

Valency dictionary - DICOVALENCY: user's guide

Karel van den Eynde & Piet Mertens

Leuven University
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1 Introduction

The valency dictionary DICOVALENCE is a language resource that lists the valency frames of more than 3700 simple (as opposed to compound) French verbs. By valency frame is meant traditionally a specification of the number and nature of the valency complements of a verb, including the subject, and indicating their syntactic function. As many infinitives have alternative valency frames, the dictionary contains over 8,000 entries. In addition to the valency frames, the dictionary specifies certain selectional restrictions, the possible term manifestations (pronominal, phrasal), the possibility to use the valency frame in various passive constructions, as well as references to other valency frames for the same infinitive.

The distinctive characteristic of the DICOVALENCE dictionary is that valency information is described according to the principles of the Pronominal Approach to syntax (Van den Eynde & Blanche-Benveniste 1978; Blanche-Benveniste *et al.* 1984). First, for each slot in the valency frame (called “formulation”) of a given verb the dictionary specifies the paradigm of accepted pronouns. For this reason a valency slot is referred to as a “paradigm”. The paradigm of pronouns subsumes the possible “lexicalizations” (i.e. constituents that include lexical elements such as nouns or verbs) of that slot. Next, the delimitation of the formulation rests not only on the configuration (number, nature, optional character, composition) of these pronominal paradigms, but also on the constructions associated with this configuration, such as the various passives (called “reformulations”).

This document is a user’s guide for the DICOVALENCE dictionary. In short it describes how the entries are structured and by which conventions information is presented. For information on the underlying syntactic concepts, the reader is referred to the reference work “Pronom et Syntaxe” (Blanche-Benveniste *et al.* 1984, henceforth abbreviated as P&S) or the overview in Van den Eynde & Mertens 2003, as well as to the studies cited in these publications.

DICOVALENCE represents a further development of the PROTON dictionary (Van den Eynde & Mertens 2003), carried out at the department of Linguistics of the University of Leuven (K.U. Leuven), during the period 1986-1992, within a research project headed by Karel van den Eynde, and later by Ludo Melis, in which participated Carmen Eggermont (for the constitution of the database) and Eric Broeders (for computer programming).

The dictionary has been totally revised in 2006 by K. van den Eynde and P. Mertens. The revision brought about numerous modifications. Here are the most important:

- Specification of the various classes of verbs: full verbs, compound verbs, verbal copulas, auxiliaries, dispositive auxiliaries, etc.
- Introduction of the class of “adjunct verbs” and its sub-classes.
- Addition of the “delocative” paradigm (syntactic function).
- Addition of the “internal” manner paradigm.
- Addition of the “evaluative adjunct”.
- Increase of the number of pronominal elements retained for the paradigms, and their logical organization within the paradigms.
- Identification of pseudo-paradigms with reflexive pronoun (known as pronominal verbs), or pseudo-terms with “il” (known as impersonal verbs), “y”, “en”, “le”, “la”, “ça”, and “là”.
- Addition of a concise characterization of the valency frame for each entry.
- Specification of non-assertive usages.

- Characterization of the different types of “linked constructions” and explicit markings of these links by the addition of cross-references between the related entries.
- Implementation of software tools for validating and selecting entries.

In addition, numerous corrections were made.

Version 2 (june 2010), prepared by Piet Mertens, adds several new elements.

- A new field FRAME provides the subcategorization frame in a format both transparent and detailed. For each position in the frame it indicates its obligatory or optional nature, its syntactic function (using a common terminology), its possible phrasal realizations (pronoun, noun phrase, subordinate clause, infinitival phrase, adverb...), as well as the principal selection restrictions, formulated using the semantic features « human, concrete non human, abstract ».
- The field AUX indicates the aspect auxiliary used for the entry.
- The inventory of discontinuous subjects has been reduced to the elements « il_en_Q », « il_que », « il_qpind », « il_qpsubj » et « il_de_inf ». The other cases have been reanalyzed into two parts : an impersonal pronoun and another complement.

The data is structured very strictly, which permits immediate access to the data based on the associated field name, either by the user or by computer programs. Format integrity is validated using specialized software.

Additional software is used to obtain the syntactic-semantic features for each valency slot, starting from the paradigm of pronominal elements specified in the dictionary.

Goals and applications

The valency dictionary has several goals and applications. The first purpose is syntactic description: this comprehensive inventory of the observed constructions constitutes a set of data for establishing a typology of valency schemes; eventually this would reduce the long list of constructions to a relatively small inventory of possible schemes. This typological work will play an important role in grammatical theory and in language teaching. The second goal is the automatic processing of French, where valency information is essential for deep syntactic parsing.

Coverage

The valency dictionary lists the valency frames of 3700 frequently used full verbs in non-technical French. These include all verbs mentioned in Petit Robert, with the exception of those belonging to the technical nomenclature as well as archaic usages. The simple verbs generate about 8000 entries corresponding to distinct valency frames, and some 100 entries of adjunct verbs.

