO can be the target of non-specific morphological government—the clitic/the relative pronoun replacing it is in the accusative: *Cette robe la* [= *cette somme*] *coûte* 'This dress costs it [= this sum]'; [*la somme*] *que cette robe coûte* '[the sum] that this dress costs'.

3) The Pseudo-DirO cannot be promoted or demoted.

4) The Pseudo-DirO cannot be the controller of the past participle in compound forms.

The first two properties are shared with the DirO, but the second two oppose the Pseudo-DirO to the DirO.

The Pseudo-DirO's descriptive properties are:

5) The Pseudo-DirO corresponds to DSyntA **II** of the governing verb.

6) The Pseudo-DirO is not necessarily present in any clause.

7) The Pseudo-DirO does not depend exclusively on the MV.

8) The Pseudo-DirO can be the target of relativization: *Je trouverai les 300 francs que cette robe coûte* 'I'll find the 300 francs that this dress costs'; *On ne mangera pas ce hareng pourri que la caisse sent encore* 'We will not eat this rotten herring of which the box still smells'.

9) The Pseudo-DirO can be the target of clefting: *C'est **300 dollars** que cette robe coûte* [*, pas 300 francs*], lit. 'It is 300 dollars that this dress costs [, not 300 francs]'; *C'est **le hareng** que le pain sent*, lit. 'It is the herring that the bread smells of'.

10) The Pseudo-DirO cannot be the controller/the target of reflexivization.

11) The Pseudo-DirO cannot be the controller of the IndirO realization of the Secondary Actor in the causative FAIRE-construction: *Ça **le** ‹*lui›* [= *le pain*] *fera sentir **le hareng*** 'This will make it [= the bread] smell of herring'.

12) The Pseudo-DirO cannot be the controller of an actantial-attributive complement.

13) The Pseudo-DirO follows the governing verb.

14) The Pseudo-DirO cannot be the target of 'pure' left dislocation: *****300 francs**, la robe coûte* '300 francs, the dress costs'; ***Le hareng**, la caisse sent* 'The herring, the box smells of'.

Formal Types of Pseudo-DirO

    a. A noun (particularly, the 'Num + N' phrase): *Il pesait **60 kilos*** 'He weighed 60 kg'; *Ça sent **le brûlé***, lit. 'It smells of [something] burnt' ‹**rien** 'of nothing'/**le hareng** 'of herring'›.

    b. A phrase equivalent to a noun: *Ça va me coûter exactement **ce que je veux*** 'It will cost me exactly what I want'.

    c. A personal clitic in the accusative: *Cette robe **la** [= cette somme] coûte* 'This dress costs it [= this sum]'.

Comment

       The **pseudo-dir-obj** SSyntRel cannot be subsumed under the **dir-obj** or the **obl-obj** SSynt-Rels, which both have prepositionless nouns among their Ds:

• A Pseudo-DirO contradicts two defining properties of a DirO—it does not control the Secondary Actor in the causative construction and the agreement of the participle in compound forms.

• A Pseudo-DirO is not substitutable by the prototypical OblO, i.e. a prepositional phrase (Criterion 2). Moreover, a Pseudo-DirO differs from an OblO with respect to cliticization: unlike an OblO, a Pseudo-DirO is replaceable by an accusative clitic.

5.3.6. Agentive SSyntRel: G−agentive→D

Properties

       Its dependent member is the Agent. It is the fifth most privileged clause element depending on a verb: *Helen a été reçue **par Alain*** 'H. was received by A.'; *Alain fait lire le roman **par Helen***, lit. 'A. makes read the novel by H.'; *Aimée **de tout le monde**, Helen ...* 'Loved by everybody, H. ...'.

N: The term *Agent* should not be construed as a semantic entity; the corresponding clause element does not necessarily denote people. Thus, *par la cérémonie* is an Agent in *Sa fureur a été changée en excessive amabilité **par la cérémonie du matin*** 'His fury has been changed into excessive amiability by the morning ceremony'.

In French, the SSynt-privileges of the Agent are the following two defining properties:

1) The Agent corresponds to DSyntA **II** of the governing verb in the passive form (it corresponds to the Subject of the active form of the verb) or to DSyntA **I** of the governing verb in the infinitive in a number of special constructions (*faire lire le roman **par Helen*** [= Agent of LIRE], lit. '[to] make read the novel by H.'; *se faire voler **par un mendiant***, lit. '[to] make oneself rob by a beggar', *se voir refuser un contrat **par le gouvernement***, lit. '[to] see oneself refuse a contract by the government', etc.).

