Annotation Guidelines

Richard Huyghe
richard.huyghe@unifr.ch

Alizée Lombard
alizee.lombard@unifr.ch

Justine Salvadori
justine.salvadori@unifr.ch

Sandra Schwab
sandra.schwab@unifr.ch

University of Fribourg (Switzerland)
February 2021

Version 1.0

Contents

List of Abbreviations

agt	Agent
anm	Animate
art	Artifact
art*cog	Artifact*Cognitive
ben	Beneficiary
cau	Cause
cog	Cognitive
cog*evt	Cognitive*Event
coll	Collective
cur	Currency
des	Destination
dis	Disease
dom	Domain
evt	Event
evt*sta	Event*State
exp	Experiencer
ext	Extent
ins	Instrument
loc	Location
man	Manner
mea	Measure
n	No
nat	Natural
pat	Patient

phn	Phenomenon
ppt	Property
pth	Path
pvt	Pivot
res	Result
src	Source
sta	State
sti	Stimulus
thm	Theme
tim	Time
tpc	Topic
y	Yes

General Principles

This annotation guide is part of a research project on the semantics of deverbal nouns in French[1]. The objective is to contribute to a better understanding of how the meaning of nouns derived from verbs is structured. It focuses on the semantic classification of deverbal nouns, in relation to morphological structure, base verb properties, and the (non-)preservation of verbal properties in the derivational process. The many-to-many relations between form and meaning and the polysemy of deverbal nouns are thus investigated.

The project is based on the detailed analysis of a large sample of deverbal nouns taken from an extensive corpus of contemporary French[2]. By combining qualitative and quantitative approaches, the project aims to reveal the main tendencies in the morphosemantic construction of deverbal nouns.

1.1 Annotated properties

Three groups of semantic properties are annotated:

- the semantic type of deverbal nouns;

- the lexical aspect of base verbs and deverbal nouns;

- the semantic roles assigned by base verbs and deverbal nouns.

1.2 Semantic identification

The semantic analysis proposed here is based on the assumption that word-formation processes apply to lexemes, understood as semantically specified items. An ambiguous noun or verb corresponds to different lexemes, whether the ambiguity is due to polysemy or homonymy. A noun or a verb is considered ambiguous if any of its analyzed semantic properties has two or more values.

The semantic annotation applies to the lexical properties of nouns and verbs. Contextually coerced interpretations are not considered in the annotation. Lexical ambiguity is signalled in the dataset by adding numeral subscripts to the lemmas and by splitting the entries in case of nominal ambiguity (see Section 1.5).

---

[1]Swiss National Science Foundation project n° 100012_188782.
[2]FRCOW16A (Schäfer 2015; Schäfer and Bildhauer 2012).

1.3   Verb-noun pairing

The annotation is centered on nouns insofar as they are morphologically related to a verb. Entries in the resulting dataset are verb-noun pairs. The pairing of verbs and nouns is based on the principle of closest semantic proximity, i.e. in case a verb or a noun is ambiguous, the verbal and nominal lexemes that share the more aspectual and role-assigning properties are paired together.

1.4   Verb alternations

Verbs that allow for systematic syntactic alternations are encoded as unique lexical entries. Their role-assigning properties are encoded according to the patterns described in Table 1.1.

	A ✗	B (encoded form) ✓
#1	*Elle charge le camion de bûches.*	*Elle charge des bûches* (thm) *dans le camion* (des).
#2	*Sacha et Tom discutent.*	*Sacha* (agt) *discute avec Tom* (agt).
#3	*Je mélange des couleurs.*	*Je mélange le bleu* (pat) *et le rouge* (pat).
#4	*Le jardin pullule de fourmis.*	*Les fourmis* (thm) *pullulent dans le jardin* (loc).
#5	*L'armoire déborde de vêtements.*	*Les vêtements* (thm) *débordent de l'armoire* (src).
#6	*Il repasse le contour avec son doigt.*	*Il repasse son doigt* (thm) *sur le contour* (pth).
#7	*Il saute au-dessus de la barrière.*	*Il* (thm) *saute la barrière* (pth).

Table 1.1: Verb alternations

Se-V forms are identified as possible lexical entries in case they are:

– intrinsic verb forms (e.g. *se méfier* vs **méfier*);

– autonomous verb forms (e.g. *Y s'apercevoir de Z* vs **X aperçoit Y de Z*);

– anticausative verb forms (e.g. *Y s'affaiblir* vs *X affaiblir Y*).

1.5   Annotation Steps

The annotation task is performed following three steps:

1. Annotation of the semantic type of the derived noun

2. Annotation of the aspectual and role-assigning properties of the corresponding base verb

3. Annotation of the aspectual and role-assigning properties of the derived noun

A new entry is created in the dataset if:

– the derived noun is ambiguous with respect to ontological or relational semantic type (Step 1);

– the derived noun is ambiguous with respect to any aspectual or role-assigning property (Step 3).

NB: Only the verb senses that are related to the identified noun senses are annotated.

Verbs are referenced according to the following criteria:

– Transitive verbs are referenced before intransitive verbs.

– Numeral subscripts are added if there are two or more verb senses or if the same verb sense appears in the dataset two or more times.

Nouns are referenced according to the following criteria:

– Numeral subscripts are added if there are two or more noun senses.

– Noun senses derived from transitive verbs are referenced before nouns derived from intransitive verbs.

– Transpositional senses are referenced before other relational types.

1.6   References

The annotation of verb-noun pairs is based on a series of definitions and linguistic tests detailed in the present guide. Many of these definitions and tests are taken from or adapted from existing works. The main references used to develop the annotation criteria are the following:

– Nominal classification: Barque et al. (in preparation), Gross and Kiefer (1995), Godard and Jayez (1996), Flaux and Van de Velde (2000), Kleiber et al. (2012), Huyghe (2015);

– Aspectual properties: Vendler (1967), Dowty (1979), Verkuyl (1993), Hay, Kennedy, and Levin (1999), Piñón (1999), Meinschaefer (2004), Rothstein (2004), Haas, Huyghe, and Marín (2008), Haas (2009), Heyd and Knittel (2009), Huyghe and Jugnet (2010), Balvet et al. (2011), Huyghe (2011), Haas and Jugnet (2013), Huyghe (2014), Dugas, Haas, and Marín (2019);

– Semantic roles: Unified Verb Index (University of Colorado Boulder n.d.), Framenet (Baker, Fillmore, and Lowe 1998), VerbNet (Kipper-Schuler 2005), PropBank (Palmer, Gildea, and Kingsbury 2005), LIRICS (Petukhova and Bunt 2008), SensoComune (Vetere et al. 2011), VerbeNet (Danlos, Nakamura, and Pradet 2014; Pradet, Danlos, and Chalendar 2014).

Verb Annotation Instructions

2.1 Number of Senses

Criterion Number of meanings of the verb that are related to deverbal nouns

Label /nb_sens_v/

Options ⟦any integer⟧

Example *boursicoter* → ⟦1⟧

2.2 Transitivity

Criterion Transitivity of the base verb (i.e. subcategorization of direct objects)

Label /v_trans/

Options

- ⟦y⟧ = The base verb allows for direct objects
- ⟦n⟧ = The base verb does not allow for direct objects

Remarks

- In case of ⟦y⟧ , direct objects may be implicit (e.g. *Pierre mange*).
- In case of ⟦n⟧ , verbs may subcategorize oblique arguments, but not direct object arguments.

Examples

- *scruter* → ⟦y⟧ , *lire* → ⟦y⟧ , *concrétiser* → ⟦y⟧
- *boursicoter* → ⟦n⟧ , *se concrétiser* → ⟦n⟧

2.3 Dynamicity

Criterion Dynamicity of the base verb

Label /v_dyn/

Options

- y = The base verb denotes dynamic eventualities
- n = The base verb denotes stative eventualities

Tests

Dynamicity Test #1
X est en train de V (Y)
✓ → y   ✗ → Test #2

Dynamicity Test #2
– Qu'a fait X hier? – X a Vé (Y) OR – Que s'est-il passé hier? – X a Vé (Y)
✓ → y   ✗ → n

Remarks

- Tests #1 and #2 must be applied in order.
- In Test #1, *X est en train de V (Y)* must not have an inchoative reading.