2 The internal structure of the entries

Each dictionary entry follows the same structure. An entry consists of several lines, where each line corresponds to a particular field. The field name appears at the start of the line, and is followed by its value. Some fields will appear in each entry, others only for entries (lexical units) that have the property denoted by the field. Below is the entry for the verb “*supprimer*”: VAL, VTYPE, NUM, etc. are the names for the fields. There is only one entry for this verb, but, as mentioned earlier, for many infinitives there are several, with an average of 2.4 entries per infinitive.

```

VAL$      supprimer: P0 P1
VTYPE$   predicator simple
VERB$    SUPPRIMER/supprimer
NUM$     80500
EG$      nous avons supprimé tous les obstacles à la publication de ce dico
TR_DU$   afschaffen, opheffen, intrekken, weghalen, weglaten, schrappen, doen verdwijnen
TR_EN$   suppress
FRAME$   subj:pron|n:[hum], obj:pron|n:[hum,nhum,?abs]
P0$      que, qui, je, nous, elle, il, ils, on, ça, celui-ci, ceux-ci
P1$      que, qui, te, vous, la, le, les, se réfl., se réc., en Q, ça, ceci, celui-ci,
          ceux-ci, l'un l'autre
RP$      passif être, se passif, se faire passif
AUX$     avoir

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There are several parts to the entry corresponding to different types of fields.

A first set of fields identifies the entry and the type of verb. These fields are present in each entry. They are listed in the first part of the following table.

Then follow the fields indicating slots of the valency frame and their characteristics. Each slot of a frame corresponds to a valency term of the verb (more precisely, of the “formulation group”) described in the entry. Their number and nature vary according to the lexical entry (the formulation group). Indeed, some entries present only a subject, while others add complements of various kinds. For this category of fields, the name of the field indicates the nature of the valency term and its value gives a list of pronouns or codes that enumerate the forms the valency term can take in utterances with pronouns or lexical elements.

Finally, a third category of fields represents characteristics (other than the valency frame) that are only mentioned when they exist for that particular entry.

1. Generic fields (entry identification, type)	
VAL	designation of the entry: it shows the predicator followed by a concise notation of the paradigms (cf. infra § 3.5) and some other properties
VERB	infinitive of the described verb, first in normalized form (for alphabetical sort) and then in standard spelling
NUM	identification number of the entry
VTTYPE	verb type: simple predicator, adjunct verb, auxiliary verb, copula verb, dispositive verb, resultative construction (cf. infra § 3)
EG	example(s)
TR_DU	Dutch translation
TR_EN	English translation
2. Valency frame and specific adjuncts	
P0	paradigm 0 : it corresponds roughly to the subject of traditional grammar
P1	paradigm 1 : it corresponds roughly to the direct object of traditional grammar
P2	paradigm 2 : it corresponds roughly to the indirect object of traditional grammar; the non-clitic forms are used with preposition “à”
P3	paradigm 3 ; the non-clitic forms are used with preposition “de or à” (cf. infra)
PL	locative paradigm
PL_PR	fixed preposition(s) or prototypes of the paradigm PL
PL_DEV	possible form of the locative: paradigm of pronouns for a given preposition
PDL	delocative paradigm
PDL_PR	fixed preposition(s) of the paradigm PDL (<i>de, à partir de, depuis</i>)
PM	manner paradigm
PM_PR	fixed preposition(s) of the paradigm PM
PMi	“internal” manner paradigm: <i>mes efforts se sont avérés inutiles</i>
PM_PR	fixed preposition(s) of the paradigm PMi
PT	temporal paradigm
PT_PR	fixed preposition(s) of the paradigm PT
PQ	quantity paradigm
PQ_PR	fixed preposition(s) of the paradigm PQ
PP	prepositional paradigm
PP_PR	fixed preposition(s) of the paradigm PP
AE	evaluative adjunct: <i>un vêtement qui tombe bien, l'affaire a mal tourné</i>
PX	paradigm without proportionality: <i>on l'a élu président, on l'a surnommé Jojo</i>
PX_PR	fixed preposition(s) of the paradigm PX
3. Additional fields	
RP	passive reformulation(s), cf. infra § 5.2.
LCCOMP	cross-reference(s) to other entries implying a link between a “complex” (plural form or form denoting a group) valency term in a first formulation and two terms in the other formulation, for instance : <i>ils collaborent – il collabore avec lui</i>
LCRES	cross-reference(s) to other entries implying a link between an active construction and the corresponding resultative construction, for example : <i>ils m'apprécient – je suis apprécié (d'eux)</i>
LC	cross reference(s) to linked formulations, other than LCCOMP et LCRES
PIVOT	representing the coincidence between a valency term of the main verb and a dependent infinitive governed by that main verb: in “ <i>il accepte de partir</i> ”, the subject of the verb “ <i>accepter</i> ” is at the same time the subject of the infinitive verb and this subject is expressed only once. (cf. infra, § 5.1)

AUX	auxiliary verb used in compound forms
LABEL	labels indicating various properties

3 Verb types

The dictionary distinguishes several types of verbs according to their valency properties. The following types are used and will be defined later: predicator, auxiliary, copula, adjunct verb and dispositive verb. Additional constructional properties are used to characterize verbs in more detail; they are applied to the major categories just mentioned. These properties are indicated in the field VTYPE.

3.1 List of verb types and properties

The following table shows a concise and simplified characterization, which will be explained more clearly later on.

predicator	a lexical unit (for example a verb) which rules zero, one or more valency elements (circumstantial complements are not mentioned)	<i>je t'<u>avertis</u> de son arrivée</i>
copula	a verb allowing an adjective (adjectival predicator) to function as a verb	<i>Anne <u>est</u> originaire de cette région</i>
auxiliary	an auxiliary verb is used with another verb (predicator or auxiliary) to form a compound tense, a passive and a resultative	<i>on <u>est</u> allé ailleurs on <u>a</u> marché deux heures il <u>est</u> soigné par qui il en <u>est</u> apprécié</i>
resultative	formulation of a verbal predicator, characterized by the use of the past participle and auxiliary <i>être</i> (“to be”); the predicator is proportional to <i>le</i> or <i>que</i> , as for adjectival predicators	<i>la vanité <u>est</u> ancrée dans le cœur de l'homme (= elle l'est)</i>
adjunct verb	a verb that combines with another verb in the infinitive, where the latter does not correspond to a valency element of the former (cf. <i>infra</i>)	<i>elle <u>continue</u> à danser on l'<u>entend</u> chanter il <u>se met</u> à pleuvoir</i>
dispositive verb	uses of <i>être</i> , <i>avoir</i> , <i>faire</i> in constructions (called “dispositives”) such as cleft (“extraction”), restriction and presentation	<i><u>c'est</u> à lui qu'il faut le dire il <u>y a</u> mon mari qui est malade il <u>ne fait que</u> travailler</i>
intro	verbal construction introducing a proposition, where this latter one is not proportional to a pronoun.	<i>il <u>se trouve que</u> je prends ce bus tous les jours <u>mettons que</u> je roule en voiture, alors...</i>

The following properties can be applied to some of the previous categories.

pseudo_ <i>il</i>	The inflected verb is constructed exclusively and necessarily with the	<i>dehors <u>il</u> pleuvait</i>
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	clitic <i>il</i> , but there is no paradigm of pronouns in that position.	
pseudo_ça	The inflected verb is constructed exclusively and obligatorily with <i>ça</i> , but there is no paradigm of pronouns in that position.	<i>ça accroche entre eux</i> <i>ça caille ici</i> <i>ça va ?</i>
pseudo_se	the entry is constructed necessarily with a clitic pronoun from the set “ <i>me, te, se, nous, vous</i> ” (thus excluding suspensive or other proportional elements), or, in the imperative, with the set “ <i>toi, nous, vous</i> ”. The subject, if present, agrees with the verb and its clitic.	<i>pour m’élancer, il (me) faut de la distance</i> <i>pour s’élancer, il (lui/leur) faut de la distance</i> <i>élance-toi</i> <i>élançons-nous</i>
pseudo_se_opt	The entry is constructed optionally as described above for the pseudo_ <i>se</i> .	<i>le faisan (se) branche dedans</i> <i>branche-(toi) bien là-dedans</i>
pseudo_soi(preposition)	The entry is constructed necessarily with a non-clitic from the set “ <i>moi, toi, lui, elle(s), soi, nous, vous, eux</i> ” (excluding suspensive or other proportional elements). The preposition is indicated between brackets.	<i>je le prends sur moi</i> <i>emporter avec soi,</i> <i>revenir à soi,</i> <i>serrer contre soi,</i> <i>réunir en soi</i> <i>chasser devant soi</i>
pseudo_soi_opt(...)	As pseudo_ <i>soi</i> , but optional.	<i>nous nous sommes répartis le boulot entre nous</i>
pseudo_en	The entry is constructed necessarily with the clitic <i>en</i> , which does not correspond to any paradigm of pronouns.	<i>il en arrive à déménager</i> <i>il en va ainsi des autres</i> <i>il s’en contrebalance (de ça)</i>
pseudo_y	ditto for “ <i>y</i> ”	<i>il y a trois invités</i> <i>elle s’y connaît en physique</i>
pseudo_le	ditto for “ <i>le</i> ”	<i>elle l’emporte sur lui en sport</i>
pseudo_la	ditto for “ <i>la</i> ”	<i>ça vous la coupe ; il la crève</i>
pseudo_là	ditto for “ <i>là</i> ”	<i>il planta là son travail</i>
simple	A “simple” predicator is formed by the verb only (accompanied possibly by pseudo-pronouns), as opposed to the “complex” predicator which implies one or several other lexical elements (cf. <i>infra</i>).	<i>je rêve</i> <i>tu n’oublieras pas de m’écrire</i>
complex	A lexical unit formed by several non pronominal lexical elements, one of which is a verb.	<i>tu me forces la main</i>
double_verb	A lexical unit formed by an adjunct verb and by a predicator	<i>envoyer balader qqn</i>
augmenting	Indicates that the adjunct verb adds a referent to those of the predicator construction with which it combines.	<i>je les écoute travailler</i>
non_assertive	Indicates that the predicator is	<i>tu n’y couperas pas</i>

	always used with a restriction, a negation or a suspensive pronoun (cf. <i>infra</i>).	<i>comment y coupera ?</i> <i>on n'y coupera que s'il se porte volontaire</i>
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3.2 Predicators, copulas and auxiliaries

Simple and complex predicators

The “predicator” corresponds to a lexical unit which governs one or more valency elements. When it consists of a single verbal element only, such as “*mettrai*” in “*je le mettrai là*”, it will be designated as a “simple (verbal) predicator”. In “*il le met en évidence*” there are several elements (“*mettre en évidence*”) which form a lexical unit and it is this unit as a whole that governs the valency elements. This kind of lexical unit will be called a “complex (verbal) predicator”, cf. “*mettre en cause, mettre à sec, faire face à, prendre racine*”.

Adjectival predicators

Adjectives are also predicators, which can govern dependents: “(*cette personne*) *originaire d’ici, apte à travailler, digne de ton attention*”... These are the “adjectival predicators”. When combined with a copula, they build complete constructions, similar to verbal constructions: “*cette personne est originaire d’ici*”.

Copula verbs and auxiliaries

Besides classical copula verbs such as “*être, sembler, demeurer, paraître, rester*”, other verbs have a similar behavior: “*se faire, se confesser, s’avouer, croire, déclarer*”.

On se fait vieux.

Elle se confesse responsable.

Il s’avoue coupable.

Il se/te/me croit intelligent.

Il le/se/les/nous déclare incompetent(s).

The auxiliary combines itself with the predicator, but is not itself a predicator.

3.3 Resultative construction

The utterance “*la fleur est cachée derrière le poteau*” is analyzed as a construction made up of the verb “*être*” followed by the past participle.

This type of construction is characterized by the proportionality with “*l’être*” and “*qu’est-ce qu’il/elle est*”, as for the adjectival predicators (“*la photo est multicolore – elle l’est – qu’est-ce qu’elle est ?*”). In certain cases, such as “*je suis charmé de ta remarque – j’en suis charmé*”, the resultative combines with a paradigm P3 (*en, de qui, de quoi,...*) which corresponds to the subject paradigm of the corresponding “active” sentence: “*ta remarque me charme*”.

The resultative is distinguished from the passive by the impossibility of an agent complement introduced by “*par*”.

As for the adjectival predicators, the use of the past in compound tenses for the resultative brings about a “has been” effect (cf. *elle a été belle*): “*elle a été charmée de sa remarque (elle l’a été, mais maintenant elle ne l’est plus); il a été estimé (il l’a été), elle a été aimée (elle l’a été)*”.

3.4 Adjunct verb

An “adjunct verb” is a verb which is constructed with another verb in the infinitive, where the latter is not a valency term of the first.

In “*il regarde travailler les ouvriers*” the strings “*travailler*” or “*travailler les ouvriers*” do not correspond to a valency term of the inflected verb “*regarder*”. Indeed, there is no pronoun corresponding to “*travailler les ouvriers*”, nor a cleft (“**c’est travailler les ouvriers qu’il regarde*”) or pseudo-cleft constructions (“**ce qu’il regarde c’est travailler les ouvriers*”) where these strings are used as an argument.

When the adjunct verb is constructed with an infinitive phrase, one must distinguish these constructions from those where the infinitive is governed by another predicator verb and where it is proportional to a pronoun belonging to the valency of the latter, as in “*j’admets avoir fait ça; je l’admets; je l’admets, d’avoir fait ça*”. The latter constructions are listed in the DICOVALENCE valency dictionary in the following way. The utterance “*il admet l’avoir trompé*” is analyzed as a construction of “*admettre*” in which the object position (P1) is an infinitive phrase matching the pronoun “*le*” (“*il l’admet*”), noted as “*le(inf)*” in the P1 paradigm of the verb. Below are some examples with the infinitive phrase in P1, P2 or P3 position.

<i>P1 : le(inf), ça(inf)</i>	<i>il admet l’avoir trompé</i>
<i>P1 : le(de_inf)</i>	<i>je lui ai crié de revenir à temps</i>
<i>P1 : le(à_inf)</i>	<i>il m’a demandé à voir ce que j’écrivais</i>
<i>P2 : y(à_inf), ça(à_inf)</i>	<i>je vous convie à revenir sur vos décisions</i>
<i>P3 : en(de_inf), ça(de_inf)</i>	<i>il s’est toujours abstenu de questionner — il s’en est toujours abstenu ils conviennent de partir ensemble – ils conviennent de ça</i>

In the pronominal approach one considers that the adjunct verb is governed by the infinitive verb following it, and the latter will be called the main (predicator) verb. This analysis is justified by the fact that the principal proposition can appear on its own, without the adjunct verb, but not the other way round. Moreover, except some exceptions (*cf. infra*, the “augmenting adjuncts”), in constructions with adjunct verbs all valency terms are selected by the predicator in the infinitive.

Most often, the infinitive of the adjunct verb also exists as an (independent) predicator, with its own valency, as is the case in the following examples:

<i>entendre : Il entend travailler les ouvriers. ↔ Il entend les ouvriers.</i>
<i>cesser : Il cesse de venir ici. ↔ Il cesse ses visites.</i>
<i>envoyer : Elle envoie son adjoint prendre les dossiers. ↔ Elle envoie sa lettre.</i>

The adjunct verb is applied to the main verb and combines with the valency frame of the main verb:

Le médecin lui donne une piqûre. – Le médecin vient lui donner une piqûre.

Certain types of adjunct verbs add an additional referent to those of the infinitive. The additional referent usually acts as an observer or commentator of the action described by the infinitive:

Le médecin lui donne une piqûre. – Je regarde le médecin lui donner une piqûre.

Such verbs will be called “augmenting adjunct verbs”. In these constructions the P0 (subject) of the main verb appears as a P1 (direct object) to the adjunct verb.

Elle leur donne une piqûre. – Je la regarde leur donner une piqûre.

An adjunct verb can combine with a construction which already contains an adjunct verb:

Elle vient travailler le lundi.

Elle cesse de venir travailler tôt.

Elle finira par cesser de venir travailler chez nous.

When two augmenting adjunct verbs are combined, two additional referents appear:

Ils déplacent les colis.

Elle les/leur fait déplacer les colis.

Je la regarde les/leur faire déplacer les colis.

Several classes of adjunct verbs are distinguished on the basis of their distribution, in particular their relative order when combined (this shows the classes are indeed of a syntactico-semantic nature). In DICOVALENCE these classes are numbered from 1 to 9; they are indicated in the field VTYPE, after the “adjunct_verb” keyword.