2) The Agent is the target of non-specific lexical government: it is always introduced by the preposition PAR 'by' (with the exception of a handful of verbs which take an Agent with the preposition DE).

N: When depending on a noun, the Agent corresponds to its DSyntA **I** and has more means of expression (*une traduction **par** Alain* 'a translation by A.', *l'arrivée **d'**Alain* 'A.'s arrival', *une conversation **entre** amis* 'a conversation among friends', etc.).

The Agent possesses the following descriptive properties:

3) The Agent is not necessarily present in any clause.

4) The Agent does not necessarily depend on the MV.

5) The Agent cannot be promoted/demoted.

6) The Agent can be the target of cliticization, but only if it is introduced by the preposition DE (the phrase PAR + N is not cliticizable in principle); the replacing clitic is EN: *Il plaisait aux femmes; en fait, il **en** était adoré*, lit. 'Women liked him; actually, he was adored thereby'.

7) The Agent can be the target of relativization: *La femme **par qui** Alain est gâté est très belle* 'The woman by whom A. is spoilt is very beautiful'; *Les étudiants **dont** ce prof est tellement aimé ...* 'The students by whom this professor is loved so much...'.

8) The Agent can be the target of clefting: *C'est **par Alain** que Helen est gâtée* 'It is by A. that H. is [being] spoilt'.

9) The Agent cannot be the controller/the target of reflexivization.

10) The Agent cannot be the controller of the Secondary Actor in the causative FAIRE-construction (strictly speaking, this property is not applicable).

11) The Agent cannot be the controller of an actantial-attributive complement.

12) The Agent cannot be the controller of the agreement of the MV.

13) The Agent follows the governing verb.

14) The Agent can be—in informal speech—the target of left dislocation: [?]***Par Alain**, ce travail sera fait vite et très bien*, lit. 'By A., this job will be done fast and very well'.

Formal Types of Agent

1. A noun (in the broad sense) introduced by the preposition PAR or DE:

   a. A noun (with the subclass of stressed pronouns): *Aimée **de tous ses amis**, Helen* ... 'Loved by all her friends, H. ...'.

   b. A phrase equivalent to a noun (e.g., a headless relative): *Elle se laisse séduire **par qui le veut*** 'She lets herself to be seduced by who wants it'.

2. The clitic EN: *Il **en** était adoré*, lit. 'He was adored thereby'.

      For considerations that justify the introduction of the <small>agentive</small> SSyntRel as different from the <small>oblique-objectival</small> SSyntRel, see below, **5.3.7**, Comment 3, p. 00.

5.3.7. Oblique-objectival SSyntRel: G−<small>obl-object</small>→D

      The prototypical D of this SSyntRel is a noun with a preposition.

Properties

      Its dependent member is the Oblique Object [= OblO]. It is the least privileged clause element, which does not possess defining properties: it is characterized rather negatively, by the opposition to other nominal objects.

      The OblO's descriptive properties:

   1) The OblO can correspond to any DSyntA of the governing verb, except for DSyntA **I**: *insister **sur** N* [= DSyntA **II**] '[to] insist', *inviter N **à** V-er* [= DSyntA **III**] '[to] invite', *louer N à N **pour** Num francs* [= DSyntA **IV**] ***pour** Num mois* [= DSyntA **V**] '[to] rent out N to N for Num francs for Num months'.

   2) The OblO is not necessarily present in any clause.

   3) The OblO does not necessarily depend on the MV.

   4) The OblO cannot be promoted/demoted.

   5) If the OblO is a noun introduced by the preposition À or DE, it can be the target of cliticization by Y or EN: *J'**y*** [= à ce projet] *renonce* 'I renounce this [= this project]'; *Ma décision **en*** [= de ta présence] *dépend* 'My decision depends thereon [= your presence]'. With a few verbs, the OblO introduced by the preposition SUR can also be cliticized by Y: *J'**y*** [= sur ta présence] *compte beaucoup* 'I count much thereon [= your presence]'.

   6) The OblO can be the target of relativization: *le principe **sur lequel** j'insiste* 'the principle on which I insist'; *le principe **dont** ma décision dépend* 'the principle on which my decision depends'.