Examples #1

(1)   a. Camille est en train de manger une fondue. ✓
      b. Le renard est en train de chasser une proie. ✓
      c. La neige est en train de fondre. ✓

(2)   a. ??Sacha est en train de posséder trois voitures. ✗
      b. ??Valéry est en train de connaître cette plante. ✗
      c. ?Marion est en train d'adorer cette situation. ✗
      d. ?Le néon est en train d'éclairer le couloir. ✗
      e. L'armée ennemie est en train de capituler.
          ✗ inchoative reading

Examples #2

(3)   a. – Qu'a fait Sacha hier? – #Elle a possédé trois voitures. ✗

          b. – Qu'a fait Marion hier? – #Elle a adoré cette situation. ✗

(4)   a. – Que s'est-il passé hier? – #Valéry a connu cette plante. ✗

          b. – Que s'est-il passé hier? – #Le néon a éclairé le couloir. ✗

2.4 Durativity

Criterion Durativity of the base verb

Label /v_dur/

Options

    – $\boxed{\text{y}}$ = The base verb denotes durative eventualities

    – $\boxed{\text{n}}$ = The base verb denotes non-durative eventualities

Interdependence

    – Stative verbs are durative ($\boxed{\text{n}}$ to Dynamicity → $\boxed{\text{y}}$ to Durativity).

    – Verbs of variable telicity are durative ($\boxed{\text{v}}$ to Telicity → $\boxed{\text{y}}$ to Durativity).

Tests

Durativity Test #1
X a commencé à V (Y)
OR
X a continué de V (Y)
OR
X a arrêté de V (Y)
✓ → $\boxed{\text{Test \#2}}$ ✗ → $\boxed{\text{n}}$

Durativity Test #2
X a Vé (Y) en x temps
OR
X a Vé (Y) pendant x temps
✓ → $\boxed{\text{y}}$ ✗ → $\boxed{\text{n}}$

Remarks

- Tests #1 and #2 must be applied in order.
- X and Y must denote delimited entities (e.g. *L'enfant mange une pomme* vs. *L'enfant mange des pommes* and *Des enfants mangent une pomme*).
- *x temps* is a duration expression in which *x* is a numeral determiner and *temps* is a temporal unit (e.g. *seconde, minute, heure, jour, mois*).
- The *en* complement must relate to a dynamic process, not to a preparatory phase.
- The duration complement introduced by *pendant* must relate to a dynamic process, not to a post-phase.
- The *pendant* complement must not create an iterative effect, except for inherently frequentative verbs (e.g. *sautiller, clignoter*, etc.).

Examples #1

(5) a. Il a commencé à atteindre son objectif. ✓
     b. Camille a continué de chanter. ✓
     c. Pierre a arrêté de martyriser sa victime. ✓

(6) a. *Il a {commencé à/continué d'/arrêté d'} apercevoir un avion. ✗
     b. *Jeanne a {commencé à/continué de/arrêté de} naître. ✗
     c. J'ai {commencé à/continué de/arrêté de} de notifier ce problème. ✗ `iterative effect`

Examples #2

(7) a. Jeanne a modernisé le programme en trois mois. ✓
     b. Albert a chanté pendant trois heures. ✓
     c. J'ai cuisiné ce plat en vingt minutes. ✓

(8) a. J'ai atteint le sommet en deux jours. ✗ `preparatory phase`
     b. J'ai notifié ce problème à Valéry pendant deux ans. ✗ `iterative effect`
     c. L'enseignant a exclu Sacha pendant quinze minutes. ✗ `post-phase`

2.5 Telicity

Criterion Telicity

Label /v_tel/

Options

- $\boxed{y}$ = The base verb denotes telic eventualities
- $\boxed{n}$ = The base verb denotes atelic eventualities
- $\boxed{v}$ = The base verb denotes eventualities of variable telicity

Interdependence

- Stative verbs are atelic ($\boxed{n}$ to Dynamicity → $\boxed{n}$ to Telicity).
- Non-durative verbs are telic ($\boxed{n}$ to Durativity → $\boxed{y}$ to Telicity).

Tests

Telicity Test #1
X a Vé (Y) en x temps
✓ → $\boxed{\text{Test \#2}}$ ✗ → $\boxed{n}$

Telicity Test #2
X a {beaucoup/considérablement} Vé (Y)
✓ → $\boxed{v}$ ✗ → $\boxed{y}$

Remarks

- Tests #1 and #2 must be applied in order.
- X and Y must denote delimited entities (e.g. *L'enfant mange une pomme* vs. *L'enfant mange des pommes* and *Des enfants mangent une pomme*).
- *x temps* is a duration expression where *x* is a numeral determiner and *temps* is a temporal unit (e.g. *seconde, minute, heure, jour, mois*).
- The *en* complement must relate to a dynamic process, not to a preparatory phase.
- The *beaucoup* and *considérablement* complements must have an intensive reading, not an extensive reading.
- Verbs of variable telicity often derive from gradable adjectives (e.g. *ralentir > lent, refroidir > froid*).

Examples #1

(9) a. J'ai rénové mon chalet en trois mois. ✓

 b. Elle a complété le questionnaire en quarante minutes. ✓

 c. Sacha a écrit son premier roman en deux ans. ✓

(10) a. ??Le bourreau a martyrisé sa victime en deux mois. ✗

 b. ??Sacha a aperçu un avion en quatre minutes. ✗

 c. Chloé a démissionné en deux heures. ✗ `preparatory phase`

Examples #2

(11) a. Jeanne a considérablement augmenté le prix du lait à la ferme. ✓

 b. Le blé a beaucoup séché depuis hier matin. ✓

 c. L'économie a considérablement ralenti en juin. ✓

(12) a. Camilla a beaucoup mangé.
 ✗ `extensive reading (quantitative)`

 b. Marion a beaucoup marché.
 ✗ `extensive reading (durative)`

 c. Sacha a beaucoup réparé sa voiture.
 ✗ `extensive reading (iterative)`
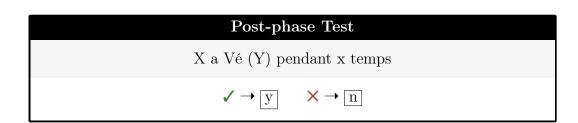
2.6   Post-phase

Criterion Post-phase

Label /v_post_phase/

Options

 – $\boxed{\text{y}}$ = The base verb denotes eventualities that include a post-phase
 – $\boxed{\text{n}}$ = The base verb denotes eventualities that do not include a post-phase

Test

Post-phase Test
X a Vé (Y) pendant x temps
✓ → $\boxed{\text{y}}$ ✗ → $\boxed{\text{n}}$

Remarks

- X and Y must denote delimited entities (e.g. *L'enfant mange une pomme* vs. *L'enfant mange des pommes* and *Des enfants mangent une pomme*).
- The *pendant* complement must relate to a post-phase, not (only) to a dynamic process.

Examples

(13) a. Le roi a emprisonné Jeanne pendant deux ans. ✓
      b. Le chat a disparu pendant deux semaines. ✓
      c. L'arbitre a exclu le joueur pendant dix minutes. ✓

(14) a. Le dentiste a aurifié ma dent cariée pendant une heure. ✗
      b. Mon voisin a rénové son chalet pendant trois mois. ✗
      c. Elle a maintenu sa tête sous l'eau pendant trente secondes. ✗

2.7 Semantic Roles

Criteria Semantic role assigned by the verb to its subject, object or oblique argument

Labels /v_rol_subj/, /v_rol_obj/, /v_rol_obq/

Options any role from the list below , na if there is no argument

List

- Agent (agt)
- Beneficiary (ben)
- Cause (cau)
- Destination (des)
- Experiencer (exp)
- Extent (ext)
- Instrument (ins)
- Location (loc)
- Manner (man)
- Path (pth)
- Patient (pat)
- Pivot (pvt)
- Result (res)
- Source (src)

    – Stimulus (sti)

    – Theme (thm)

    – Topic (tpc)

Precautions Annotators should be aware of the following:

    – Semantic roles are annotated for arguments that are both semantic and syntactic. For example, *avec un couteau* in (15a) is not annotated because it is a semantic but not a syntactic argument of *trancher* (15b); *à Pierre* in (16a) is not annotated because it is a syntactic but not a semantic argument of *parler* (16b).