```

VAL$      commencer à: | AdjunctVerb
VTYPE$    adjunct_verb:2 adjunct_prep:à
VERB$     COMMENCER/commencer
NUM$      16850
EG$       ils commencent à chanter
TR_DU$    beginnen
TR_EN$    start (doing sth)
FRAME$
AUX$      avoir

```

An additional class, indicated as “adjunct_verb:p”, is used for constructions where the adjunct verb combines with a predicator in the present participle, rather than the infinitive:

les bénéfices vont diminuant

l'inquiétude allait croissant

IX EPISTEMIC	VIII PRESUMPTIVE (aux= <i>avoir</i>)	VII PUTATIVE (aux= <i>avoir</i>)	VI PROSPECTION OBSERVER (aux= \emptyset)	R RETRO- SPEC- TIVE	V SUBJECT PROSPECTION (aux= <i>avoir</i>)	IV PERCEPTION AUGMENTING +P0 (aux= <i>avoir</i>)	III CONTROL AUGMENTING +P0 (aux= <i>avoir</i>)	II PREDICATION PHASE (aux= <i>avoir</i>)	I SUBJECT MOBILITY
pouvoir devoir avoir pu avoir dû aller	sembler (*) paraître (*) menacer de risquer de faire semblant de	croire penser supposer être censé être supposé considérer	être près de venir de être loin de en venir à être à la veille de être en passe de être en voie de	avoir / être	finir par être sur le point de être en mesure de ne pas manquer de être en droit de savoir avoir à [avoir] manqué (de) [avoir] failli ?pouvoir ?devoir (<i>déont</i>)	voir sentir entendre regarder écouter	laisser faire envoyer aider à amener	cesser de finir de continuer à/de commencer à arrêter de achever de terminer de	aller (<i>ê</i>) passer (<i>ê</i>) rester (<i>ê</i>) courir (<i>a</i>) venir (<i>ê</i>) revenir (<i>ê</i>) retourner (<i>ê</i>) s'en aller (<i>ê</i>) partir (<i>ê</i>) accourir descendre monter (<i>ê</i>) sortir
			brûler de compter s'ennuyer à tenter de trembler de bien vouloir		attendre de chercher à daigner dédaigner de se dépêcher de se devoir de hésiter à tarder à être en train de être occupé à	\emptyset		?	
inflected	(*) [P2]	P0 [+hum]				P0 → P1'/P2'	P0 → P1'/P2'		P0 [+hum]

3.5 Pseudo-paradigms

The valency frame lists the valency slots selected by the predicator, called here paradigms. Any paradigm meets the following requirements:

1° it contains several pronominal elements, clitic (“*tu le/la/les cherches*”) or non-clitic (“*tu cherches celui-ci/ceux-là/ça*”), or paranouns (“*quelqu’un, quelque chose, tout, rien, personne, autant, ainsi...*”);

2° it has at least one suspensive element (called “interrogatives” in traditional grammar): “*tu cherches qui/quoi*”, “*tu pars où, quand, comment, pourquoi*” ;

3° it can be lexicalized, i.e. replaced by a constituent containing a lexical element: “*tu chercheras le trésor caché*”.

Certain constituents consist of a pronoun and are governed by the predicator, but do not meet the requirements given above. Such constituents are called “pseudo-paradigms”.

(*pseudo_il*)

il pleut – **elle pleut, *qui pleut, *le ciel pleut*

(*pseudo_se*)

les enfants se chamaillent – **les grands chamaillent les petits, *ils chamaillent qui*

(*pseudo_en*)

on n’en finira jamais avec ça – **on ne finira jamais de qui/quoi, *on ne finira jamais de Jean avec ça*

(*pseudo_y*)

elle s’y connaît en maths – **où elle se connaît en maths, *elle se connaît ici/là en maths*

(*pseudo_là*)

il a planté là son travail

(*pseudo_le*)

elle l’emporte sur lui en maths

(*pseudo_la*)

ça vous la coupe

(*pseudo_ça*)

ça caille ici

(*pseudo_soi*)

il prend sur lui la responsabilité d’organiser ça, revenir à soi

The most common case of pseudo-paradigm is the “pseudo_se”, which represents about 18% of the dictionary entries.

pseudo_il

The feature “pseudo_il” indicates that the formulation described in the entry is constructed necessarily with the clitic “*il*”: “*il pleuvait*”. There is number and person agreement between the clitic and the inflected verb, which always appears in the third person singular. The “pseudo_il” can not be replaced by a suspensive element (“**qui pleuvait*”, “**qu’est-ce qui pleuvait*”) or by a pronoun, nor by a lexical element (“**le nuage pleuvait*”).

Thus entries with a “pseudo-il” correspond to the “impersonal verbs” from traditional grammar.

pseudo_se

An entry (a formulation group) is tagged with the property “pseudo_se” when it is constructed obligatorily with a clitic reflexive pronoun (*me, te, se, nous, vous*) which agrees in person and number with the verb. This reflexive pronoun cannot be replaced by a suspensive element, nor be lexicalized. There is no corresponding tonic form (save the imperative: *casse-toi !, méfie-toi...*), nor cleft. In traditional grammar it would be called a “pronominal verb”.

s'écrouler :

je m'écroule, tu t'écroules, il s'écroule,

**je t'écroule, *tu m'écroules, *tu écroules qui, *c'est moi que j'écroule, *je n'écroule que moi-même*

This reflexive pronoun is co-referential with the subject, but contrarily to the “pseudo_se” reflexive pronoun, the subject can be absent, for example in an infinitive phrase or an imperative.

pour bien s'élancer, il faut parfois reculer un peu

As for the subject, the form of the “pseudo_se” pronoun (its person, its number) is imposed by the verb.

A given infinitive can present uses both with and without a “pseudo_se” paradigm. They will appear in the valency dictionary as separate entries.

le vent agite les branches de l'arbre.

ne t'agite pas comme ça !

son état de santé a alarmé tous ses amis.

ils s'alarment de son état de santé.

pseudo_se vs. a paradigm containing the pronoun “se réfl.”

Predicators such as “*s'envoler, se prosterner, s'abstenir*” are used exclusively with a reflexive pronoun; the corresponding entries in the dictionary are labeled “pseudo_se”. Other predicators, such as “*démaquiller*”, accept reflexive pronouns in the paradigm P1, next to non-reflexive pronouns such as “*que, qui, le, la, les, celui-ci...*” In such a case the “*se*” is a member of the P1 paradigm, and therefore the entry does not carry the label “pseudo_se”, but its P1 paradigm includes the element “*se réfl.*”.

démaquiller P0 P1 :

elle le/la/les/se démaquille,

elles se démaquillent (réciproque ou réfléchi)

elle ne démaquille qu'elle-même

Finally, when an infinitive presents both reflexive and non-reflexive pronouns, there can be several entries, one with a “pseudo_se” label and another one without, when the reflexive pronoun in some cases presents the characteristics of an element of a paradigm and in other cases those of a “pseudo_se” element.

*démêler P0 P1 : elle le/la/les/*se démêle (démêler les fils)*

*se démêler P0 P3 : elle cherche à se/*le/la/les démêler de cette situation épineuse*

pseudo_en

Its treatment is analogous to that of other pseudo-paradigms.

où en sont les études sur la valence ?

les manifestants s'en prennent aux hommes politiques

pseudo_y

Its treatment is analogous to that of other pseudo-paradigms.

tu n'y couperas pas

il y va de nos convictions

elle s'y connaît en linguistique distributionnelle

pseudo_là

As for the other pseudo-paradigms, the “pseudo_là” is noted as a property of the predicator, and not as a locative paradigm which would have only one element, namely “là”.

il a planté là son travail et est allé au bistrot

pseudo_ça

Its treatment is analogous to that of other pseudo-paradigms.

ça accroche bien entre eux

ça caille ici

pseudo_le

Its treatment is analogous to that of other pseudo-paradigms.

tu peux te l'accrocher

le mal l'emporte toujours sur le bien

pseudo_la

Its treatment is analogous to that of other pseudo-paradigms.

il la crève

ça vous la coupe

se la couler douce (prédicateur complexe)

pseudo_soi

Its treatment is analogous to that of other pseudo-paradigms.

emporter avec soi, prendre avec soi,

prendre sur soi, se replier sur soi,

réunir en soi, porter en soi,

tirer à soi, revenir à soi,

serrer contre soi

3.6 The field VAL

The field VAL gives a concise characterization of the entry. It specifies the following elements:

- the predicator
- the valency frame: list of the paradigms (terms); the parentheses indicate the optional terms; for the prepositional paradigms, the preposition(s) are indicated between chevrons (<...>)
- some properties: verb type (in the cases other than the simple predicator), pseudo-paradigms, etc.

```

VAL$      acheter: P0 P1 (PP<pour>)
VTYPE$   predicator simple
VERB$    ACHETER/acheter
NUM$     1865
EG$      j'ai acheté une nouvelle voiture pour Paul
TR_DU$   kopen, aanschaffen
TR_EN$   buy sth (for)
FRAME$   subj:pron|n:[hum], obj:pron|n:[nhum,?abs], ?objp<pour>:pron|n:[hum]
P0$      qui, je, nous, elle, il, ils, on, celui-ci, ceux-ci
P1$      que, la, le, les, en Q, ça, ceci, celui-ci, ceux-ci
PP_PR$   pour
PP$      0, qui, lui_ton, eux, celui-ci, ceux-ci, l'un l'autre
AUX$     avoir

VAL$      s'aviser de: | AdjunctVerb
VTYPE$   adjunct_verb:5 pseudo_se adjunct_prep:de
VERB$    AVISER/aviser
NUM$     9640
EG$      si tu t'avises de lui raconter ça, tu le regretteras
TR_DU$   z verstouten, het in zijn hoofd halen (om)
TR_EN$   dare, think (about)
FRAME$   pseudo_se,
AUX$     être

```

4 Characterization of the valency paradigms

4.1 Valency and rection

The dependents of a verb are the elements (e.g. constituents) governed by that verb. The pronominal approach uses the French term “rection” (P&S: 37) to designate the set of dependents. Several types of dependents are distinguished: valency terms, non-valency terms (or modifiers, or circumstantial complements) and adjuncts. (See Eynde & Mertens, 2003, for the criteria to distinguish them).

Valency terms are specific for each individual predicator: certain predicators require an object (“*Luc examine ça*”), others cannot have one (“**Luc dortait ça*”). A valency paradigm should meet certain requirements: it should contain several pronominal elements (“*Luc le/la/les/en examine*”), of which at least one suspensive (“*Qu’est-ce que Luc examine*”, “*Qui est-ce que Luc examine*”), with the possibility of lexicalization (“*Luc examine les résultats*”) (cf. § 3.5). For a complex predicators such as “*porter plainte, perdre la face*”, the apparent complement is not a valency term because there is no corresponding pronoun paradigm: “**il la porte, la plainte*”, “*il la perd, la face*”.

Circumstantial complements can combine with any of the verbal predicators: “*Luc dormira ici demain, parce qu’il est malade*”. Such dependents indicate time, place, manner, reason, etc.

However, all dependents indicating place, time, duration, manner... are not necessarily circumstantial complements. In fact, for certain predicators, place, time, and manner function as valency terms: “*la bibliothèque ferme plus tôt pendant les vacances ; *Luc est né le 17 avril ; elle se dirige vers la gare*”. When a term is obligatory and meets the criteria required for the valency paradigms, it is of course a valency term (“*il se dirige où/là/ici*” – “**il se dirige*”).*

Tesnière (1959) already opposes “*actants*” (valency terms) and “*circonstants*” (circumstantial complements). The distinction is similar to that between essential and accessory (or peripheral) complements. However, these distinctions rest on semantic criteria and thus do not parallel the definition by the pronominal approach.

The DICOVALENCE entries mention only the valency terms, as all other terms can be added freely to every predicator.

4.2 General considerations

This paragraph deals with aspects applying to all paradigms.

Maximal paradigm

For each valency slot (or paradigm) of a given verb, the dictionary entry lists the pronouns that can occur in that slot for that verb. For instance, for a transitive verb the object slot of the dictionary entry will list the pronouns that can be used as the object of that verb. However, the object slot of all transitive verbs does not contain the same set of pronouns. The set of object pronouns may vary from one verb to another.

The “maximal paradigm” for a given slot corresponds to the set of different pronouns found for that kind of slot, when considering all predicators with this kind of slot. For instance, the P0 paradigm contains pronouns such as “*qui, que, je, tu, il, elle, on, nous, vous, ils, elles, ceci, celui-ci, ceux-ci, ça,*” etc., but not all verbs will have the full list in the P0 paradigm.

The set of pronouns used in the dictionary has been limited for reasons of descriptive economy and predictability. For example the presence of pronoun “*tu*” implies that of the pronoun “*vous*” (*tu* → *vous*, *je* → *te*, *nous* → *vous*, etc.). Henceforth, when the question of the maximal paradigm for some valency position arises, we in fact refer to the restricted set of elements taken into account in the dictionary for that position.

Optional arguments

When a slot is optional, a zero (written as “0”) appears as the first element of the list of pronominal elements in the paradigm.