7) The OblO can be the target of clefting: *C'est **sur ce point** que j'insiste* 'It is on this point that I insist'; *C'est **à construire la maison** qu'Alain m'a aidé* 'It is to build the house that A. has helped me'.

8) The OblO cannot be the controller/the target of reflexivization (as opposed, for instance, to the DirO and the IndirO).

9) The OblO cannot be the controller of the Secondary Actor in the causative FAIRE-construction.

10) The OblO cannot be the controller of an actantial-attributive complement.

11) The OblO cannot be the target of non-specific government (the clitics EN and Y do not have case, and the **obl-obj** SSyntRel does not impose a specific preposition).

12) The OblO cannot be the controller of the agreement of the MV.

13) The OblO follows the governing verb.

14) The OblO can be the target of left dislocation: ***Sur ce point**, j'insiste*, lit. 'On this point, I insist'; ***À mourir si jeune**, elle ne s'attendait pas*, lit. 'To die so young, she did not expect'; ***De travailler le matin**, Alain n'enrage pas*, lit. 'To work in the morning, A. is not furious'.

> ɴ: Some specific OblOs cannot be dislocated for purely semantico-communicative reasons: *****En sanglots**, Helen éclate* 'In sobs, H. bursts out'; *****De quelques mètres**, Alain s'est approché* 'A few meters, A. has approached'.

Formal Types of OblO

1. A noun (in the broad sense) introduced by a preposition:

   a. A noun (including stressed pronouns): *insister **sur le départ*** '[to] insist on the departure', *en vouloir [à N = IndirO] **de ces paroles*** '[to] hold a grudge against N for having said this', *s'approcher **de quelques mètres*** '[to] approach a few meters', *penser **à Helen*** '[to] think of H.', *éclater **en sanglots*** '[to] burst out in sobs', *rémonter **à 1937*** '[to] go back to 1937'.

   b. A phrase equivalent to a noun (e.g., a headless relative or a quantitative phrase): *Je me moque **de qui viendra*** 'I don't care who is coming'.

2. The clitic EN or Y: *J'**en** raffole* 'I am very keen on this', *J'**y** pense* 'I think of this'.

3. An infinitive introduced by a preposition: *Alain a consenti **à travailler*** 'A. has agreed to work'; *Alain doute **de pouvoir venir*** 'A. doubts that he can come'; *Alain se passe **de dormir*** 'A. can do without sleeping'.

4. A subordinate QUE-clause: *douter **que** CLAUSE* '[to] doubt', *prévenir [N] **que** CLAUSE* '[to] warn'.

5. A prepositionless noun (with the verbs PARLER, CAUSER, ACHETER, VENDRE, PAYER and a few others): *parler **politique** ‹**bébés**›* '[to] talk politics/children', *causer **affaires*** '[to]

talk business', *vendre ses concombres **5 francs*** '[to] sell one's cucumbers 5 francs', *payer cette robe **300 francs*** '[to] pay this dress 300 francs'.

N: The **obl-obj** SSyntRel is repeatable (for instance, *Leo a changé des marks **en pesetas*** [= OblO] ***avec Marga*** [= OblO] 'L. has exchanged marks for pesetas with M.').

Comments

1. Unlike all other SSyntRels on our list, the **obl-obj** SSyntRel calls for some explanations concerning Criteria 1-3 (since their application in this case is not quite obvious).

The constructions subsumed under the **obl-obj** SSyntRel satisfy all three criteria.

—Criterion 1: no Ds of the **obl-obj** SSyntRel that can appear with the same G contrast semantically differing only by some syntactic means. Thus, consider the case of *dessiner **au** pinceau* '[to] draw with a brush' vs. *dessiner **sur** le pinceau* '[to] draw on a brush'; here, *au pinceau* et *sur le pinceau* both are OblOs corresponding to different DSyntAs of DESSINER and they do contrast semantically. But these expressions do not contradict Criterion 1, because their difference is not in syntactic means: they are distinguished by prepositions, which are different lexemes.

—Criterion 2: all Ds are either implemented by a prepositional phrase, or are substitutable by a prepositional phrase, cf. *parler politique* '[to] talk politics' ~ *parler de la politique* '[to] talk of the politics';[25] *douter qu'il part* '[to] doubt that he leaves' ~ *douter de son départ*, lit. '[to] doubt of his departure'.