(15)   a. Il a tranché le pain avec un couteau bien aiguisé.
         b. Il a tranché le pain, et il l'a fait avec un couteau aiguisé.

(16)   a. Elle a parlé à Pierre.
         b. ??Elle a parlé, et elle l'a fait à Pierre.

    – When identifying the role of a given argument, a broad range of scenarios must be considered (e.g. 17a-17b), i.e. not only the usual situations that involve animate entities (17c).

(17)   a. La canicule a tué Camille.
         b. Le rocher a tué Camille en tombant.
         c. Mon voisin a tué Camille.

    – Semantic role assignment is described for lexical entries, i.e. it should encompass all possible variants for each argument type (e.g. *tuer* is considered to assign the role of Cause by default, although some subjects are Agents).

2.7.1 Cause

> **Cause (cau)**
>
> Entity that initiates an eventuality (not necessarily intentionally), or is the reason why an eventuality occurs

Remarks A Cause role is lexically assigned by causative verbs that do not imply intentionality (whether intentionality is not involved in the eventuality or is only accidentally observed).

Hierarchy Cause subsumes Agent and Stimulus. Agents are Causes that are necessarily intentional. Stimuli are Causes that initiate a psychological, perceptive or physiological state.

Concurrent roles Unlike Causes:

– Experiencers are in or enter a psychological, perceptive or physiological state, but do not cause anything;

– Pivots are attributed a property, but do not cause anything.

Prototypical examples

(18)   a. La tempête a détruit le chalet.
          b. Sacha a détruit (par mégarde) le bricolage de sa soeur.

(19)   a. La crise a déclenché un mouvement de réformes.
          b. Le pilote a (involontairement) déclenché l'alarme.

(20)   a. La canicule a tué de nombreuses personnes.
          b. Valéry a tué Camille (par accident).

Marginal examples

(21)   a. Le satellite a détecté une rafale de rayons gamma.
          b. Mon chat ronfle.
          c. Le bébé bave.

2.7.2   Agent

Agent (agt)
Entity that brings about an event intentionally

Remarks Agents are prototypically animate entities. They also include machines, robots, vehicles, etc. in case the event is fundamentally described by the verbal predicate as intentionally performed by an autonomous entity.

Hierarchy Agent falls under Cause. An Agent is a Cause that is necessarily intentional.

Concurrent roles Unlike Agents:

– Stimuli cause states, not necessarily intentionally;

– Experiencers are in or enter a psychological, perceptive or physiological state, and do not perform actions;

– Pivots are attributed a property, and do not perform a actions.

– Themes are not necessarily intentional

Prototypical examples

    (22)   a. Camille a assassiné son frère.

                b. Le chat a chassé une souris.

                c. La classe a corrigé le devoir avec application.

Marginal examples

    (23)   a. L'androïde a attaqué le commissariat.

                b. Romain se rend à Paris.

                c. Le vendeur a amadoué son client.

2.7.3   Stimulus

Stimulus (sti)
Entity that causes a psychological, perceptive or physiological state

Remarks Stimuli affect Experiencers.

Hierarchy Stimulus falls under Cause. A Stimulus is a Cause that initiates a psychological, perceptive or physiological state.

Concurrent roles Unlike Stimuli:

    – Agents are necessarily intentional Causes, and necessarily perform actions.

Prototypical examples

    (24)   a. La crise a traumatisé Pierre.

                b. Ce tableau plaît beaucoup à Sacha.

                c. Le film amuse les enfants.

    (25)   a. Pierre a senti une odeur de croissant.

                b. Sacha a entendu des hurlements inquiétants.

                c. J'ai vu un cerf ce matin.

Marginal examples

    (26)   a. {Cette option / Pierre} a séduit Jeanne.

                b. {La situation / Pierre} agace Jeanne.

    (27)   a. Le pull en laine que je porte me gratte.

                b. La fumée lui picote les yeux.

2.7.4 Pivot

Pivot (pvt)

Entity that is attributed a property, or is in a non-stimulated condition

---

Remarks A Pivot is prototypically the subject of an individual-level predicate that denotes an inherent property. A Pivot can nevertheless be in an episodic state, provided it is not a psychological, perceptive, physiological or locative state.

Concurrent roles Unlike Pivots:

- Causes bring about eventualities;
- Experiencers are in a transitional psychological, perceptive or physiological state;
- Themes are located entities;
- Topics are involved in cognitive activities.

Prototypical examples

(28) a. Marie possède trois vélos.
      b. Le glacier s'étend sur 56 km2.
      c. Le noir va bien avec le rouge.

Marginal examples

(29) a. Le poster présente les gestes de premiers secours.
      b. Le texte décrit une bataille qui a eu lieu il y a 100 ans.
      c. Les règles interdisent de fumer.

2.7.5 Experiencer

Experiencer (exp)

Entity that is in or enters a particular state because of a psychological, perceptive or physiological stimulation

---

Remarks Experiencers are prototypically animate entities. They can be affected by Stimuli. They do not cause anything.

Concurrent roles Unlike Experiencers:

- Causes necessarily bring about an eventuality;
- Pivots are in a non-psychological, non-perceptive and non-physiological state;
- Themes are in a locative state.

Prototypical examples

(30)   a. La crise a traumatisé Pierre.

          b. Ce tableau plaît beaucoup à Sacha.

          c. Le film amuse les enfants.

          d. Paul s'énerve.

(31)   a. Mon voisin a senti une odeur de croissant.

          b. Sacha a entendu des hurlements inquiétants.

          c. Camille a aperçu un cerf ce matin.

          d. Marie frissonne.

Marginal examples

(32)   a. Le pull en laine que je porte me gratte.

          b. Les épines picotent Pierre.

(33)   Le renard pense à son futur dîner.

2.7.6   Patient

Patient (pat)
Entity that undergoes a (potential) change of structure

Remarks Patients can be affected by an event triggered by a Cause or an Agent, but the cause for structural change is not necessarily expressed.

Concurrent roles Unlike Patients:

– Results are entirely created through a process;

– Themes, Beneficiaries and Topics do not undergo a change of structure.

Prototypical examples

(34)   a. La tempête a détruit le chalet.

          b. Sacha a assassiné son frère.

          c. La classe a corrigé le devoir.

          d. Valéry désosse une cuisse de poulet.

(35)   a. Mireille se meurt.

          b. La bombe a explosé.

          c. Le pays s'est beaucoup transformé.

          d. Le vernis a durci.

Marginal examples

(36)   a. Le tonneau fuit.

          b. La voiture percute le mur.

          c. Camille gaspille sa nourriture.

          d. Sacha consomme de l'électricité.

2.7.7 Result

Result (res)
Entity that is created through an event

Remark Results are created by Causes or Agents.

Concurrent roles Unlike Results:

– Patients, Beneficiaries, Themes, and Topics are entities that preexist to the eventuality.

Prototypical examples

(37) a. Pierre a fabriqué une bibliothèque.
      b. Marion a creusé un trou.
      c. Sacha a peint un tableau.
      d. L'écrivain a inventé une langue très complexe.
      e. Mes parents ont cuisiné un gâteau.

Marginal examples

(38) a. Les négociations ont abouti à un accord.
      b. Ces mesures ont permis une baisse des émissions de CO2.

2.7.8 Beneficiary

Beneficiary (ben)
Entity that is advantaged or disadvantaged by an event or a state

Remarks Beneficiaries correspond prototypically to dative arguments.

Concurrent roles Unlike Beneficiaries:

– Patients undergo a change of structure;

– Results are created through a process;

– Themes are involved in a locative relation;

– Topics are not (dis)advantaged by an eventuality.

Prototypical examples

(39) a. Marcel a offert des livres à son ami.
      b. Paul a pardonné à son voisin.
      c. Pierre a promis à sa soeur de ne plus se droguer.
      d. Les règles nous interdisent de fumer.

Marginal examples

(40)   a. L'économie a profité de conditions propices.
           b. Arnaud caresse **un petit chat roux**.
           c. La météo a pénalisé **la production viticole**.
           d. J'ai arnaqué **mon voisin**.
           e. La promulgation de la loi a aidé **notre cause**.
           f. Son coup de sang a coûté trois matches de suspension **au joueur**.