```

VAL$      brader: P0 (P1)
VTYPE$    predicator simple
VERB$     BRADER/brader
NUM$      12130
EG$       ils bradent leurs vieilles affaires
TR_DUS$   op een braderie/markt verkopen, verkwanzelen, wegdoen, van de hand doen,
           versjacheren
TR_EN$    sell (on a fair), bargain, sell off
FRAME$    subj:pron|n:[hum], ?obj:pron|n:[nhum,?abs]
P0$       qui, je, nous, elle, il, ils, on, celui-ci, ceux-ci
P1$       0, que, la, le, les, en Q, ça, ceci, celui-ci, ceux-ci
RP$       passif être, se passif
AUX$      avoir

```

Uncertain elements

An element of a paradigm is preceded by a question mark if its inclusion within the paradigm is uncertain.

Secondary elements

Placing an element of a paradigm between parentheses indicates a “secondary” use. To illustrate this, let us consider the predicator “*interdire*”. This predicator most often takes a human P0 (“*le médecin lui interdit le sel*”). A non-human P0 is acceptable (“*le diagnostic lui interdit le sel – qu’est-ce qui lui interdit le sel ?*”), but in such cases the feature [+human] is underlying. In this case the non-human pronoun is a “secondary” element of the paradigm. This will be indicated by the parentheses around the pronoun in the paradigm P0: “*je, nous, on, qui, (que), elle, il, ils...*”.

Realizations of terms containing a verb form

Paradigms can also include elements other than pronouns (in the traditional meaning of that word). This is the case for subordinate clauses and infinitive phrases that are proportional to a pronoun. They will be indicated by the proportional pronoun followed by the clause or phrase form in between parentheses.

il avoue avoir vu Paul ÷ il l’avoue → le(inf)

il avoue avoir vu Paul ÷ il avoue ça → ça(inf)

il avoue qu’il me connaît ÷ il l’avoue → le(qpind)

il avoue qu’il me connaît ÷ il avoue ça → ça(qpind)

de regarder la mer me calme ÷ ça me calme → ça(de_inf)

The following table lists the abbreviations used for the notation of these elements. Note that their complete form can vary from one valency position to the other, because the proportional pronoun varies: “*y(qpind)*” in P2, but “*en(qpind)*” in P3, etc. The complete list of these elements will be given later on, when the individual paradigms will be presented.

inf	infinitive phrase	<i>elle aime bavarder</i>
de_inf	infinitive phrase introduced by <i>de</i>	<i>je te plains de devoir subir ça</i>
à_inf	infinitive phrase introduced by <i>à</i>	<i>sa famille l'a poussé à changer</i>
qpind	clause introduced by <i>que</i> with indicative	<i>il nous cachait qu'il tenait un journal intime</i>
qpsubj	clause introduced by <i>que</i> with subjunctive	<i>qu'elle ne vienne pas me chicane un peu</i>
sipind	clause introduced by <i>si</i> with indicative	<i>comment contrôler si son anti-virus est toujours actif</i>
indirq	indirect question, clause introduced by a suspensive	<i>on révèle comment ça s'est passé</i>
à_ce_qpind	clause introduced by <i>à ce que</i> with indicative	
à_ce_qpsubj	clause introduced by <i>à ce que</i> with subjunctive	
de_ce_qpind	clause introduced by <i>de ce que</i> with indicative	

Discontinuous elements

The element “*en Q*” in P1 indicates that the clitic pronoun “*en*” can be completed by a quantification following the verb: “*Nous en prenons [trois/plusieurs/beaucoup/peu/combien/autant...]*”. Together, the two parts of the discontinuous element are proportional to a single element: *Nous les prenons*.

The P0 paradigm contains 3 discontinuous elements containing the clitic “*il*”, followed by an infinitive or a subordinate clause after the verb. The complete list is given in section 5.12.

il lui plaît de voyager ainsi → *il_de_inf*

il lui revient de faire cette demande → *il_de_inf*

il s'en suit que le projet est rejeté → *il_qpind*

The element « *il_en_Q* » indicates constructions such as *Il en arrive plusieurs*, which is proportional to *Ils arrivent*.

Singular and plural elements

Some paradigms include couples of singular and plural pronouns: “*je/nous, il/ils, celui-ci/ceux-ci, lui/leur...*”. It so happens that one or the other valency position requires the use of a plural pronoun or of a lexicalized plural constituent. In this case this slot is said to carry a “complexity feature”. The complexity feature is marked by the absence of the singular pronoun in the paradigm.

j'alterne les couleurs – ?*j'alterne la couleur* – *j'alterne le jaune avec le bleu* –

j'alterne les couleurs claires avec les couleurs sombres

les animaux s'accouplent – ?*l'animal s'accouple* – *le mâle s'accouple avec la femelle*

The element “*l'un l'autre*” in P1, P2, P3 or PP

The element “*l'un l'autre*” in P1 indicates that beside the construction with “*se réciproque*” one also observes a linked construction with “*l'un*” in P0 and “*l'autre*” in P1. Similar linked constructions are found with “*l'autre*” (preceded by a preposition) in P2, P3 or PP. Thus, the element “*l'un l'autre*” has a particular status; it is not similar to other elements in the paradigm. In fact it indicates the possibility of a linked construction which adds an

additional valency term. The motivation of this special element is to avoid an additional entry in the lexicon.

les pilotes s'arrosent l'un l'autre (P1) de champagne

l'un (P0) arrose l'autre (P1) de champagne

ils s'avouent leurs sentiments l'un à l'autre (P2)

l'un (P0) avoue à l'autre (P2) ses sentiments

ils se bagarrent l'un avec l'autre (PP)

l'un (P0) se bagarre avec l'autre (PP)

5 Valency paradigms

5.1 Paradigm P0

With respect to other valency positions, the P0 presents certain complications, notably because of the discontinuous elements. These cases are treated separately in § 5.12.

The following table lists the elements considered for the paradigm P0.

que	suspensive pronoun	<i>qu'est-ce qui change ?</i>
qui	suspensive pronoun	<i>qui prend les bagages ?</i>
je	clitic pronoun	
nous	clitic pronoun	
on	clitic pronoun	
elle	clitic pronoun	
il	clitic pronoun	
ils	clitic pronoun	
ce	clitic pronoun	<i>c'est lui / ce sera moi</i>
ça	non-clitic pronoun	
ceci	non-clitic pronoun	
celui-ci	non-clitic pronoun	
ceux-ci	non-clitic pronoun	
ça(inf)	infinitive phrase, proportional to the pronoun <i>ça</i>	
ça(de_inf)	infinitive phrase introduced by <i>de</i> , proportional to the pronoun <i>ça</i>	
ça(qpsubj)	subordinate clause in the subjunctive, introduced by <i>que</i> , proportional to the pronoun <i>ça</i>	
ça(sipind)	subordinate clause in the indicative, introduced by <i>si</i> , proportional to the pronoun <i>ça</i>	<i>on me demande si elle est entrée</i>

5.2 Paradigm P1

The following table lists the elements considered for the paradigm P1.

0	indicates optionality	
que	suspensive pronoun	<i>que cherche-t-il ?</i>
qui	suspensive pronoun	<i>qui cherche-t-il ?</i>
te	clitic pronoun	<i>on te cherchait partout</i>
vous	clitic pronoun	<i>je vous cherchais depuis longtemps</i>
le	clitic pronoun	<i>je le cherche</i>
la	clitic pronoun	<i>il la cherche aussi</i>
les	clitic pronoun	<i>nous les cherchions</i>
se réfl.	reflexive clitic pronoun	<i>il se surveille trop</i>
se réc.	reciprocal clitic pronoun	<i>ils s'accusent des pires mensonges</i>
en_Q	clitic pronoun which can be completed after the verb by a complement	<i>j'en demande (trois/plusieurs/combien...)</i>

	indicating quantity	
ça	non-clitic pronoun	<i>je te raconterai ça demain</i>
ceci	non-clitic pronoun	
celui-ci	non-clitic pronoun	
ceux-ci	non-clitic pronoun	
combien	suspensive non-clitic pronoun	
autant	non-clitic pronoun	
l'un l'autre	non-clitic pronoun	<i>ils se défient l'un l'autre</i>
le(inf) ça(inf)	infinitive phrase, proportional to the pronoun <i>le/ça</i>	
le(de_inf) ça(de_inf)	infinitive phrase introduced by <i>de</i> , proportional to the pronoun <i>le/ça</i>	
le(à_inf) ça(à_inf)	infinitive phrase introduced by: <i>à</i> , proportional to the pronoun <i>le/ça</i>	
le(qpind) ça(qpind)	subordinate clause in the indicative, introduced by <i>que</i> , proportional to the pronoun <i>le/ça</i>	
le(qpsubj) ça(qpsubj)	subordinate clause in the subjunctive, introduced by <i>que</i> , proportional to pronoun <i>le/ça</i>	
le(sipind) ça(sipind)	subordinate clause in the indicative, introduced by <i>si</i> , and proportional to <i>le/ça</i>	
le(indirq) ça(indirq)	subordinate clause in the indicative or infinitive, introduced by a suspensive	<i>elle demande qui était là je sais comment faire il sait de quoi parler</i>

The quantifiers: « combien, autant »

As shown in the table above the P1 paradigm includes the quantifiers “*combien, autant*”. These elements have a special status: there is also a PQ paradigm, which contains the same elements and only these (*cf. infra*, section 5.5).

Certain predicators govern a P1 term proportional both with quantifiers and with “*que (qu'est-ce que), le, la, les...*”

je consacre la journée à cette rédaction – je la consacre à ça – qu'est-ce que tu y as consacré – combien y as-tu consacré ?

elle te coûte combien ? – elle me coûte deux jours/autant – ?elle me les coûte

Other predicators govern a constituent solely proportional to quantifiers. In the latter case the paradigm will be designated as PQ.

*combien elle pèse ? – elle pèse 67 kilos – ?elle les pèse, les 67 kilos
le Mont Blanc culmine à 4807 mètres (PQ<à>)
on a débité le compte de 5000 euros (PQ<de>)*

In fact, in the above examples, the quantifiers constitute a subset of the P1 paradigm. A similar situation is observed for other paradigms (P3, PP). One could thus consider the paradigm PQ as a particular case of a P1, P3 or PP term.

However the latter solution has not been adopted, because utterances may have both a P1 and a PQ term, as in:

je les ai payés autant (I paid those things that much)

In this case, if one considers the PQ as a P1, there would be two P1 terms for the same verb, which would be contrary to the principles underlying dependency and valency grammar.

5.3 Paradigm P2

Given that the preposition *à* (or its contracted forms *au*, *aux*) is foreseeable in the non-clitic P2 elements, it is not included in the notation of the elements in the paradigm. As a result, in “*il ne le demande qu’à eux*”, the element “*à eux*” will be represented by “*eux*” in the P2 paradigm.

0	indicates optionality	
quoi	suspensive pronoun	<i>à quoi tu penses ?</i>
qui	suspensive pronoun	<i>à qui tu l’as donné ?</i>
me	clitic pronoun	<i>il me conseille de partir</i>
lui	clitic pronoun	<i>elle lui demande trop</i>
leur	clitic pronoun	<i>elle leur demande trop</i>
y	clitic pronoun	<i>il y pense souvent</i>
se réfl.	reflexive clitic pronoun	
se réc.	reciprocal clitic pronoun	
ceci	non-clitic pronoun	<i>je pense à ceci</i>
lui_ton	non-clitic pronoun	<i>je pense à lui</i>
eux	non-clitic pronoun	<i>je pense à eux</i>
ça	non-clitic pronoun	
celui-ci	non-clitic pronoun	
ceux-ci	non-clitic pronoun	
l’un l’autre	non-clitic pronoun	<i>ils se recommandent des livres l’un à l’autre</i>
y(qpind) ça(qpind)	subordinate clause in the indicative, introduced by <i>que</i> , proportional to the pronoun <i>y/à_ça</i>	
y(qpsubj) ça(qpsubj)	subordinate clause in the subjunctive, introduced by <i>que</i> , proportional to the pronoun <i>y/à_ça</i>	
y(à_inf) ça(à_inf)	infinitive phrase introduced by <i>à</i> , proportional to the pronoun <i>y/ça</i>	
y(à ce qpi) ça(à ce qpi)	subordinate clause in the indicative, introduced by <i>à ce que</i>	
y(à ce qps) ça(à ce qps)	subordinate clause in the subjunctive, introduced by <i>à ce que</i>	

Remarks

The element “*me*” is included because it plays a role in the automatic generation of the syntactico-semantic features.

The element “*lui_ton*” (i.e. “*lui tonique*” or non-clitic *lui*) allows to oppose the [+pers’] (*lui/y*) to [-pers’] (*y/à lui*) (see P&S: 43-47).

lui parler

lui/y ressembler

y/à lui penser
y remédier

5.4 Paradigm P3

In certain cases the P3 paradigm is realized by the clitic “*en*”, or by a non-clitic with the preposition *à* : “*l’en enlever, le lui enlever, l’enlever à celui-ci/à celui-là...*”.

0	indicates optionality	
quoi	suspensive pronoun	<i>de quoi tu rêves ?</i>
qui	suspensive pronoun	<i>de qui tu rêves ?</i>
en	clitic pronoun	<i>j’en rêve souvent</i>
lui	clitic pronoun	<i>elle lui a arraché les vêtements</i>
leur	clitic pronoun	<i>le fisc leur réclame une fortune</i>
se réfl.	reflexive clitic pronoun	<i>ils s’enlèvent ces marques</i>
se réc.	reciprocal clitic pronoun	<i>ils s’enlèvent tout espoir</i>
ça	non-clitic pronoun	
ceci	non-clitic pronoun	<i>je rêve de ceci</i>
lui_ton	non-clitic pronoun	<i>je me vengerai de lui</i>
eux	non-clitic pronoun	<i>je me vengerai d’eux</i>
celui-ci	non-clitic pronoun	
ceux-ci	non-clitic pronoun	
combien	non-clitic suspensive pronoun	
autant	non-clitic pronoun	
l’un l’autre	non-clitic pronoun	<i>ils se soucient l’un de l’autre</i>
en(qpind) ça(qpind)	subordinate clause in the indicative, introduced by <i>que</i> , proportional to the pronoun <i>en/à_ça</i>	
en(qpsubj) ça(qpsubj)	subordinate clause in the subjunctive, introduced by <i>que</i> , proportional to the pronoun <i>en/à_ça</i>	
en(de_inf) ça(de_inf)	infinitive phrase introduced by <i>de</i> , proportional to the pronoun <i>en/ça</i>	
en(sipind) ça(sipind)	subordinate clause in the indicative, introduced by <i>si</i> , and proportional to <i>en/ça</i> .	
en(de ce qpi) ça(de ce qpi)	subordinate clause in the indicative, introduced by <i>de ce que</i>	
en(de ce qps) ça(de ce qps)	subordinate clause in the subjunctive, introduced by <i>de ce que</i>	
en(indq) ça(indq)	subordinate clause in the indicative or infinitive, introduced by a suspensive	

5.5 Quantity paradigm PQ

The quantity paradigm PQ indicates a valency term proportional to “*combien/autant*” (however, see to comments in 5.2, the section on P1), optionally preceded by the preposition indicated in the field PQ_PR.

*Il a joué deux mille euros sur ce cheval.
Il mesure un mètre quatre-vingts.*

*Je vous laisse ce tapis pour mille euros.
Le prix a monté de dix pour cent.
à combien se chiffrent les pertes ?*

The information in the two fields PQ and PQ_PR has to be combined. The utterance “*les pertes se chiffrent à 10000 euros*” is analyzed as containing a PQ term (“à 10000 euros”) introduced by the preposition supplied by PQ_PR (“à”).