—Criterion 3: the **obl-obj** SSyntRel is repeatable (the possible number of OblOs is specified by the governing verb), cf. *Il m'invite **au restaurant*** [= OblO] ***pour manger des moules*** [= OblO] 'He invites me to a restaurant to eat mussels'; *Il m'aide **à construire*** [= OblO] *la maison **avec son argent*** [= OblO] 'He helps me to build the house with his money'; *Alain loue sa voiture **pour 3 mois*** [= OblO] ***à 100 francs par jour*** [= OblO] 'A. rents his car for 3 months 100 francs a day'.

2. Traditional French grammar does not distinguish the IndirO and the OblO. We, however, think that they should be separated: only the IndirO, but not the OblO, is replaceable with the personal dative clitic **lui** 'to him/her'/**leur** 'to them', controls reflexivization and can itself be reflexivized. Cf. such indicative examples as the following ones (Blanche-Benveniste 1975: 39-40):

(21) **a**. *Alain obéit   à **Helen*** [= IndirO] 'A. obeys H.'.

~ *Alain **lui** obéit* ‹*Alain obéit à elle›.

b. *Alain renonce **à Helen*** [= OblO] 'A. renounces H.'.

~ *Alain renonce **à elle*** ‹*Alain lui renonce›.

The verbs TÉLÉPHONER and APPARTENIR take the phrase *à* N as the IndirO, the verbs RÊVER and RÉFLÉCHIR—as an OblO. For other reasons to isolate the IndirO with respect to the OblO, see above, **5.3.4**, Comments, p. 00.

3. Neither can the Agent be subsumed under the **obl-obj** SSyntRel:

• The preposition that introduces an OblO is specified by the Government Pattern of the verb, while the choice of the basic preposition of the Agent—PAR—does not depend on the verb; it is imposed by the SSyntRel itself (this is a case of non-specific lexical government). As was already indicated (**5.3.6**, item 2, p. 00), this statement is true with the exception of a few verbs that require DE.

• In contrast to the OblO, left dislocation is problematic for the Agent:

(22) **a**. ***Pour Alain*** [= OblO]*, une telle lettre a été écrite la semaine dernière*

   'For A., such a letter has been written last week'.

   vs.

   $^{?}$***Par Alain*** [= Agent]*, une telle lettre a été écrite la semaine dernière*

   'By A., such a letter has been written last week'.

This is of course a consequence of the Agent being a result of communicative demotion, while left dislocation is a means to express (among others) Focalized Topicalization, i.e., communicative promotion. The Agent's 'demoted status' is also seen in that the Agent discourages proleptization as well:

   b. *Alain, cette lettre a été écrite **pour lui*** [= OblO]*,*

   lit. 'A., this letter has been written for him'.

   vs.

   $^{??}$*Alain, cette lettre a été écrite **par lui*** [= Agent]*,*

   lit. 'A., this letter has been written by him'.

• Criterion 3 does not allow us to collapse the Agent with the OblO: the **obl-obj** SSyntRel is repeatable, but the **agentive** SSyntRel is not (a Governor can have two, three, etc. OblOs—as a function of its Government Pattern, but there can be no more than one Agent per Governor).

4. In the expressions of the type *parler politique* and *causer affaires* the D does not behave like a typical OblO: it does not allow relativization, clefting or 'pure' left dislocation. However, we deal here with an extremely phraseologized construction (possible with just a few verbs), so that we need not require from these expressions to be fully similar to the prototype.

5.4. The Summary: A Synoptic Table of French Valency-Controlled SSyntRels

To make the results of our description more surveyable, we will now offer a table which presents, in a compact form, a characterization of the considered SSyntRels, or the corresponding clause elements, in terms of their relevant linguistic properties (see next page).

The value of a property is given according to the prototypical D' of the SSyntRel in question; wherever it seems important to specify a different value for a non-prototypical D we do so, using a slash and indicating (in brackets) the part of speech of D. [?] means that the corresponding value is not stable—speakers are not unanimous with respect to it.

The clause elements represented in this table are ordered—from left to right—according to the number of positive values (of the properties) they feature: SSyntSubj has 13 positive values, DirO—11, IndirO—6, Pseudo-DirO—6, Agent—5, and OblO—4. The IndirO is put before the Pseudo-DirO, which has the same number of positive values, because the IndirO is linguistically closer to the preceding elements according to a more important property: reflexivization. (The Quasi-Subject is an exception: since it is the result of the application of a special DSynt-rule—so to speak, a 'transformation'—it is not considered in the subsequent discussion; it is positioned in the rightmost column in order not to obscure the picture.) Interestingly, such ordering leads to a hierarchy: if a lower element features the positive value of a property, then either any higher element also does or the property is not applicable to it, but not vice versa. (Exception: the Pseudo-DirO precludes 'pure' left dislocation while the higher IndirO does not.) And this hierarchy corresponds to the hierarchy of nominal clause elements mentioned on p. 00: The Keenan-Comrie Hierarchy (Keenan & Comrie 1976).