2.7.9   Theme

Theme (thm)
Entity that is in a certain location or changes location

Remarks Themes can be statically related to a Location, or change location through a process initiated by an Agent or a Cause. They can also be (non-intentional) self-moving items.

Concurrent roles Unlike Themes:

- Agents are necessarily intentional;
- Patients, Results, and Beneficiaries are not located, and do not undergo a change of location.

Prototypical examples

(41)   a. Sacha pousse **le chariot**.
           b. **Valéry** est tombé de la chaise.
           c. **La caisse** glisse sur la glace.

(42)   a. **Le livre** se trouve sur la table.
           b. **Les vélos** sont dans le garage.
           c. La casserole contient **de l'eau bouillante**.

Marginal examples

(43)   a. Mes voisins investissent **beaucoup d'argent** dans ce projet.
           b. Valéry possède **douze chats**.
           c. Sacha porte **une veste en tweed**.
           d. Camille coordonne **les deux équipes**.
           e. Elle a trouvé {**une source d'eau chaude**.
           f. **Les insectes** pullulent dans la forêt.

2.7.10 Topic

> **Topic (tpc)**
>
> Entity that is a subject of thought, discussion or cognitive activity

Remarks Topics are involved in cognitive eventualities but do not instigate or cause those eventualities, and are not affected by them.

Concurrent roles Unlike Topics:

- Patients are affected entities;
- Results are created through an event;
- Themes are involved in a locative relation;
- Pivots are characterized with respect to their properties.

Prototypical examples

(44) a. Mes collègues parlent d'astronomie.
      b. Ils étudient l'histoire.
      c. Les enfants pensent aux prochaines vacances.

Marginal examples

(45) a. Marc photographie un raton-laveur.
      b. Jeanne enregistre Pierre.
      c. Pablo scanne un document.

2.7.11 Instrument

> **Instrument (ins)**
>
> Entity that is manipulated in order to perform an action

Remarks The Instrument role is rarely assigned to syntactic arguments of verbal predicates.

Concurrent roles Unlike Instruments:

- Agents are intentional and not manipulated by another entity;
- Patients undergo a change of state.

Examples

(46) a. Sacha a empoisonné ses voisins à l'arsenic.
      b. Marion a filmé son chat avec sa nouvelle caméra.
      c. Le tortionnaire a garrotté le prisonnier à l'aide d'une corde.

2.7.12   Manner

Manner (man)
The way an action is performed, or the intensity of a state

Remarks Some verbs assign a Manner role to oblique arguments.

Examples

(47)   a. Camille et Sacha se comportent bien.
      b. Son chien se conduit bizarrement.
      c. Mon voisin se sent mal.
      d. Tu te tiens droit.
      e. Je traite mon chat de manière exemplaire.

2.7.13   Location

Location (loc)
Entity that serves as a landmark to locate another entity

Remarks Locations are spatial or temporal points of reference that can be used to localize Themes. Metaphorical abstract Locations can be identified for verbs that allow for spatial or temporal landmarks.

Concurrent roles Unlike Locations:

– Paths are involved in dynamic localization and indicate trajectories;

– Sources are involved in dynamic localization and indicate a starting point in a change of location;

– Destinations are involved in dynamic localization and indicate an endpoint in a change of location.

Prototypical Examples

(48)   a. Le livre se trouve dans la bibliothèque
      b. Les insectes pullulent dans la forêt.
      c. La réunion tombe un mardi.

Marginal Examples

(49)   a. Sacha est dans une mauvaise passe.
      b. Ce travail se situe dans une perspective interactionniste.
      c. L'association se trouve dans une situation difficile.

2.7.14   Path

┌───┐
│   **Path (pth)**   │
├───┤
│   Trajectory followed during a change of location │
└───┘

Remarks Paths are spatial or temporal entities that can be used to localize movements or changes of location. Metaphorical abstract Paths can be identified for verbs that allow for spatial or temporal trajectories. Fictive motions can involve a Path argument.

Concurrent roles Unlike Paths:

- Locations are surrounding landmarks that are not used to characterize trajectories;
- Sources do not indicate a trajectory but a starting point in a change of location;
- Destinations do not indicate a trajectory but an endpoint in a change of location.

Prototypical Examples

(50)   a.   Valéry traverse le lac en kayak.
       b.   Nous avons passé la frontière.
       c.   Sacha emprunte souvent ce chemin de terre battue.

Marginal Examples

(51)   a.   Camille traverse une période difficile.
       b.   Ils ont dépassé le quart d'heure de retard.
       c.   La route longe le canal.

2.7.15   Source

┌───┐
│   **Source (src)**   │
├───┤
│   Starting point in a change of location   │
└───┘

Remarks Sources are temporal or spatial points of reference used to localize the start of a movement. Metaphorical abstract Sources can be identified for verbs that allow for spatial or temporal starting points. Fictive motions can involve a Source argument.

Concurrent roles Unlike Sources:

- Locations are surrounding landmarks and do not indicate reference points in a change of location;
- Paths indicate a trajectory and do not focus on a starting point;
- Destinations indicate an endpoint rather than a starting point.

Prototypical Examples

(52) a. L'eau a jailli du sol.
      b. Elle est partie de Fribourg.
      c. Le colloque a commencé à 9h00.

Marginal Examples

(53) a. Notre équipe est partie de rien.
      b. Le sentier démarre de Brest.
      c. Ce régime s'éloigne des valeurs démocratiques.

2.7.16   Destination

Destination (des)
Endpoint in a change of location

Remarks Destinations are temporal or spatial points of reference used to localize the end of a movement. Metaphorical abstract Destinations can be identified for verbs that allow for spatial or temporal endpoints. Fictive motions can involve a Destination argument.

Concurrent roles Unlike Destinations:

- Locations are surrounding landmarks and do not indicate reference points in a change of location;
- Paths indicate a trajectory and do not focus on an endpoint;
- Sources indicate a starting point rather than an endpoint.

Prototypical Examples

(54) a. Valéry a amené son chat chez le vétérinaire.
      b. Sacha a conduit ses parents à la gare.
      c. Le colloque s'est terminé à 17h30.

Marginal Examples

(55) a. Sacha a conduit le projet à son terme.
      b. Ce chemin va à la ville.
      c. La fenêtre donne sur la cour.

2.7.17 Extent

Extent (ext)
Extensive value related to an event, or measurable magnitude of a change of state or location

Remark Extents are measures of space, time, size, weight, temperature, money, etc.

Examples

(56) a. La route fait 4 kilomètres de long.
      b. L'appareil a tourné de 90 degrés.
      c. Leur concert a duré trois heures.
      d. Ce pain pèse une livre.
      e. Le livre de Valéry coûte 20 euros.

Noun Annotation Instructions

3.1 Number of Senses

Criterion Number of senses of N

Label /nb_sens_n/

Options | any integer |

Example *atterrissage* → | 1 |

3.2 Ontological Type

Criterion Ontological type of N

Label /n_onto/

Options | any type from the list below | , | type*coll | if N is collective
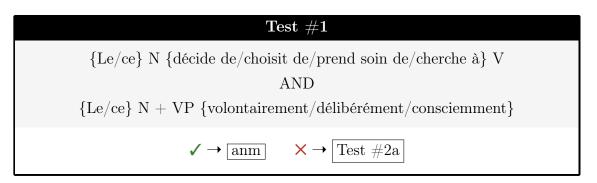
List

- Animate (anm)
- Artifact (art)
- Cognitive (cog)
- Currency (cur)
- Disease (dis)
- Domain (dom)
- Event (evt)
- Measure (mea)
- Natural (nat)
- Phenomenon (phn)
- Property (ppt)
- State (sta)
- Time (tim)
- Artifact*Cognitive (art*cog)

– Cognitive*Event (cog*evt)

– Event*State (evt*sta)

Tests

– Linguistic tests for ontological types are listed below.

– Tests should be applied in the indicated order to provide accurate classification.

– Tests should be applied successively to the same meaning of a noun (esp. when the noun is polysemous).