```

VAL$      se chiffrer: P0 PQ
VTYPE$    predicator simple pseudo_se
VERB$     CHIFFRER/chiffrer
NUM$      15320
EG$       à combien se chiffrent les pertes ?
TR_DU$    bedragen
TR_EN$    amount (to), number, run up (to)
FRAME$    pseudo_se, subj:pron|n:[abs], quant<à>:pron|n:[]
P0$       que, elle, il, ils, ça, celui-ci, ceux-ci
PQ_PR$    à
PQ$       combien, autant
AUX$      être

```

Here are the elements used for the PQ paradigm:

0	indicates optionality	<i>la voiture, je l'ai payée (autant)</i>
combien	non-clitic suspensive pronoun	<i>il coûte combien ?</i>
autant	non-clitic pronoun	<i>les dégâts se chiffrent à autant</i>
que	non-clitic pronoun	<i>que coûte tel produit ?</i>

5.6 Manner paradigms PM et PMi

The manner paradigm PM indicates a valency term characterized by the following elements: “*comment, comme ça, ainsi, de quelle façon, de telle façon*”. The lexicalization can be done as well by an adverb as by expressions with or without preposition. The latter is indicated in the field PM_PR.

*il s'accoutre d'une manière ridicule
agréger des éléments hétérogènes en une masse compacte
il va de Bruxelles à Paris en TGV
le moulin s'alimente en eau par un canal*

0	indicates optionality	
comment	non-clitic suspensive element	<i>il voyage comment</i>
comme ça	non-clitic element	<i>il parle comme ça</i>
ainsi	non-clitic element	<i>elle fonctionne ainsi</i>
de quelle façon	non-clitic suspensive element	<i>de quelle façon comptez-vous y aller</i>
de telle façon	non-clitic element	

The manner paradigm PMi represents a valency term characterized by the following elements: “*comment, (comme) tel(le)(s), ainsi*”. The lexicalization is often done with adjectives or substantives without article or with the introductory preposition: “*comme*”

The paradigm PMi is necessarily linked to another term of the (sentence) construction; this is why we have named it temporarily “internal” PM.

*on te l’a dépeint comment ?- on me l’a dépeint comme un homme du monde
elle finira ministre
je le considère trop intelligent pour devoir mentir
la journée s’annonce bien/radieuse*

0	indicates optionality	
comment	non-clitic suspensive	<i>on te l’a dépeint comment ?</i>
comme tel	non-clitic	
tel	non-clitic	
ainsi	non-clitic	

5.7 Evaluative adjunct AE

Some predicators almost systematically combine with an adjunct taking the form of an evaluative adverb such as “*bien/mal*”. Although this evaluative adjunct can function as a reply to the suspensive “*comment*”, it is not related to a pronominal paradigm: there is absolutely no proportional assertive pronoun or paranoun matching the adjunct. As a result the adjunct can not be seen as a valency term.

Such adjuncts can be found as *optional* adjuncts combining with most predicators. The latter are not included in a valency dictionary, which mentions valency elements only.

However, as some predicators require such an adjunct as an obligatory element, they will be taken into account here and they will be represented as a non-valency adjunct, in a way similar to the *pseudo_se* element, for example. This adjunct is marked by the symbol AE in the field VAL and by the keyword “*evaluative_adjunct*” in field VTYPE. The pseudo-paradigm also appears as a field at the end of the list of actual valency paradigms, with as unique element the form “*comment*”.

```
VAL$      tourner: P0 AE
VTYPE$    predator simple evaluative_adjunct
VERB$     TOURNER/turner
NUM$      83190
EG$       l'affaire a mal tourné
TR_DU$    een loop/wending nemen
TR_EN$    change badly
FRAME$    subj:pron|n:[hum], eval:pron|n|adv:[]
P0$       que, qui, je, nous, elle, il, ils, on, ça, celui-ci, ceux-ci
AE$       comment
AUX$      avoir
```

```
VAL$      tomber: P0 AE
VTYPE$    predator simple evaluative_adjunct
VERB$     TOMBER/tomber
NUM$      82730
EG$       un vêtement qui tombe bien
TR_DU$    <zus of zo> vallen
TR_EN$    fit <>
FRAME$    subj:pron|n:[nhum,?abs], eval:pron|n|adv:[]
P0$       que, elle, il, ils, ça, ceci, celui-ci, ceux-ci
AE$       comment
AUX$      être
```

5.8 Prepositional paradigm PP

The field PP indicates the presence of a valency paradigm introduced by a fixed preposition. Its peculiarity lies in the fixed character of the preposition. Contrary to other paradigms that can have a preposition for their lexicalization (“à” in P2, “de” or “à” in P3, prepositions such as “à, dans, sur, sous, contre...” in PL and so forth) and that also have clitic forms without preposition, this is not the case for the PP.

For each prepositional paradigm in the entry, two fields are given, one named PP, which lists the elements in the paradigm, and the other named PP_PR, which specifies the fixed preposition or possibly several prepositions if these fit in the same valency position.

Here is the list of prepositions occurring in PP_PR:

après,	comme,	en faveur de,	selon,
au dépens de,	comme de,	entre,	sous,
au sujet de,	contre,	envers,	suivant,
au travers de,	d’avec,	face à,	sur,
au-dessus de,	dans,	jusqu’à,	vers,
au-devant de,	de,	le long de,	à,
auprès de,	derrière,	par,	à l’avis de,
autour de,	devant,	parmi,	à travers,
avec,	du côté de,	pour,	(le long) de
chez,	en,	sans,	

An entry can have more than one prepositional paradigm, but this is exceptional.

0	indicates optionality	
quoi	suspensive pronoun	
qui	suspensive pronoun	
prep []	bare preposition (absolute usage)	<i>courir après, compter avec, lutter contre</i>
soi-même	non-clitic pronoun	
elle-même	non-clitic pronoun	
lui_ton	non-clitic pronoun	
eux	non-clitic pronoun	
ça	non-clitic pronoun	
ceci	non-clitic pronoun	
celui-ci	non-clitic pronoun	
ceux-ci	non-clitic pronoun	
l’un l’autre	non-clitic pronoun	
combien	suspensive non-clitic pronoun	
autant	non-clitic pronoun	
ça(qpind)	subordinate clause in the indicative, introduced by <i>que</i> , proportional to <prep> <i>ça</i> .	
ça(Inf)	infinitive phrase, introduced by <i>à</i> , proportional to <prep> <i>ça</i> .	
ça(p_ce_qpind)	subordinate clause in the indicative, introduced by <prep> <i>ce que</i>	

Additional elements are added for some prepositions:

<i>sur</i>	là-dessus, dessus, lui...dessus	<i>mets-le là-dessus</i>
<i>sous</i>	là-dessous, dessous	<i>place-le là-dessous</i>
<i>dans</i>	là-dedans, dedans, lui...dedans	<i>elle lui est rentrée dedans</i>
<i>autour de</i>	autour, lui...autour	<i>elle lui a tourné autour</i>
<i>contre</i>	là-contre	

The elements such as “dessus, lui...dessus” are for the prepositional paradigm what the clitic pronoun “y” is for the paradigm P2.

Alternating prepositions

Some prepositional paradigms have prepositions which alternate depending on the following element: “*intéresser quelqu’un dans quelque chose, l’intéresser en quoi*”. A slash in the field PP_PR indicates the alternating prepositions.