The Keenan-Comrie hierarchy was established using one parameter only: accessibility of a clause element for (a particular type of) relativization. However, it was shown that the same hierarchy obtains according to several other parameters: it determines the syntactic rank of the Causee (= the Secondary Actor under causativization; Comrie 1974); it underlies the voice systems —in the sense that the accessibility of clause elements for promotion also corresponds to this hierarchy (if a lower element can be promoted, then all the higher elements necessarily can; Keenan 1977); etc. Now, our results confirm once again the validity of this hierarchy—based, however, not just on one parameter, but rather on a full set of parameters relevant in this framework.

Nominal Clause Elements: Subjects, Objects, Agents

Clause elements \ Properties of SSyntRels	SSubj	DirO	IndirO	Pseudo-DirO	Agent	OblO	Quasi-Subj
1. Corresponding DSyntA	**I**	**II**	**II/III**	**II**	**I/II**	any but **I**	**I**
2. Obligatory presence	+	-	-	-	-	-	-
3. Dependence on the MV only	+	-	-	-	-	-	+
4. Target of promotion/demotion	demotion	promotion	-	-	-	-	-
5. Target of cliticization	Cl_{pers}	$Cl_{pers}/$ $LE_{neut}[V_{inf}]$	Cl_{pers}	Cl_{pers}	EN	EN, Y	EN [N]
6. Target of relativization	+	+	+	+	+	+	-
7. Target of clefting	+	+	+	+	+	+	+
8. Controller/Target of reflexivization	controller	controller/ target	controller/ target	-	-	-	controller
9. Controller of the SSynt-role of the Secondary Actor	-	+	-	-	-	-	-
10. Controller of actamtial-attributive com-plements	+	+	-	-	-	-	-
11. Target of non-specific government	nominative	accusative	dative	accusative	PAR	-	-
12. Controller of agree-ment of the MV	finite verb	past participle	-	-	-	-	-
13. Precedes the MV	+	-	-	-	-	-	-
14. Impossibility of left dislocation	+	+	-	+	[?] -	-	+

Here is the hierarchy of clause elements in French such as it results from our study:

Subject > DirO > IndirO > Pseudo-DirO > Agent > OblO

Note that it includes two more clause elements, which were not considered by Keenan and Comrie: the Pseudo-DirO (a kind of 'degenerate' DirO) and the Agent. Two lower elements in the Keenan-Comrie hierarchy are omitted, since they do not belong to the active verb valency and therefore are outside our scope.

6. Conclusion

While working on the inventory of valency-controlled SSyntRels governed by a verb, we have tried to take into account the complex interaction between a SSyntRel, formal types (= syntactic classes) of its dependents and individual lexemic features of its governor. In other words, we tackle the problem of an optimal distribution of linguistic information among these three types of linguistic entities. Our guiding principle has been to avoid both extreme semanticism and extreme formalism. We do not want to base the system of SSyntRels

exclusively on their semantic functions nor on the syntactic distribution of their Ds; what we are looking for is a SUBTLE EQUILIBRIUM between both these aspects—such that it is in conformity with the lexicographic information of the Gs. (Cf., in this connection, Ju. Apresjan's insistence on the necessity of a perfect 'agreement' between the grammar and the lexicon, "which must be tuned to each other:" Apresjan 1986: 57.)

Our central tool in this endeavor is the PROTOTYPICAL Dependent of a given SSyntRel—an idea that is itself by no means new (it goes back to Jespersen and Tesnière and is shared by many others), but that has been applied to our material in a rigorous and systematic way. Non-prototypical dependents of a SSyntRel are determined based on their similarity with the prototype; we suggest a more precise interpretation of the notion of 'similarity,' **3**, p. 00.

And last, but not least, as has been already said, we made a special effort to ensure the TYPOLOGICAL PLAUSIBILITY of the proposed system of SSyntRels.