– Complex types are identified through copredication (e.g. *Le ministre des Finances a fait une déclaration selon laquelle le Brésil n'avait pas besoin de réforme fiscale*).
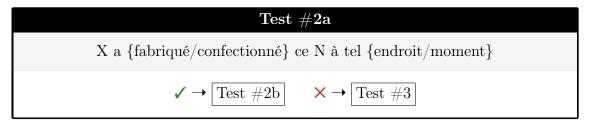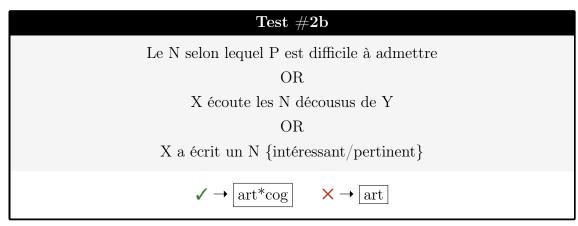
3.2.1   Animate

Test #1
{Le/ce} N {décide de/choisit de/prend soin de/cherche à} V
AND
{Le/ce} N + VP {volontairement/délibérément/consciemment}
✓ → anm   ✗ → Test #2a

Prototypical denotation Animate entities, such as humans (57), animals (58), and institutions (59).

Examples #1

(57) a. Pierre a {décidé/choisi} de cuisiner un rôti. ✓

  b. Pierre a délibérément cuisiné un rôti. ✓

(58) a. Le cerf a {décidé/choisi} de sauter dans l'eau. ✓

  b. Le cerf a volontairement sauté dans l'eau. ✓

(59) a. Le gouvernement a {décidé/choisi} de prendre des mesures. ✓

  b. Le gouvernement a consciemment pris des mesures. ✓

3.2.2 Artifact

Test #2a
X a {fabriqué/confectionné} ce N à tel {endroit/moment}
✓ → Test #2b   ✗ → Test #3

Test #2b
Le N selon lequel P est difficile à admettre OR X écoute les N décousus de Y OR X a écrit un N {intéressant/pertinent}
✓ → art*cog   ✗ → art

Prototypical denotation Concrete entities made by humans, such as objects (60a), meals (60b), and buildings (60c)
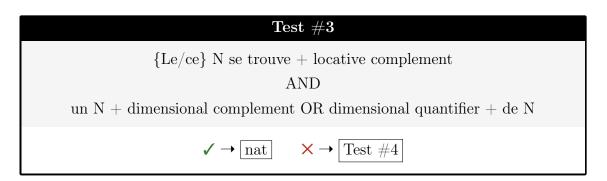
Examples #2a

(60) a. Camille a fabriqué une lampe. ✓
      b. Valéry a confectionné une tresse au beurre. ✓
      c. L'entreprise a fabriqué un pont. ✓

Examples #2b

(61) a. Sacha a écrit un livre très intéressant. ✓
      b. Camille écoute les chansons décousues de Marie. ✓

3.2.3 Natural

Test #3
{Le/ce} N se trouve + locative complement AND un N + dimensional complement OR dimensional quantifier + de N
✓ → nat   ✗ → Test #4

Prototypical denotation Concrete entities that are not made by humans, such as natural substances (62), living organisms (63), and natural locations (64).

Possible locative complements *sur la table, à côté du sac, dans le jardin, à Paris, entre la table et le mur, en Europe, près du poumon droit,* etc.

Possible dimensional complements *de x mètres de large, de x m2, de x m3, de x hectares, de x grammes, de x kilos,* where x is a numeral determiner

Possible dimensional quantifiers *x {m/m2/m3/hectares} de N, x grammes de N, x kilos de N, x tonnes de N,* where x is a numeral determiner

Examples

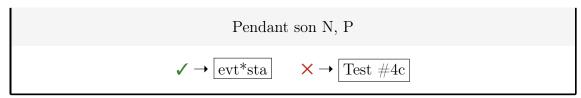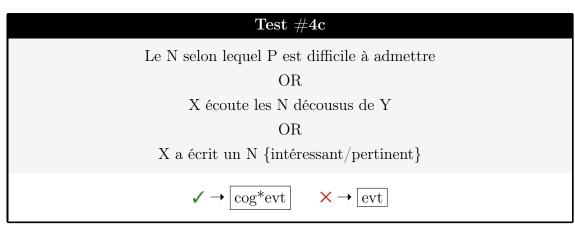(62)   a. Le charbon se trouve au fond du jardin. ✓

            b. 3 kg de charbon ✓

(63)   a. Cette plante se trouve en Europe. ✓

            b. une plante de 3 mètres de haut ✓

(64)   a. Ce glacier se trouve en Suisse. ✓

            b. un glacier de 86 km2 ✓

(65)   a. Cette idée est dans l'air depuis un moment. ✗ `metaphorical reading`

            b. ??une idée de {20 grammes/4 m3} ✗

(66)   a. ?Cette maladie se trouve en Europe. ✗

            b. ??une maladie de {20 grammes/4 m3} ✗

3.2.4   Event

Test #4a

{Le/ce} N {a eu lieu/s'est produit} à tel {moment/endroit}

OR

X a {effectué/procédé à/accompli} un N + expansion

✓ → Test #4b   ✗ → Test #5

Test #4b

X {ressent/éprouve} {du/un} N + expansion

OR

X est dans un état de N + expansion

OR

Son N a duré X temps

OR

Pendant son N, P
✓ → evt*sta   ✗ → Test #4c

Test #4c
Le N selon lequel P est difficile à admettre OR X écoute les N décousus de Y OR X a écrit un N {intéressant/pertinent}
✓ → cog*evt   ✗ → evt

Remark In Test #4b, *a duré* et *pendant* should entail a stative (vs. dynamic) interpretation.

Prototypical denotation Dynamic situations in which an event occurs (67) or an action is performed (68)

Examples #4a

(67)   a. Le séisme a eu lieu hier à Toronto. ✓
        b. Cet embouteillage s'est produit ce matin sur l'A9. ✓

(68)   a. La mécanicienne a effectué une réparation délicate. ✓
        b. Valéry a procédé à un examen complet des instances. ✓
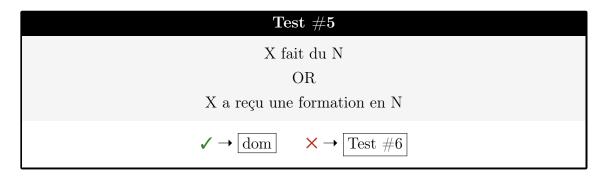   c. Sacha a accompli un exploit historique. ✓

Examples #4b

(69)   a. Je ressens une forte irritation dans le dos. ✓
        b. La falaise est dans un état de dégradation perpétuel. ✓
        c. Sa disparition a duré deux heures. ✓
        d. Pendant son emprisonnement, Pierre a appris la couture. ✓

(70)   a. Son concert a duré trois heures.
          ✗ `dynamic interpretation`
        b. Jeanne s'est endormie pendant son massage.
          ✗ `dynamic interpretation`

Examples #4c

(71)   a. L'affirmation selon laquelle l'embargo était légal est difficile à admettre. ✓
        b. Camille écoute les accusations décousues de l'enquêteur. ✓

3.2.5 Domain

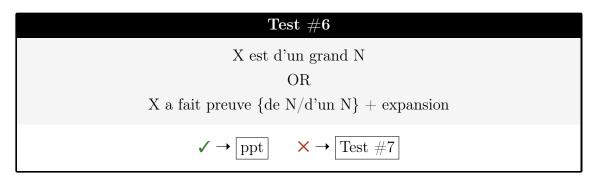| Test #5 |
|---|
| X fait du N |
| OR |
| X a reçu une formation en N |
| ✓ → dom   ✗ → Test #6 |

Remark *Faire* in Test #5 cannot be interpreted as 'fabriquer' or 'avoir'.