```

VAL$      intéresser: P0 P1 PP<dans/en>
VTYPE$    predicator simple
VERB$     INTERESSER/intéresser
NUM$      51680
EG$       ce patron a intéressé ses travailleurs dans l'entreprise
TR_DU$    betrekken (bij), doen delen in de winst
TR_EN$    involve (in), make participate (in)
FRAME$    subj:pron|n:[hum], obj:pron|n:[hum], objp<dans,en>:pron|n:[?nhum,abs]
P0$       qui, je, nous, elle, il, ils, on, celui-ci, ceux-ci
P1$       qui, te, vous, la, le, les, en Q, celui-ci, ceux-ci
PP_PR$    dans/en
PP$       quoi, celui-ci, ceux-ci, dedans, là-dedans
RP$       passif être, se faire passif
LC$       51680-51700 je les intéresse là-dedans, ils s'intéressent là-dedans
AUX$      avoir

```

5.9 Locative paradigm PL

The field PL indicates a locative valency paradigm. It should be distinguished from the delocative paradigm (PDL) (*il s'éloigne du parapet, il vient de cette région*) and from the prepositional paradigms (PP), characterized by a fixed preposition.

The locative can take various forms: a clitic pronoun (y), a non-clitic element (*où, là, ici, là-bas*), a paranoun (*quelque part, ailleurs, partout...*), a preposition (*autour, dessus, là-dessus*) or a lexicalization, introduced by a preposition (*sur le bateau, à la cave...*).

In the entries where the locative paradigm takes many different forms (*il y habite, il habite là-bas, il habite où, habiter à l'étranger, sous un pont, dans un arbre, sur un bateau, près de la gare, chez un ami...*), the entry has only the field PL.

```

VAL$      bifurquer: P0 PL
VTYPE$    predicator simple
VERB$     BIFURQUER/bifurquer
NUM$      11180
EG$       la route bifurque à deux kilomètres du village
TR_DU$    splitsen, afslaan, van richting / spoor veranderen, een andere richting inslaan
TR_EN$    split
FRAME$    subj:pron|n:[nhum,?abs], loc<>:pron|n:[]
P0$       que, elle, il, ils, ça, ceci, celui-ci, ceux-ci, il_en_Q
PL$       où, là, ici, là-bas
AUX$      avoir

```

VAL\$ habiter: P0 PL
 VTYPE\$ predicator simple
 VERB\$ HABITER/habiter
 NUM\$ 48570
 EG\$ elle habite toujours chez ses parents
 TR_DU\$ wonen, verblijf houden
 TR_EN\$ live (with)
 FRAME\$ subj:pron|n:[hum], loc<>:pron|n:[]
 P0\$ qui, je, nous, elle, il, ils, on, celui-ci, ceux-ci
 PL\$ où, y, là, ici, là-bas
 LC\$ 48570-48610 j'habite là, je l'habite
 AUX\$ avoir

When the prepositional lexicalization of the locative paradigm is limited to only a few prepositions, the latter are listed in the field PL_PR.

VAL\$ partir: P0 (PDL) (PL)
 VTYPE\$ predicator simple
 VERB\$ PARTIR/partir
 NUM\$ 59380
 EG\$ je suis parti de Bruxelles pour Paris en TGV
 TR_DU\$ vertrekken, weggaan/rijden, afvaren/reizen
 TR_EN\$ leave (from) (to)
 FRAME\$ subj:pron|n:[hum,nhum,?abs], ?deloc<de>:pron|n:[], ?loc<>:pron|n:[]
 P0\$ que, qui, je, nous, elle, il, ils, on, ça, ceci, celui-ci, ceux-ci
 PDL_PR\$ de
 PDL\$ 0, en, prep où, prep là, prep ici, prep là-bas
 PL_PR\$ pour, à, vers, chez, en, sur, ...
 PL\$ 0, où, y, là, ici, là-bas, prep où, prep là, prep ici, prep là-bas
 AUX\$ être

In some cases, the entry shows one or several fields PL_DEV, where each provides the pronominal paradigm for the preposition indicated at the start.

VAL\$ s'accouder: P0 (PL)
 VTYPE\$ predicator simple pseudo_se
 VERB\$ ACCOUDER/accouder
 NUM\$ 1270
 EG\$ il s'est accoude sur son bureau et a commencé à nous parler / défense de s'accouder contre le mur / il s'accoude au comptoir pour commander trois bières
 TR_DU\$ met de ellebogen gaan leunen (op/tegen)
 TR_EN\$ lean on one's elbows
 FRAME\$ pseudo_se, subj:pron|n:[hum], ?loc<>:pron|n:[]
 P0\$ qui, je, nous, elle, il, ils, on, celui-ci, ceux-ci
 PL\$ 0, où, y, là
 PL_PR\$ sur, contre, à
 PL_DEV\$ sur : quoi, ceci, celui-ci, ceux-ci, dessus, là-dessus
 PL_DEV\$ contre : quoi, ceci, celui-ci, ceux-ci, ça, là-contre
 PL_DEV\$ à : quoi, ceci, celui-ci, ceux-ci, ça
 LCRES\$ 1270-? être accoude
 AUX\$ être

The following table enumerates the elements of the paradigm PL.

0	indicates optionality	
où	suspensive pronoun	<i>tu habites où ?</i>
y	clitic pronoun	<i>il y retourne souvent</i>
là	non-clitic pronoun	
là-bas	non-clitic pronoun	<i>reste là-bas</i>
ici	non-clitic pronoun	<i>viens ici</i>
prep où	suspensive preceded by a preposition	<i>il repassera par où ?</i>
prep là	non-clitic preceded by a preposition	<i>on accède au musée par cette porte</i>
prep là-bas	non-clitic preceded by a preposition	<i>la balle a bondi jusque là-bas</i>
prep ici	non-clitic preceded by a preposition	<i>on transite les marchandises par ici</i>

List of the prepositions occurring in PL_PR:

à	contre	jusque	sur
auprès de	dans	par	vers
autour de	en	parmi	(jusqu') à
avec	entre	pour	(le long) de
chez	jusqu'à	sous	

The field PL_DEV first gives one of the prepositions found in the constituent corresponding to the PL slot, then the paradigm proportional with the constituent introduced by this preposition. The set of possible elements is identical with the one of the PP paradigm.

quoi	suspensive pronoun	
qui	suspensive pronoun	
ceci	non-clitic pronoun	
ça	non-clitic pronoun	
lui_ton	non-clitic pronoun	
eux	non-clitic pronoun	
celui-ci	non-clitic pronoun	
ceux-ci	non-clitic pronoun	

As was the case with the PP paradigms, additional elements are added for some prepositions.

<i>sur</i>	là-dessus, dessus	
<i>sous</i>	là-dessous, dessous	
<i>dans</i>	là-dedans, dedans	
<i>autour de</i>	autour	
<i>contre</i>	là-contre	

5.10 Delocative paradigm PDL

The field PDL indicates the presence of a delocative valency paradigm, proportional with “*en, d'où, de là, d'ici, de là-bas*”. The non-clitic realizations are always introduced by preposition “*de*”.

les jouets déboulaient de l'escalier
il s'est barré de la prison
ces lectures m'éloignent de la réalité
les arabes ont été expulsés de leur maisons

A field PDL_PR, indicating the fixed preposition, is associated to the PDL field, as for the PP and PL terms, but this field always takes as a value the preposition “*de*”.

The elements for the paradigm PDL are listed in the following table. The non-clitic forms are indicated as “*prep X*” (instead of “*de X*”) by analogy to the treatment for the paradigms PL, PT, and PP.

0	indicates optionality	
en	pronom clitique	

prep où	suspensive preceded by a preposition	
prep là	non-clitic preceded by a preposition	
prep là-bas	non-clitic preceded by a preposition	
prep ici	non-clitic preceded by a preposition	

An entry can have at the same time the paradigms PL et PDL.

Veux-tu déplacer le lit de la chambre au salon ?
Il importe du café (du Brésil) (en Europe)

5.11 Temporal paradigm PT

The field PT indicates the presence of a temporal valency paradigm, proportional to “*quand, à ce moment-là*”.

il vivait au 15^e siècle
la décision fut prise à un moment plus favorable

A field PT_PR is associated with the PT field. It specifies the preposition introducing the temporal complement. The symbol “...” indicates that several prepositions are possible in the temporal paradigm.

*réserver le meilleur pour la fin / pour quand / *à midi / *quand*
les cours reprennent quand / après les vacances / à midi / demain / dans quinze jours

The values used in the field PT_PR are : “..., à, de, depuis, jusqu’à, jusque, pour”. Other possible prepositions, such as “*vers, au-delà de, autour de, avant, après*”, are not listed.

0	indicates optionality	
quand	suspensive	
à ce mom-là	non clitic	<i>à ce moment-là</i>
prep quand	suspensive preceded by a preposition	
prep mainten	non-clitic preceded by a preposition	
prep c m-l.	non-clitic preceded by a preposition	<i>à ce moment-là</i>

5.12 Discontinuous elements in the P0 paradigm

The table below lists the most frequent discontinuous elements.

	fr	discontinuous elements	
il_en_Q	301	discontinuous clitic pronoun which can be completed after the verb by a complement indicating a quantity	<i>il en arrive plusieurs ici chaque jour</i>
il_que	13	suspensive (= interrogative) discontinuous pronoun	<i>que ressort-il du rapport ?</i>
il_de_inf	23	discontinuous infinitive phrase in P0, introduced by <i>de</i>	<i>il lui plaît de voyager ainsi, il suffit d’aller ailleurs</i>
il_qpind	15	discontinuous clause in P0 introduced by <i>que</i> , with the indicative	<i>il s’en suit que le projet est rejeté</i>
il_qpsubj	15	discontinuous clause in P0 introduced by <i>que</i> , with the subjunctive	<i>il semble qu’elle soit licenciée</i>

The distribution of these elements differs.

With 300 occurrences, the element « il_en_Q » is the most frequent: *il en arrive (plusieurs)*. Together, the parts “*il*”, “*en*” et “*plusieurs*” represent the subject referent, as shown by the proportionality with “*ils arrivent, plusieurs arrivent*”.

It is important not to mistake these discontinuous elements for elements of constructions with several terms (of which the P0), as in “*il en prend (plusieurs)*”, where “*il*” corresponds to the P0 and “*en (plusieurs)*” to the P1. Compare “*elle en prend plusieurs*” and “**elle en arrive plusieurs*”.

The parts of the element « il_en_Q » represent a single term. Indeed, if “*il en roule trop ici (de camions)*” was to be analyzed as consisting of two terms, first the P0 “*il*” and second a P1 “*en trop (de camions)*”, one would expect the passive to be: “**trop de camions sont roulés ici*”.

As for the elements « il_de_inf », « il_qpind », « il_qpsubj », they are proportional to « ça »:

il appartient aux parents d'élever leurs enfants – ça leur appartient
il arrive souvent qu'elle soit en retard – ça arrive souvent

The valency frame of the field FRAME ignores these discontinuous element; their inclusion would lead to a conflict with the other elements of the P0 paradigm or with other elements of the valency. For parsing it will be necessary for these entries to generate additional entries with an impersonal subject “*il*” and an extra complement:

P0-il_de_inf	pseudo_il, objet:de_inf:[abs]
P0-il_qpind	pseudo_il, objet:compl:[abs,mood:ind]
P0-il_qpsubj	pseudo_il, objet:compl:[abs,mood:subj]

For the element « il_en_Q », the solution will be analogous to the one adopted for the element « en Q » in P1.

6 The valency frame in the field FRAME

The valency (or subcategorization) frame indicates the set of valency elements governed by a verb. Since version 2 of DICOVALENCE, the FRAME field provides a concise specification of the valency frame. For each valency position, it gives four types of information: 1. the syntactic function, 2. the obligatory or optional nature, 3. possible phrasal realizations and 4. certain selectional restrictions formulated using semantic features. This information was computed from the pronominal paradigms, using the approach described in Mertens (2010).