Abbreviations

A, ADJ	: adjective	**L**	: particular language
ADV	: adverb	MV	: Main Verb
D	: Dependent	N	: noun
DirO	: Direct Object	OblO	: Oblique Object
DMorphS	: Deep-Morphological Structure	**r**	: particular SSyntRel
		SSynt-	: Surface-Syntactic
DSynt-	: Deep-Syntactic	SSyntRel	: Surface-Syntactic Relation
DSyntA	: Deep-Syntactic Actant	SSyntS	: Surface-Syntactic Structure
DSyntS	: Deep-Syntactic Structure	V	: verb
G	: Governor		
IndirO	: Indirect Object		

research; without him, the paper would not have be written at all. L. Iomdin and Y.-Ch. Morin have read and commented upon the prefinal version; the final version has been reviewed by D. Beck, J. Milićević, A. Polguère, and L. Wanner. We thank all of them for their generous help, while accepting full responsibility for all blunders and mistakes that have remained.

Notes

[1] The topic of 'Labeled SSyntRels' belongs to the research field known as 'Grammatical relations.' The relevant literature is too vast; we will limit ourselves to indicating just three publications, where a rich bibliography can be found: Plank (ed.) 1984, Dryer 1986, and Hudson 1992.

[2] A violation of semantic/lexical constraints is not considered as syntactic ill-formedness. Thus, cf. *inside the car* vs. **inside Stuttgart* or *according to Leo* vs. **according to the car*; however, the starred phrases are considered as syntactically well-formed, because PREP + N is a legitimate phrase of English.

[3] A similar property was used for the identification of SSyntRels in the METATAXIS system, see K. Schubert (1989: 10): "Interchangeable dependents are grouped in classes and the relations that are definitional for these classes are given names."

[4] The Subject of impersonal verbs (PLEUVOIR ([to] rain), NEIGER ([to] snow), etc.)—the 'impersonal' IL—is considered as a particular case of noun (= a pronominal noun which is not a substitute pronoun). Note that with the Kunze property, Subjects in *Il* [= *Alain*] *dort* (He is sleeping) and *Il pleut* (It is raining) must be described by two different SSyntRels.

[5] The phrases [*Il*] *le peut*, lit. (He can it), and [*Il*] *le coupe* (He cuts it) do not constitute a counter-example: the two **le** seen here (they belong to two different lexemes) are substitute pronouns, which are explicitly excluded from consideration.

[6] It is sometimes claimed that even actantial SSyntRels can be repeatable. The best-known example is the repeatability of the **dir-obj** SSyntRel in Kinyarwanda: it is said that in this language, a clause can have up to three DirOs (Kimenyi 1980: 229); cf.:

(i) *Umo +góre   á +r   +úubak+iish +iriz +a   ábá+ana   umu+gabo   inzu*
   Class I woman   I   PRES build CAUS BENEF CONT   II children   I   man   house

   (The woman, on behalf of the children, is making the man build the house).

A detailed analysis of 'repeated DirOs' in Kinyarwanda in Gary & Keenan 1977: 87-94 shows that indeed all of them possess the same relevant linguistic properties, which set them off with

respect to oblique objects: they passivize, reflexivize and relativize, they can be cross-referenced in the verb, etc. And yet, in our framework, all three of them cannot be considered DirOs, because they contrast semantically—that is, they violate our Criterion 1. The corresponding presumed SSyntRel in Kinyarwanda has to be split into three different SSyntRels: the **dir-obj** SSyntRel, the **caus-dir-obj** SSyntRel and the **benef-dir-obj** SSyntRel. (These are, so to speak, the subtypes of an abstract—objectival—SSyntRel. In this way, the commonality of their important properties is explicitly shown.)

[7] The construction *Mes enfants, je leur permets tout* is represented in a different way:

$$\text{proleptic}$$

Mes enfants, je ***leur***←**indir-obj**–*permets tout*.
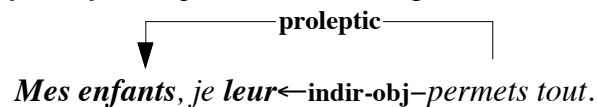
Here, we see a special SSyntRel used for a Fronted Dislocated Topic, which can be called, in syntactic terms, a ***prolepsis***.

[8] Along with Criteria 1 - 3, the researcher can use the following heuristic test:

Coordinability with one Synt-governor

Within a coordinated phrase D_1–**coord**→D_2 which is subordinated as a whole to a Synt-governor G, each element must in principle bear the same SSyntRel **r** to G:

if G–**r**→D_1–**coord**→D_2, then both G–**r**→D_1 and G–**r**→D_2 are syntactically correct configurations.