Prototypical denotation Activities (72) and fields of expertise (73)

Examples #5

(72)   a. Sacha fait du jardinage tous les week-ends. ✓
       b. Valéry fait de la natation durant son temps libre. ✓

(73)   a. Sacha a reçu une formation en astrophysique. ✓
       b. Valéry a reçu une formation en ferblanterie. ✓

(74)   a. Sacha fait du porridge. (= Sacha fabrique du porridge) ✗
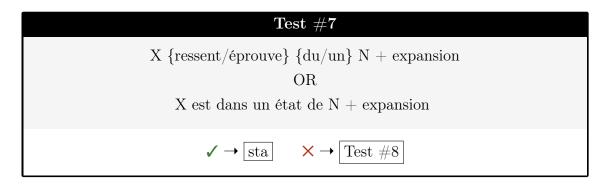   b. Valéry fait de l'eczéma. (= Valéry a de l'eczéma) ✗

3.2.6 Property

Test #6
X est d'un grand N
OR
X a fait preuve {de N/d'un N} + expansion
✓ → ppt   ✗ → Test #7

Remark *X est d'un grand N* in Test #6 must be synonymous with *X a du N* (75 vs 76a).

Prototypical denotation Physical and psychological qualities

Examples #6

(75)   a. Sacha est d'une grande intelligence. (= Elle a de l'intelligence) ✓
       b. Valéry fait preuve de beaucoup de courage. (= Il a du courage) ✓

(76)   a. Marie est d'une grande famille de peintres. (≠ Elle a de la famille de peintres) ✗
       b. ??Cette fondue est d'une odeur étrange. ✗

3.2.7 State

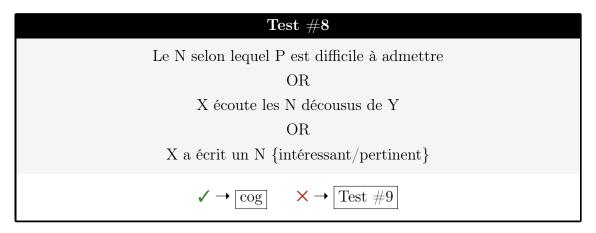| Test #7 |
|---|
| X {ressent/éprouve} {du/un} N + expansion |
| OR |
| X est dans un état de N + expansion |
| ✓ → sta   ✗ → Test #8 |

Prototypical denotation Feelings (77), physical and psychological states (78)

Examples #7

(77)   a. Sacha {ressent/éprouve} une vive crainte. ✓
       b. Camille {ressent/éprouve} une tristesse infinie. ✓

(78)   a. Le chalet est dans un état de délabrement avancé. ✓
       b. Le patient est dans un état de conscience minimale. ✓
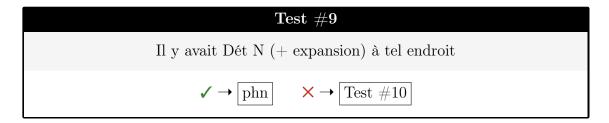
3.2.8 Cognitive

Test #8
Le N selon lequel P est difficile à admettre
OR
X écoute les N décousus de Y
OR
X a écrit un N {intéressant/pertinent}
✓ → cog   ✗ → Test #9

Prototypical denotation Informational contents, ideas (79), opinions (80), textual, cultural or artistic objects (81)

Examples #8

(79)   L'hypothèse selon laquelle ce virus a été fabriqué est difficile à admettre. ✓

(80)   Valéry écoute les opinions décousues de Camille. ✓

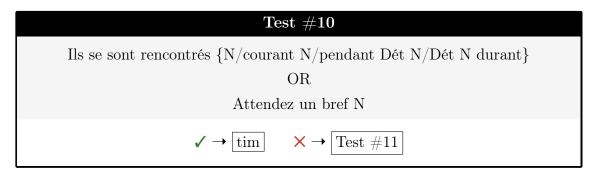(81)   Sacha a écrit un récit intéressant. ✓

3.2.9 Phenomenon

Test #9
Il y avait Dét N (+ expansion) à tel endroit
✓ → phn   ✗ → Test #10

Remark *à tel endroit* should denote a physical location.

Prototypical denotation Noises, sounds, smells, lights

Examples #9

(82)   a. Il y avait une odeur étrange dans le couloir. ✓
       b. Il y avait du bruit dans la cour. ✓
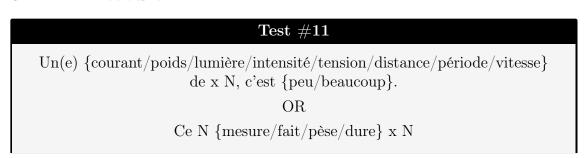   c. Il y avait une lueur au fond de l'impasse. ✓

3.2.10 Time

Test #10
Ils se sont rencontrés {N/courant N/pendant Dét N/Dét N durant}
OR
Attendez un bref N
✓ → tim   ✗ → Test #11

Prototypical denotation Punctual (84) or durative (83) moments

Examples #10

(83)   Ils se sont rencontrés {mardi/courant janvier/pendant l'été/trois jours durant}. ✓

(84)   Attendez un bref {instant/moment}. ✓

3.2.11 Measure

Test #11
Un(e) {courant/poids/lumière/intensité/tension/distance/période/vitesse} de x N, c'est {peu/beaucoup}.
OR
Ce N {mesure/fait/pèse/dure} x N

$$\checkmark \rightarrow \boxed{\text{mea}} \qquad \times \rightarrow \boxed{\text{Test \#12}}$$
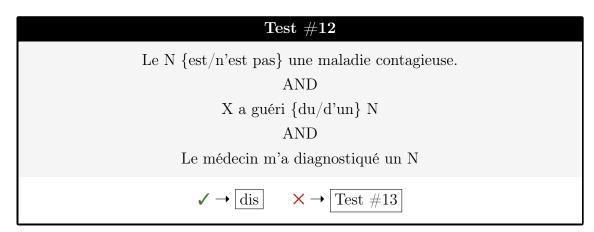
Remark x is a numeral determiner (e.g. *mille, un, cinquante*, etc.).

Prototypical denotation Units of measurement

Examples #11

(85)   a. Un courant de mille ampères, c'est beaucoup! ✓
       b. Ce buffet pèse cent kilos.
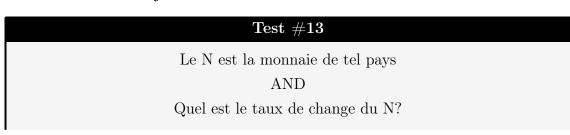   c. Cette piste fait deux cents mètres. ✓

3.2.12   Disease

> **Test #12**
>
> Le N {est/n'est pas} une maladie contagieuse.
>
> AND
>
> X a guéri {du/d'un} N
>
> AND
>
> Le médecin m'a diagnostiqué un N
>
> $\checkmark \rightarrow \boxed{\text{dis}} \qquad \times \rightarrow \boxed{\text{Test \#13}}$

Prototypical denotation Medical conditions

Examples #12

(86)   a. La grippe est une maladie contagieuse. ✓
       b. Camille a guéri de la grippe. ✓
       c. Le médecin m'a diagnostiqué une grippe. ✓

(87)   a. La {timidité/vantardise} n'est pas une maladie contagieuse. ✓
       b. ??Valéry a guéri d'une {timidité/vantardise}. ✗
       c. ??Le médecin m'a diagnostiqué une {timidité/vantardise}. ✗

3.2.13   Currency

> **Test #13**
>
> Le N est la monnaie de tel pays
>
> AND
>
> Quel est le taux de change du N?

$$\checkmark \rightarrow \boxed{\text{cur}} \qquad \times \rightarrow \boxed{\text{untagged}}$$

Prototypical denotation Money systems

Examples #13

(88) a. Le franc est la monnaie de la Suisse. ✓
      b. Quel est le taux de change du franc? ✓

3.3   Relation

Criterion Relation of N to the base verb

Label /n_relation/

Options

- $\boxed{\text{any role from the list below}}$
- $\boxed{\text{tsp}}$ if N is a semantic transposition of the base verb or if the ontological type of N is dom, art*evt, cog*evt, or evt*sta

List

- Agent (agt)
- Beneficiary (ben)
- Cause (cau)
- Destination (des)
- Experiencer (exp)
- Extent (ext)
- Instrument (ins)
- Location (loc)
- Manner (man)
- Path (pth)
- Patient (pat)
- Pivot (pvt)
- Result (res)
- Source (src)
- Stimulus (sti)
- Theme (thm)
- Topic (tpc)

Examples *perceuse* → $\boxed{\text{ins}}$, *patinoire* → $\boxed{\text{loc}}$, *construction (d'un chalet)* → $\boxed{\text{tsp}}$

3.4 Dynamicity

Criterion Dynamicity of N

Label /n_dyn/

Options

- $\boxed{\text{y}}$ = N denotes dynamic eventualities
- $\boxed{\text{n}}$ = N denotes static eventualities
- $\boxed{\text{na}}$ = N has no aspectual properties

Interdependence

- The Dynamicity Test is only performed on Event, Domain, Property, State, Event*State, and Cognitive*Event.
- Event, Cognitive*Event, Event*State, and Domain are dynamic ($\boxed{\text{y}}$ to Dynamicity).
- Property and State are stative ($\boxed{\text{n}}$ to Dynamicity).