```

VAL$      offrir: P0 P1 (P2)
VTYPE$    predicator simple
VERB$     OFFRIR/offrir
NUM$      58100
EG$       je lui ai offert mes excuses publiques
TR_DU$    aanbieden, geven, bieden
TR_EN$    offer, present
FRAME$    subj:pron|n:[hum], obj:pron|n|de_inf:[nhum,abs], ?objà:pron|n:[hum]
P0$       qui, je, nous, elle, il, ils, on, celui-ci, ceux-ci
P1$       que, (qui), (te), (vous), la, le, les, en Q, ça, ceci, celui-ci, ceux-ci, combien,
          autant, le(de_inf), ça(de_inf)
P2$       0, qui, lui, leur, se réfl., se réc., celui-ci, ceux-ci, l'un l'autre
RP$       passif être, se passif
PIVOT$    P0/P0 [below de_inf in P1]
AUX$      avoir

```

The optional nature of a valency position is indicated by the question mark preceding the syntactic function.

6.1 Syntactic functions

The terminology used to designate the syntactic functions in the FRAME field is close to grammatical tradition, while adding some labels to distinguish the P2 and P3 paradigms, to identify the quantitative complement, the attribute and the evaluative adjunct AE.

Notation FRAME	Paradigm in Dicovalece	Traditionnal terminology	Remarks
subj	P0	subject	except impersonal <i>il</i> and discontinuous element
obj	P1	direct object	
objà	P2	indirect object	also clitic without preposition
objde	P3	indirect object	also clitic without preposition
objp	PP	prepositional complement	fixed preposition, no clitic form
quant	PQ		quantitative
attr_subj	PMi	attribute of sujet	
attr_obj	PMi	attribute of object	
man	PM	(manner adjunct)	for the valency type only
loc	PL	(locative/place adjunct)	id.
deloc	PDL	(delocative adjunct)	id.
temp	PT	(time adjunct)	id.
eval	AE	-	evaluative adjunct
internal_cause	PX	-	complement without proportionality
px	PX	-	complement without proportionality

Besides from positions acting as semantic arguments, the valency frame in FRAME also includes elements without semantic status, which appear as pseudo-paradigms in the VTYPE field. For instance, the frame of the verb “*s’accoler*” contains the element “pseudo_se”, next to the subject and the indirect object (P2); that of “*s’y connaître*” contains “pseudo_se” and “pseudo_y”, next to the subject and the prepositional complement introduced by “*en*”, and so on. The frame of impersonal verbs such as “*il neige*” contains the element “pseudo_il”.

```

VAL$      s'y connaître: P0 (PP<en>)
VTYPE$    predicator simple pseudo_se pseudo_y
VERB$     CONNAITRE/connaitre
NUM$      18590
EG$       je m'y connais en politique
TR_DU$    verstand hebben (van), iets goed kunnen
TR_EN$    know (about), understand, be a good judge (of)
FRAME$    pseudo_se, subj:pron|n:[hum], pseudo_y, ?objp<en>:pron|n:[?nhum,abs]
P0$       qui, je, nous, elle, il, ils, on, celui-ci, ceux-ci
PP_PR$    en
PP$       0, quoi, cela
AUX$      être

VAL$      neiger: (PQ)
VTYPE$    predicator simple pseudo_il
VERB$     NEIGER/neiger
NUM$      57450
EG$       il neige sur Liège
TR_DU$    sneeuwen
TR_EN$    snow
FRAME$    pseudo_il, ?quant<>:pron|n:[]
PQ$       0, combien, autant
AUX$      avoir

```

6.2 Phrasal realizations

The phrasal realizations designate the forms (or phrase types) a verbal term may take in utterances: clitic pronoun (*Eva le comprend*), non clitic pronoun (*elle comprend ça*), noun phrase (*elle comprend cette question*), prepositional phrase (*elle parlait à ces personnes*), subordinate clause (*elle comprend qu'il ne viendra plus*), subordinate clause introduced by « si » (*elle voudrait contrôler si la livraison est bien arrivée*), infinitive clause (*elle voudrait se reposer un peu*), and so on.

The following cases are used.

pron	pronoun (clitic or non clitic)
n	noun phrase (NP) or prepositional phrase (PP), depending on the type of paradigm, for instance NP for P0 and P1, PP for P2, P2, PP, PL, PDL, PT...
inf	infinitival clause
de_inf	infinitival clause introduced by <i>de</i>
à_inf	infinitival clause introduced by <i>à</i>
compl	subordinate clause
si_compl	subordinate clause introduced by <i>si</i>
à_ce_que_compl	subordinate clause introduced by <i>à ce que</i>
de_ce_que_compl	subordinate clause introduced by <i>de ce que</i>
indirq	indirect question
adv	adverb or adverbial phrase

For the subordinate clauses, the mood used is specified using the feature *mood* (cf. infra).

6.3 Selectional restrictions

To specify selectional restrictions on a verbal argument semantic features are used. These features indicate certain semantic properties of the *referent* designated by the verbal argument. In DICOVALENCE these features are computed on the basis of the elements in the pronominal paradigms. This information allows only for the prediction of a few major categories. Mertens (2010) motivates the choice of a non hierarchical organisation of these features.

Our definition of semantic features does not adopt a hierarchical taxonomy, but rather a one-level classification with 3 major classes without intersection: [humin], [concrete non human] and [abstract]. When a verb argument allows for human referents, it will carry the feature [human]; when that argument accepts both human and concrete non human referents, it will carry two features, and so on.

hum	concrete human
nhum	concrete non human
abs	abstract
+complex	complexity feature (cf. section about this property)
mood:ind/subj	mood used in the subordinate clause

7 Relations within the formulation group

7.1 “Pivot” elements

The pivot refers to a term that realizes two valency slots at the same time, first a term governed by a verbal predicator and second a term governed by an infinitive; the latter forms the lexicalization of another valency slot of the first predicator (cf. P&S: 65).

il s’obstine à travailler ainsi P0/P0

je lui conseille de se raser P2/P0

In “*il s’obstine à travailler ainsi*”, the subject of “*s’obstiner*” is also the non-expressed subject of the infinitive “*travailler*”, which is the local head of the P2 of “*s’obstiner*”. In “*je lui conseille de se raser*”, the P2 of the first verb is at the same time the P0 of the infinitive.

The field PIVOT specifies the elements that identify the type of pivot: first, the function of the term ruled by the first predicator, second, the one of the non-explicit term of the infinitive, followed in between brackets by the type of infinitive phrase and the function which it fulfils relative to the first predicator. For “*s’obstiner*” in “*il s’obstine a travailler ainsi*”, the P0 term of “*s’obstiner*” is also acting as the P0 of the infinitive phrase, which itself functions as the P2 of “*s’obstiner*”. This is noted as follows:

PIVOT\$ P0/P0 [below à_inf in P2]

7.2 Passive reformulations

les libraires vendent les dictionnaires

les dictionnaires sont vendus par les libraires

les dictionnaires ne se vendent que par des libraires

on a viré cet employé

cet employé s’est fait virer

The active and the different types of passive are analyzed as alternative configurations of the valency terms of a predicator, and are therefore called “reformulations” (cf. P&S: 64). For example, the valency terms of the predicator “*vendre* P0 P1 (P2)”, and the corresponding referents, also exist in the passive voice, although with different syntactic functions. Together, the active and passive formulations, linked by relations between their terms, form the “formulation group”.

The field RP lists the possible passive reformulations observed for a formulation group.

passif être	passive reformulation formed using the verb “être”	<i>ils sont vendus (par eux)</i>
se passif	passive reformulation formed using a reflexive paradigm	<i>ils se vendent (par eux)</i>
se faire passif	passive reformulation formed using the verb “se faire”	<i>il s’est fait virer (par eux)</i>

The truth value of an active proposition implies that of the corresponding passive reformulations, and vice versa. This relation of mutual implication (or logical equivalence) forms the essential and necessary characteristic of the reformulations.

Thus, for the same predicator “*charger*”, we have two formulation groups each with its own passive formulations on the basis of these equivalence relations:

charger 1 (P0 P1 P3)

elles chargent ceux-là de ceci (elles chargent les wagons de colis postaux)

↔ *ceux-là sont chargés de ceci par elles*

↔ *ceux-là ne se chargent de ceci que par elles*

charger 2 (P0 P1 PP)

elles chargent ceci sur ceux-là (elles chargent ces colis sur les wagons)

↔ *ceci est chargé sur ceux-là par elles*

↔ *ceci ne se charge sur ceux-là que par elles*

The equivalence relations found within each formulation group do not hold between for example the active formulation of “*charger 2*” and the passive formulations of “*charger 1*”. There is an implication from the formulation group “*charger 1*” to the other group, but not the other way round.

8 Auxiliaries

The AUX field specifies the auxiliary used in compound tenses of the active voice. Certain verbs take either « avoir », either « être », or both, according to the formulation group.

Le contrôleur est déjà passé ici. [P0 (PL), 59490, être]

Ce pays a passé par tous les degrés de la dictature et de l’exploitation. [P0 PP<par>, 59500, avoir]

Après les présentations on est/a passé du hall au salon. [P0 (PDL) PL, 59510, avoir/être]

Ca s’est passé ici-même il y a un demi-siècle. [pseudo_se, P0 (PL) (PT), 59520, être]

Ils sont passés me dire bonjour. [adjunct_verb, 59540, être]

Son héritage a passé à ses enfants. [P0 PP<à>, 59550, avoir]

Elle m’a passé ce virus. [P0 P1 P2, 59560, avoir]

Elle est passée commandant des sapeurs-pompiers. [P0 P1, 59580, être]

Le rouge est passé à l’orange au soleil. [P0 (PP<à>), 59590, être]

Ce film est/a passé dans toutes les grandes salles. [P0 PL, 59660, avoir/être]

Remarks.

Pronominal verbs (pseudo_se) use « être » : *il s'est évanoui*. Resultative constructions also take « être » : *les balises étaient cachées derrière la végétation*.

When a P1 paradigm contains the pronoun « se » among other pronouns, the auxiliary used in constructions with the pronoun « réfléchi » or « réciproque » will of course be « être », whereas in the other cases, it corresponds to the auxiliary indicated in the AUX field.

Il l'a trompée plusieurs fois.

Ils se sont trompés déjà quelques mois après le mariage.

Nous ne nous sommes jamais trompés.

9 Construction specificities related to the lexicalization

9.1 Non assertive

Some predicators are used almost exclusively in negative constructions, in interrogative ones (more precisely: containing a suspensive element), or in affirmative constructions containing elements expressing a restriction (*ne ... guère, peu, rien, jamais, aucun...*).

elle n'en revient pas (de cet affront/de cette surprise) – ?elle en revient

il n'a pas bronché quand on l'a réprimandé

tu n'y couperas pas – comment y couper ? –

tu n'y couperas que s'il y a un volontaire

sa fidélité au régime ne s'est jamais démentie

c'est une maladie qui ne pardonne pas – qui pardonne difficilement

il ne pipait mot de l'accord avec les syndicats

*elle n'y peut rien – *elle n'y peut pas – qu'est-ce que j'y peux ?*

In the field VTYPE, such entries are tagged as “non_assertive”.