Examples

(i) **a**. *Il craint **d'être découvert** et **que l'administration le punisse***, lit. (He fears to be discovered and that the administration punish him).

b. *Il veut **partir** et aussi **que je parte avec lui***, lit. (He wants to leave and also that I leave with him).

c. *Le rendement augmente **successivement** et **par degré***, lit. (The yield rises successively and by degree).

In each of the examples of (i), the boldfaced phrases bear the same SSyntRel to the Main Verb.

Unfortunately, this test cannot be raised to the rank of a genuine formal criterion: coordination—at any rate, in many languages—is strongly semantically motivated; therefore, in some cases, syntactically different clause elements can be coordinated, while in some other cases identical clause elements cannot. Here are a few examples.

Coordination of different clause elements (cf. Grevisse 1993: 371):

(ii) **a**. *Elle vieillissait **dans l'aisance** et **entourée de considération***

    (She was aging in well-being and surrounded with consideration).

  b. *augmentation **successive** et **par degré***, lit. ([a] rise successive and by degree).

  c. *Je me demande **si** et **sous quelles conditions** on pourra regler le problème*

    (I ask myself whether and under what conditions it will possible to solve the problem).

  Other examples can be drawn from Russian:

(iii) **a**. *Èto otkrytie bylo sdelano **v Anglii** i **angličaninom***,

   lit. (This discovery was made in England and by an Englishman).

  b. *Ja govorju **s poètom** i **o poète***, lit. (I talk with a poet and about a poet).

  c. ***Nikto, nikomu** i **nikogda** ne pomogaet*, lit. (Nobody, to nobody and never helps).

(Russian coordinate constructions of this 'exotic' type are described in detail in Sannikov 1989: 14-20.)

Impossible or difficult coordination of identical clause elements:

  (iv) **a**. **Ils étaient **cinq** et **très blonds***, lit. (They were five and very blond).

    b. **des plats **français** et **exquis***, lit. (French and exquisite dishes).

    c. [?]*Tout le monde préfère **le repos maintenant** et **partir plus tard***,

     lit. (Everybody prefers the rest now and to leave later).

Consequently, the results of the coordination test can serve as arguments in favor of or against a particular solution (especially in less obvious cases); but the test as such cannot be accepted as a rigorous criterion. Cf. the discussion of the role coordination plays in establishing grammatical relations in Sag *et al*. 1985 (in cases such as *I am neither **an authority** on this subject nor **trying** to portray myself as one*, *Pat was **awarded** the prize and **very upset** about it*, and the like) and Hudson 1988.

[9] The main difference between a system of SSyntRels in our approach and a system of traditional clause elements is that the former has to distinguish and, as a rule, does distinguish many more different SSyntRels than the latter distinguishes different clause elements.

[10] "...each identified grammatical relation represents a clustering of syntactic properties in the language, sufficient to justify the internal cohesion of the grammatical relation and to set it off from other grammatical relations" (Borg & Comrie 1984: 109).

[11] In this paper, we consider as MVs only finite verbal forms; therefore, we ignore clauses that have as their SSynt-predicate the 'semi-verb' VOICI/VOILÀ (Morin 1985), an adjective or an

adverb (***Sûr*** *qu'il pleuvra* (Sure that it will rain); ***Heureusement*** *qu'il pleut*, lit. (Fortunately that it is raining)).

[12] Using distributional and transformational properties to characterize syntactic entities is by no means a novel idea. For instance, such an approach has been developed for French and applied for a detailed description of thousands of verbs by M. Gross and his collaborators (Gross 1975, 1986; Boons *et al*. 1976, Guillet & Leclère 1992). They use about a hundred properties to specify the government patterns and isolate useful semantico-syntactic classes of verbs. Since our goals are essentially different (we are interested in SSynt-roles of Dependents, rather than in classes of Governors), our set of relevant properties is also different. However, a few intersections occur: for insytance, 'Antéposition des compléments prépositionnels' de Boons *et al*. (1976: 200-201) corresponds to our 'Impossibility of left dislocation.'

[13] We propose that in imperative sentences, the Subject is present in the SSyntS (it controls the person and number of the verb) and is deleted on the surface (see Mel'čuk 1988: 194-196).