Test

Dynamicity Test
{Le/Ce} N {a eu lieu/s'est produit} à tel {moment/endroit}
OR
X {a procédé à/a accompli} un N + expansion
OR
X a fait du N toute la journée
✓ → $\boxed{\text{y}}$ ✗ → $\boxed{\text{n}}$

Remark In *X a fait du N toute la journée*, *faire* should not be interpreted as 'avoir' or 'fabriquer' (92).

Examples

(89) a. La caramélisation s'est produite au bout de quelques minutes. ✓
      b. La perte des clefs a eu lieu à la bibliothèque. ✓

(90) a. Sacha a effectué une longue promenade. ✓
      b. Valéry a accompli un miracle. ✓

(91) a. Sacha a fait du jardinage toute la journée. ✓
      b. Valéry a fait du bricolage tout le weekend. ✓

(92) a. Joël a fait de la fièvre. (= Joël a eu de la fièvre) ✗
      b. Elle a fait du vin chaud. (= Elle a fabriqué du vin chaud) ✗

3.5 Durativity

Criterion Durativity of N

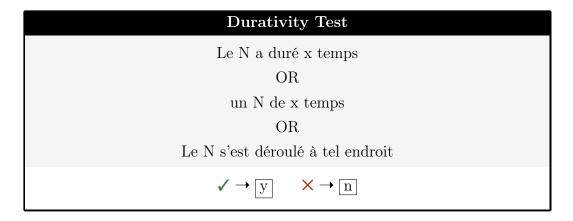**Label** /n_dur/

Options

- $\boxed{y}$ = N denotes durative eventualities
- $\boxed{n}$ = N denotes non-durative eventualities
- $\boxed{na}$ = N has no relation to time

Interdependence

- The Durativity Test is only performed on Event, Domain, State, Event*State, and Cognitive*Event. It does not apply to Property ($\boxed{na}$ to Durativity).
- Domain is durative ($\boxed{y}$ to Durativity).
- State is durative ($\boxed{y}$ to Durativity).

Test

Durativity Test
Le N a duré x temps
OR
un N de x temps
OR
Le N s'est déroulé à tel endroit
✓ → $\boxed{y}$ ✗ → $\boxed{n}$

Remarks

- *x temps* is a duration expression in which x is a numeral determiner and *temps* is a temporal unit (e.g. *seconde*, *minute*, *heure*, *jour*, *mois*).
- Durativity should relate to a dynamic process (vs. a post-phase).

Examples

(93)   a. Le jardinage a duré deux heures. ✓
       b. La caramélisation a duré dix minutes. ✓

(94)   a. un accouchement de huit heures ✓
       b. une réunion de deux heures ✓

(95)   a. La rencontre des linguistes s'est déroulée à Genève. ✓

     b. Le match s'est déroulé à St-Léonard. ✓

(96)   a. ?une liberté de plusieurs jours ✗

     b. ??L'arrivée du coureur a duré deux heures. ✗

     c. La disparition de la jeune fille a duré trois jours.
     ✗ `post-phase`
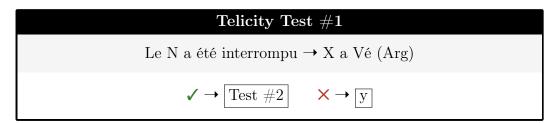
3.6   Telicity

Criterion Telicity of N

Label /n_tel/

Options

- $\boxed{\text{y}}$ = N denotes telic eventualities
- $\boxed{\text{n}}$ = N denotes atelic eventualities
- $\boxed{\text{v}}$ = N denotes eventualities of variable telicitiy
- $\boxed{\text{na}}$ = N has no relation to time

Interdependence

- The Telicity Tests are only performed on Event, Domain, State, Event*State, and Cognitive*Event. They do not apply to Property ($\boxed{\text{na}}$ to Telicity).
- **Domain and state are atelic** ($\boxed{\text{n}}$ to Telicity).
- Dynamic non-durative eventualities are telic ($\boxed{\text{y}}$ to Dynamicity and $\boxed{\text{n}}$ to Durativity → $\boxed{\text{y}}$ to Telicity).
- State is atelic ($\boxed{\text{n}}$ to Dynamicity and $\boxed{\text{y}}$ to Durativity → $\boxed{\text{n}}$ to Telicity).

Tests

Telicity Test #1
Le N a été interrompu → X a Vé (Arg)
✓ → $\boxed{\text{Test \#2}}$ ✗ → $\boxed{\text{y}}$

Telicity Test #2
un N en x temps
✓ → $\boxed{\text{v}}$ ✗ → $\boxed{\text{n}}$

Remarks

– *x temps* is a duration expression in which *x* is a numeral determiner and *temps* is a temporal unit (e.g. *seconde, minute, heure, jour, mois*).

– Possible internal arguments complementing the tested N should be delimited (e.g. *construction d'une maison* vs. *construction de maisons*).

– When performing Telicity Test #1, the partial realization of an incremental action should not be considered.

– N that denote atelic eventualities combine more easily with a *pendant* complement than with a *en* complement.

– N that denote eventualities of variable telicity can often be modified with *fort* (e.g. *une forte caramélisation*).

Examples #1

(97) a. La manifestation a été interrompue.
→ Ils ont manifesté. ✓

b. Le jardinage a été interrompu.
→ On a jardiné. ✓

c. La caramélisation du sucre a été interrompue.
→ Le sucre a caramélisé. ✓

d. L'augmentation du prix du lait a été interrompue.
→ Le prix du lait a augmenté. ✓

(98) a. L'accouchement de Marie a été interrompu.
→ Marie a accouché. ✗

b. L'exécution du condamné a été interrompue.
→ Le condamné a été exécuté. ✗

c. La réparation de la voiture a été interrompue.
→ On a (intégralement) réparé la voiture. ✗

d. La construction de la maison a été interrompue.
→ On a (intégralement) construit la maison. ✗

Examples #2

(99) a. une caramélisation du sucre en 12 minutes ✓

b. une augmentation du prix du gaz en deux ans ✓

(100) a. ??une manifestation en deux heures ✗

b. ??un jardinage en deux heures ✗

3.7   Post-phase

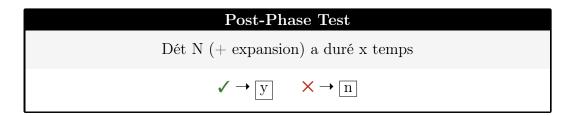**Criterion** Post-phase of N

Label /n_post_phase/

Options

- $\boxed{\text{y}}$ = N denotes eventualities that include a post-phase
- $\boxed{\text{n}}$ = N denotes eventualities that do not include a post-phase
- $\boxed{\text{na}}$ = N cannot include a post-phase in its denotation

Interdependence

- The Post-Phase Test is only performed on Event, State, Event*State, Domain, and Cognitive*Event. It does not apply to Property ($\boxed{\text{na}}$ to Post-phase).
- Atelic nouns cannot include a post-phase ($\boxed{\text{n}}$ to Telicity → $\boxed{\text{n}}$ to Post-phase).

Test

Post-Phase Test
Dét N (+ expansion) a duré x temps
✓ → $\boxed{\text{y}}$ ✗ → $\boxed{\text{n}}$

Remark

- *x temps* is a duration expression in which x is a numeral determiner and *temps* is a temporal unit (e.g. *seconde, minute, heure, jour, mois*).
- Durativity should not be related to a dynamic process.
- The state related to the post-phase is generally reversible (e.g. *emprisonnement, disparition, exclusion*).