```
VAL$      broncher: P0 | NonAssert
VTYPE$    predicator simple non_assertive
VERB$     BRONCHER/broncher
NUM$      12570
EG$       elle n'a pas bronché
TR_DU$    z verzetten, protesteren, morren
TR_EN$    offer resistance
FRAME$    subj:pron|n:[hum]
P0$       qui, je, nous, elle, il, ils, on, celui-ci, ceux-ci, il_en_Q
AUX$      avoir
```

8.2 Internal cause

Some predicators are accompanied by a complement introduced by the preposition “de”, which expresses the internal cause of the process: “*elle bondit de joie*”. This complement is not proportional with a suspensive or clitic pronoun (**elle bondit de quoi, *elle en bondit*) and therefore it does not correspond to a valency position.

bondir d'impatience, de surprise, de joie

il brûle de fièvre/ brûler d'amour

crier de douleur

il frétilait de joie

ses succès l'ont gonflé d'orgueil

être gonflé d'orgueil
grelotter de peur
griller d'impatience
je languissais d'amour pour vous
il pétille d'esprit

These entries have a field LABEL with the tag “internal_cause”.

```
VAL$      exploser: P0 PX<de>
VTYPE$    predicator simple
VERB$     EXPLOSER/exploser
NUM$      41805
EG$       il a explosé de colère
TR_DU$    uitbarsten
TR_EN$    explode
FRAME$    subj:pron|n:[hum], internal_cause<de>
P0$       qui, je, nous, elle, il, ils, on, celui-ci, ceux-ci
PX_PR$    de
PX$       n ;
LABEL$    internal_cause
AUX$      avoir
```

10 Linked constructions

Sometimes relationships can be established between the terms of alternative valency frames of the same verb, even though in some cases these terms have different syntactic functions. Such relationships rest on the co-reference between the referents pointed at by the terms in the alternative valency slots. The formulations groups implied by the co-reference relation are called linked constructions.

8.1 Constructions linked by the feature of “complexity”

The following construction couple

nous bavardons
je bavarde avec toi

implies a relation between, on one hand, a predicator “*bavarder_1 P0*” governing a valency term referring to a referent R with the feature of “complexity” (“*nous*”) and, on the other, hand a second predicator “*bavarder_2 P0 PP<avec>*” governing two valency terms pointing at two referents (“*je*” and “*toi*”) that are part of the “complex” referent R.

In the above example, the “complex” term occupies the position P0 and the member terms the position P0 and PP<avec>. Numerous couples or constructions exist that are analogous, except for the syntactic function of the terms. The verb may have additional valency positions which do not participate in the relation.

P0 ~ P0 PP<avec>

ils interfèrent ~ celui-ci interfère avec celui-là
ils flirtent ~ il flirte avec elle
nous fraternisons ~ je fraternise avec lui
nous complotons de faire ça ~ je comploté avec lui de faire ça

P0 ~ P0 PP<contre>

ils frottent ~ ça frotte contre ceci

Verbs with pseudo_se present the same relations.

P0 se ~ P0 se P2

*ils s'enchaînent ~ celui-ci s'enchaîne à celui-là
ça se joint à ça ~ ils se joignent*

P0 se - P0 se PP<avec>

*ils s'entendent ~ il s'entend avec elle
ils se sont expliqués ~ il s'est expliqué avec elle
nous nous sommes fâchés ~ je me suis fâché avec lui
ils se sont fiancés ~ il s'est fiancé avec elle
elles se fondent ~ elle se fond avec celle-là
nous nous sommes réconciliées ~ je me suis réconcilié avec elle
je m'en entretiens avec vous ~ nous nous en entretenons*

P0 se - P0 se PP<contre>

*nous nous sommes fâchés ~ je me suis fâché contre lui
nous luttons ~ je lutte contre lui*

P0 se - P0 se PP<dans>

*ils s'enchevêtrent ~ l'un s'enchevêtre dans l'autre
ils s'imbriquent ~ ça s'imbrique là-dedans*

In some pairs, only the predicator with a complex term is of the type pseudo_se.

P0 se - P0 P2

ils s'équivalent ~ il équivaut à celui-là

P0 se - P0 PP<avec>

ils se le sont partagé (entre eux) ~ il l'a partagé avec lui

Analogous phenomena are found for the P1.

P1 - P1 PP<avec>

*je les fonds ~ je le fonds avec celui-là
je les harmonise ~ j'harmonise celui-ci avec celui-là
je les identifie ~ je l'identifie avec celui-là
je les intervertis ~ j'intervertis celui-ci avec celui-là
je les marie ~ je la marie avec lui
accorder les choses ~ accorder ceci avec cela*

P1 - P1 P3

*il nous sépare ~ il me sépare de lui
je les rapproche ~ je rapproche celui-ci de celui-là*

P1 - P1 P2

*je les enchaîne ~ je l'enchaîne à celui-là
je les juxtapose ~ je juxtapose ceci à cela
je les fixe ~ je l'y fixe
je les joins ~ je le joins à celui-là
accoler deux choses ~ accoler un nom à qch*

P1 - P1 PP<dans>

*je les enchevêtre ~ j'enchevêtre l'un dans l'autre
je les imbrique ~ j'imbrique l'un dans l'autre*

P1 - P1 PP<sur>

je les rive ~ je rive l'un sur l'autre

A predicator can present several linked constructions at the same time. This is the case of “fusionner” in the following examples:

P1 : je les fusionne ~ je fusionne l'un avec l'autre

P0 : ils ont fusionné ~ il a fusionné avec elle

In the valency dictionary, these linked constructions are indicated in the entries of both the predicators that participate in the relationship. Both entries will have a field LCCOMP indicating the numbers of the entries of the couple, as well as some concise examples.

```
VAL$      s'apparenter: P0 P2
VTYPE$   predicator simple pseudo_se
VERB$    APPARENTER/apparenter
NUM$     6130
EG$      c'est une espèce qui s'apparente à celle que nous venons de décrire
TR_DU$   verwant z, lijken op
TR_EN$   be related (to)
FRAME$   pseudo_se, subj:pron[n:[nhum,?abs], objâ:pron[n:[nhum,?abs]
P0$      que, elle, il, ils, ça, ceci, celui-ci, ceux-ci
P2$      quoi, y, ça, ceci, celui-ci, ceux-ci
LCCOMP$  6130-6150 il s'apparente à celui-là, ils s'apparentent
LCRES$   6130-? être apparenté
AUX$     être
```

9.2 Linked constructions of the type “active – resultative”

The dictionary marks the relation between a (“active”) formulation group and the corresponding “resultative” construction and indicates the possible correspondences between the terms of the two entries. In the following example the referents P1 and P0 of the “active” construction correspond respectively to the referents P0 and P3 of the resultative formulation. This is specified as: P1/P0 P0/P3.

nous l'estimons tous ~ il est estimé de nous tous

Information in the resultative entry

The field LCRES of a resultative entry indicates the number of the corresponding “active” entry (it appears as the first number of the field, before the hyphen), the correspondence between the valency positions (using couples such as “term of the active / term of the resultative”), possibly followed by an example (after the colon):

```
VAL$      être estimé: P0 P3 | Resultative
VTYPE$   être_PPE
VERB$    ESTIMER/estimer
NUM$     39785
EG$      le chef a toujours été estimé de ses ressortissants
TR_DU$   geacht zijn
TR_EN$   be esteemed/respected
P0$      qui, je, nous, elle, il, ils, on, celui-ci, ceux-ci
P3$      qui, en, lui_ton, eux, celui-ci, ceux-ci
LCRES$   39780-39785 P1/P0 P0/P3 : je l'estime, il est estimé de moi
AUX$     être
```

In the cases where the resultative refers to several active entries, there will be as many fields LCRES.

je me l'attache – il est attaché à moi : P1/P0 P2/P2

je m'attache à ce pays – je suis attaché à ce pays

```

VAL$      être attaché: P0 P2 | Resultative
VTYPE$    être_PPE
VERB$     ATTACHER/attacher
NUM$      8560
EG$       elle est attachée à son mari
TR$       gehecht z aan
P0$       qui, je, nous, elle, il, ils, on, celui-ci, ceux-ci
P2$       quoi, qui, y, lui_ton, eux, ça, ceci, celui-ci, ceux-ci
LCRES$    8520-8560 P0/P0 P2/P2
LCRES$    8470-8560 P1/P0 P2/P2 : je me l'attache, il est attaché à moi

```

The following table lists the occurring correspondences with their frequency.

```

17 P0/P0
3 P0/P0 P2/P2
1 P0/P0 PP(avec)/P3
1 P0/P0 PP(pour)/PP(pour)
3 P0/P1
1 P0/P1 P0/P3
1 P0/zero
60 P1/P0
68 P1/P0 P0/P3
1 P1/P0 P0/P3 P2/P2
1 P1/P0 P0/PP(avec)
2 P1/P0 P0/PP(dans)
1 P1/P0 P0/PP(devant)
7 P1/P0 P2/P2
8 P1/P0 P3/P3
1 P1/P0 P3/PP(pour)
2 P1/P0 PP/PP
1 P2/P0 P0/P3
1 PP(dans)/P3

```

Information in the “active” entries

The relation between a formulation group and the corresponding resultative is not made explicit in a systematic manner for the “active” entries, but can easily be recovered from the resultative entries. In certain cases the active entry gives only part of the information, as in the following example, where the question mark appears at the place (to the right of the dash) for the identifier of the resultative entry “*être avancé*”, if it exists:

```

VAL$      s'avancer: P0
VTYPE$    predicator simple pseudo_se
VERB$     AVANCER/avancer
NUM$      9460
EG$       le temps s'avance sans qu'on s'en aperçoive
TR_DU$    vorderen, voortgaan
TR_EN$    progress
FRAME$    pseudo_se, subj:pron|n:[abs]
P0$       que, elle, il, ils, ça, celui-ci, ceux-ci
LCRES$    9460-? être avancé
AUX$      être

```

9.3 Other linked constructions

The linked constructions other than LCCOMP and LCRES are mentioned in the dictionary without specifying the types.

je l'éteins, il s'éteint

je les étale sur plusieurs mois, ils s'étalent sur plusieurs mois

ça l'éternise, il s'éternise

je l'en étaie, ça l'étaie

ça m'étonne, je m'étonne de ça

ça m'étouffe, j'étouffe

The field LC indicates the identifiers of the linked entries, followed by a short example.

```

VAL$      évacuer: P0 P1
VTYPE$    predicator simple
VERB$     EVACUER/évacuer
NUM$      40830
EG$       la séance est interrompue, vous êtes priés d'évacuer la salle
TR_DU$    ontruimen
TR_EN$    evacuate
FRAME$    subj:pron|n:[hum,+complex], obj:pron|n:[nhum]
P0$       qui, nous, ils, on, ceux-ci
P1$       que, la, le, les, en Q, celui-ci, ceux-ci
LC$       40810-40830 je les évacue de la ville, ils évacuent la ville
AUX$      avoir

```

Please note that (as mentioned earlier, in § 4.2) the linked constructions of the type

les pilotes s'arrosent l'un l'autre de champagne
l'un arrose l'autre de champagne

(with “*l'un*” in P0 and “*l'autre*” in P1) are not mentioned under the field LC, but are indicated by the presence of the element “*l'un l'autre*” in the paradigm P1.

11 References

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