[14] This is a very approximate formulation, used here for simplicity's sake. In the Meaning-Text theory, a Subject, i.e. an element of the SSyntS, cannot be 'demoted.' What our formulation means is as follows: 'In French, only DSyntA I, which is to be implemented as a Subject, can be demoted by passivization.'

[15] 'The MV agrees with the Subject' means that the form of the MV is determined as a function of the Subject, not that their forms coincide; thus, in *Travailler deux jours et qu'on me paye le double me convient* [SG] *parfaitement*, lit. (To work two days and that they pay me the double suits me perfectly), the MV agrees with the conjoined Subject, just as it does in *La plupart sont* [PL] *heureux* (The majority are happy).

[16] As indicated in Morin 1980, this rule is, in point of fact, more complex. Thus, in some cases the Secondary Actant of a causative construction can appear as an IndirO of FAIRE in the absence of a DirO of the lexical verb: *Cela **leur** fait penser à leurs enfants*, lit. (This makes to them think of their children). In some other cases, the Secondary Actor appears as a DirO even in the presence of a DirO of the lexical verb: *Cela **la** fait se poser de nombreuses questions*, lit. (This makes her ask of herself numerous questions). (Note, however, that such 'deviations' are possible only with clitics: **Cela fait penser à leurs enfants **à tous les parents** qui* ..., lit. (This makes think of their children to all parents who ...) and **Cela fait se poser de nombreuses*

*questions **cette pauvre femme** qui ...*, lit. (This makes ask of herself numerous questions this poor woman who ...).)

Interestingly, the property of imposing the role of the IndirO on the Secondary Actor of a causative construction is shared by the Quotative Object, i.e. Direct Speech (Kayne 1977: 203): *Alain **lui** fait dire: « J'ai tort »*, lit. (A. makes to her say: 'I am wrong'). At the same time, unlike the DirO, the QuotO systematically allows the Secondary Actor of the causative construction to be realized as a DirO as well: *Alain **la** fait dire : « J'ai tort »* (A. makes her say: 'I am wrong') (but again, only if the DirO is a clitic: **Alain fait dire **Helen** : « J'ai tort »* (A. makes H. say: 'I am wrong')).

[17] In other approaches, other properties may be taken as defining for the DirO. Thus, M. Gross (1986: 27) defines DirO as any clause element that can be replaced by one of the clitics LE, LA, LES (which includes among DirOs the attributive adjective with a copula: *Alain est **intéressant*** (A. is interesting), etc.). For Abeillé (1997: 22-25), a DirO is a clause element that admits the quantitative pronominalization in EN (*Alain **en** a vu trois*, lit. (A. has seen three thereof)) and the negation in PAS... DE... (*Alain **n'**a pas vu **de** navets* (A. has not seen turnips)), which excludes, for instance, infinitives.

[18] We owe this type of example to Y.-Ch. Morin.

[19] In *Nous avons payé 300 francs pour cette robe* (We have paid 300 francs for this dress) the phrase *300 francs* is a DirO—here it corresponds to DSyntA **II** of PAYER and satisfies all the defining properties of DirOs.

[20] Phasal verbs themselves have passive forms: *Le travail a été commencé* (The work has been begun).

[21] Cf. ***Être admis** est attendu de plusieurs malades depuis longtemps*, lit. (To be admitted is awaited by several patients for a long time) and *Alain attend d'**être admis*** (A. awaits to be admitted) ~ *Alain **l'**attend*.

[22] Cf. *Alain cherche **à convaincre** ses opposants* (A. seeks to convince his opponents) ~ *Il **le** cherche*. CHERCHER ([to] try to achieve...) (as opposed to CHERCHER ([to] look for)) has no passive form.

[23] This ESSAYER means ([to] attempt); in *essayer la nouvelle robe* ([to] try the new dress) we have a different lexeme ESSAYER ([to] test).

[24] The **host** of a clitic is the clause element which determines its linear position, that is, the word-form to which this clitic 'attaches' linearly and prosodically (cf. Zwicky 1977).

[25] The expressions *parler politique* and *parler de la politique* are not synonymous (*parler politique* is phraseologized and implies an exchange of political opinions), just as *parler affaires* ([to] talk business) is not synonymous with *parler des affaires* ([to] talk about business). This, however, is irrelevant in the present context: the only important thing for us is the fact that the verb PARLER is used in both these expressions in the same sense (([to] talk)).

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