Examples #1

(101)   a. Son emprisonnement a duré trois ans. ✓

  b. La disparition du chat a duré deux heures. ✓

  c. L'exclusion de l'élève a duré deux jours. ✓

(102)   a. Son accouchement a duré quatre heures. ✗

  b. La démolition de l'immeuble a duré deux semaines. ✗

  c. La réparation de la voiture a duré deux jours. ✗

3.8   Semantic Roles

Criterion Semantic role of the first, second and third arguments of N

Labels

- /n_rol_arg1/ = only argument of N (e.g. *éternuement de Pierre*), or internal argument if N has two or three arguments (e.g. *opération du patient, insertion de la pile*)
- /n_rol_arg2/ = external argument if N has two arguments (e.g. *opération de la chirurgienne*), or oblique argument if N has three arguments (e.g. *insertion dans le compartiment*)
- /n_rol_arg3/ = external argument if N has three arguments (e.g. *insertion par Pierre*)

Options

- any role from the list below
- na if there is no argument

List

- Agent (agt)
- Beneficiary (ben)
- Cause (cau)
- Destination (des)
- Experiencer (exp)
- Extent (ext)
- Instrument (ins)
- Location (loc)
- Manner (man)
- Path (pth)
- Patient (pat)
- Pivot (pvt)
- Result (res)
- Source (src)
- Stimulus (sti)
- Theme (thm)
- Topic (tpc)

Remark Argument structures with maximal extension should be considered:

- *éternuement de X* → one argument
- *opération de Y par X* → two arguments
- *insertion de Y dans Z par X* → three arguments

Examples

- *éternuement de X*: X → $\boxed{\text{cau}}$
- *opération de Y par X*: Y → $\boxed{\text{pat}}$, X → $\boxed{\text{agt}}$
- *insertion de Y dans Z par X*: Y → $\boxed{\text{thm}}$, Z → $\boxed{\text{des}}$, X → $\boxed{\text{agt}}$

References

Baker, Collin F., Charles J. Fillmore, and John B. Lowe (1998). "The Berkeley FrameNet Project". In: *36th Annual Meeting of the Association for Computational Linguistics and 17th International Conference on Computational Linguistics*. Vol. 1. Montreal, Quebec, Canada: Association for Computational Linguistics, pp. 86–90.

Balvet, Antonio et al. (2011). "La ressource Nomage. Confronter les attentes théoriques aux observations du comportement linguistique des nominalisations en corpus". In: *Traitement Automatique des Langues* 52.3, pp. 129–152.

Barque, Lucie et al. (in preparation). "Classification sémantique des noms en français appuyée sur des tests linguistiques".

Danlos, Laurence, Takuya Nakamura, and Quentin Pradet (2014). "Vers la création d'un VerbeNet du français". In: *Atelier FondamenTAL, TALN 2014*.

Dowty, David (1979). *Word Meaning and Montague Grammar*. Dordrecht: Reidel.

Dugas, Edwige, Pauline Haas, and Rafael Marín (Sept. 2019). "French Denominal Verbs : from countability to aspect". In: Université Paris. International Symposium of Morphology (ISMO).

Flaux, Nelly and Danièle Van de Velde (2000). *Les noms en français: esquisse de classement*. Paris: Editions Ophrys.

Godard, Danièle and Jacques Jayez (1996). "Types nominaux et anaphores : le cas des objets et des événements". In: *Anaphores temporelles et (in-)coherence*. Ed. by W. De Mulder, L. Tasmowski-De Ryck, and C. Vetters. Amsterdam: Rodopi, pp. 41–58.

Gross, Gaston and Ferenc Kiefer (1995). "La structure événementielle des substantifs". In: *Folia linguistica* 29.1-2, pp. 43–66.

Haas, Pauline (Dec. 2009). "Comment l'aspect vient aux noms. Les propriétés aspectuelles des noms à l'épreuve des restrictions de sélection imposées par certaines prépositions". PhD thesis. Université de Lille III - Charles de Gaulle.

Haas, Pauline, Richard Huyghe, and Rafael Marín (2008). "Du verbe au nom : calques et décalages aspectuels". In: *Congrès Mondial de Linguistique Française*

(CMLF). Ed. by Jacques Durand, Benoît Habert, and Bernard Laks. Paris: Institut de Linguistique Française, pp. 2051–2065.

Haas, Pauline and Anne Jugnet (2013). "De l'existence des prédicats d'achèvements". In: *Lingvisticæ Investigationes* 36.1, pp. 56–89.

Hay, Jen, Christopher Kennedy, and Beth Levin (1999). "Scale structure underlies telicity in 'degree achievements'". In: *Semantics and Linguistic Theory 9*. Ed. by Tanya Matthews and Devon Strolovitch. Ithaca, NY: CLC Publications, pp. 127–144.

Heyd, Sophie and Marie Laurence Knittel (2009). "Les noms d'activité parmi les noms abstraits: propriétés aspectuelles, distributionnelles et interprétatives". In: *Lingvisticæ investigationes* 32.1, pp. 124–148.

Huyghe, Richard (2011). "(A) telicity and the mass-count distinction: the case of French activity nominalizations". In: *Recherches linguistiques de Vincennes* 40, pp. 101–126.

– (2014). "Les événements intensifs". In: *Congrès Mondial de Linguistique Française*. Paris: Institut de Linguistique Française, pp. 3111–3122.

– (2015). "Les typologies nominales : présentation". In: *Langue française* 185, pp. 5–27.

Huyghe, Richard and Anne Jugnet (2010). "Nominalisations statives et transfert aspectuel: quel héritage sémantique?" In: *2ème Congrès Mondial de Linguistique Française*, p. 115.

Kipper-Schuler, Karin (2005). "VerbNet: A broad-coverage, comprehensive verb lexicon". PhD thesis. University of Pennsylvania.

Kleiber, Georges et al. (2012). "Typologie des noms: le critère" se trouver+ SP loc"". In: *Scolia* 26, pp. 105–129.

Meinschaefer, Judith (2004). "Deverbale Nominalisierungen im Französischen und Spanischen. Ein Modell der Schnittstelle von Syntax und Semantik". In: *Unpublished habilitation thesis, University of Constance*.

Palmer, Martha, Daniel Gildea, and Paul Kingsbury (Mar. 2005). "The Proposition Bank: An Annotated Corpus of Semantic Roles". In: *Comput. Linguist.* 31.1, pp. 71–106.

Petukhova, Volha and Harry Bunt (May 2008). "LIRICS Semantic Role Annotation: Design and Evaluation of a Set of Data Categories". In: *Proceedings of the Sixth International Conference on Language Resources and Evaluation (LREC'08)*. Marrakech, Morocco: European Language Resources Association (ELRA).

Piñón, Christopher (1999). "Durative adverbials for result states". In: *Proceedings of the 18th West Coast Conference on Formal Linguistics*. Vol. 420433. Casadilla Press Somerville.

Pradet, Quentin, Laurence Danlos, and Gaël de Chalendar (2014). "Adapting Verb-Net to French using existing resources". In: *Proceedings of the Ninth International Conference on Language Resources and Evaluation (LREC'14)*.

Rothstein, Susan (2004). *Structuring events: A study in the semantics of lexical aspect*. Oxford: Blackwell Publishing.

Schäfer, Roland (2015). "Processing and querying large web corpora with the COW14 architecture". In: *Proceedings of Challenges in the Management of Large Corpora 3 (CMLC-3)*. Ed. by Piotr Bański et al. UCREL. Lancaster: IDS.

Schäfer, Roland and Felix Bildhauer (2012). "Building Large Corpora from the Web Using a New Efficient Tool Chain". In: *Proceedings of the Eight International Conference on Language Resources and Evaluation (LREC'12)*. Ed. by Nicoletta Calzolari et al. Istanbul, Turkey: European Language Resources Association (ELRA), pp. 486–493.

University of Colorado Boulder (n.d.). *Unified Verb Index*. `https://uvi.colorado.edu`.

Vendler, Zeno (1967). *Linguistics in Philosophy*. Ithaca, NY: Cornell University Press.

Verkuyl, Henk J. (1993). *A Theory of Aspectuality: The Interaction between Temporal and Atemporal Structure*. Cambridge Studies in Linguistics. Cambridge University Press.

Vetere, Guido et al. (Sept. 2011). "Senso Comune, an Open Knowledge Base for Italian". In: *Traitement Automatique des Langues* 53.