

## Évaluation linguistique de résultats de parsing syntaxique dépendancier automatique (spaCy) d'un corpus de poèmes en prose de Pierre Reverdy

**Auteur :** Beckers, Xavier

**Promoteur(s) :** Mazziotta, Nicolas

**Faculté :** Faculté de Philosophie et Lettres

**Diplôme :** Master en langues et lettres françaises et romanes, orientation générale, à finalité approfondie

**Année académique :** 2021-2022

**URI/URL :** <http://hdl.handle.net/2268.2/14775>

---

### Avertissement à l'attention des usagers :

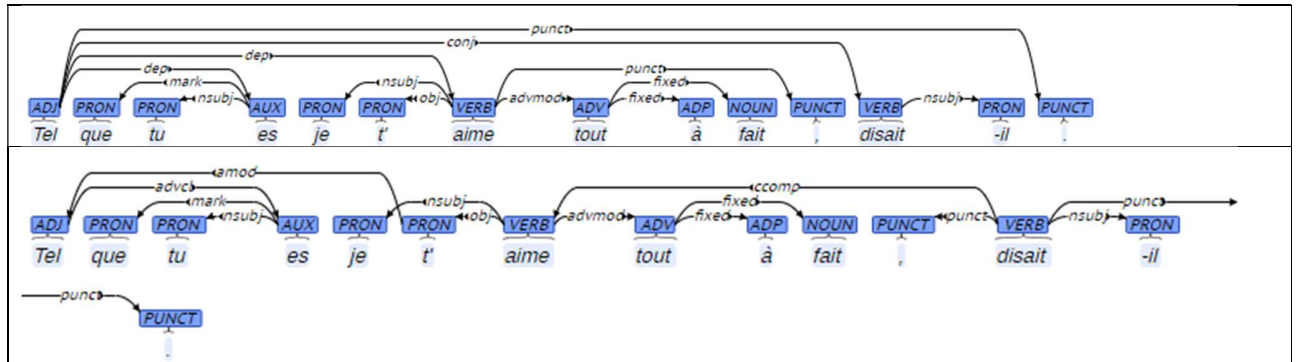
*Tous les documents placés en accès ouvert sur le site le site MatheO sont protégés par le droit d'auteur. Conformément aux principes énoncés par la "Budapest Open Access Initiative"(BOAI, 2002), l'utilisateur du site peut lire, télécharger, copier, transmettre, imprimer, chercher ou faire un lien vers le texte intégral de ces documents, les disséquer pour les indexer, s'en servir de données pour un logiciel, ou s'en servir à toute autre fin légale (ou prévue par la réglementation relative au droit d'auteur). Toute utilisation du document à des fins commerciales est strictement interdite.*

*Par ailleurs, l'utilisateur s'engage à respecter les droits moraux de l'auteur, principalement le droit à l'intégrité de l'oeuvre et le droit de paternité et ce dans toute utilisation que l'utilisateur entreprend. Ainsi, à titre d'exemple, lorsqu'il reproduira un document par extrait ou dans son intégralité, l'utilisateur citera de manière complète les sources telles que mentionnées ci-dessus. Toute utilisation non explicitement autorisée ci-avant (telle que par exemple, la modification du document ou son résumé) nécessite l'autorisation préalable et expresse des auteurs ou de leurs ayants droit.*

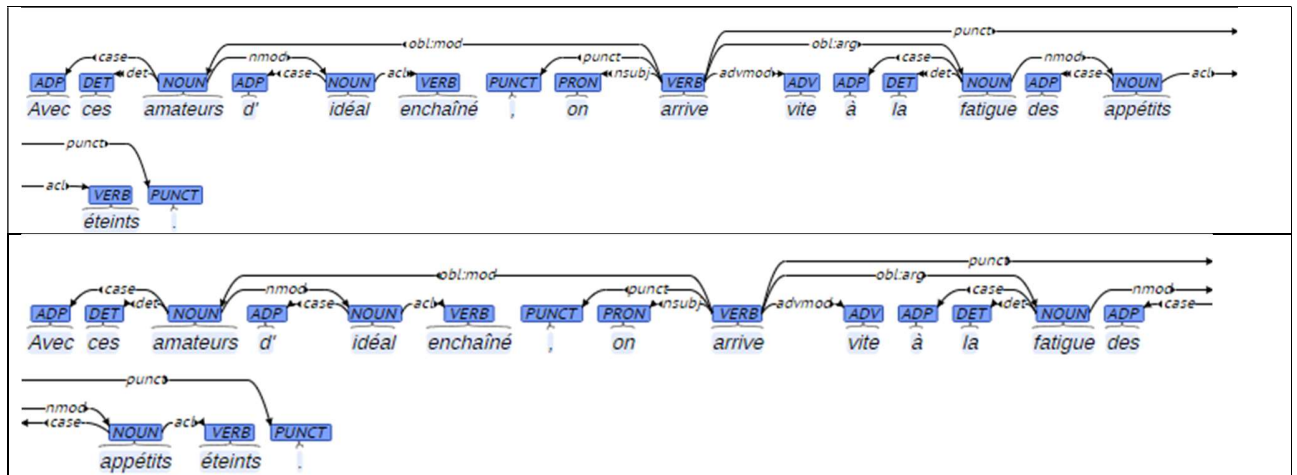
---

## Visualisations des arbres prédits et corrigés

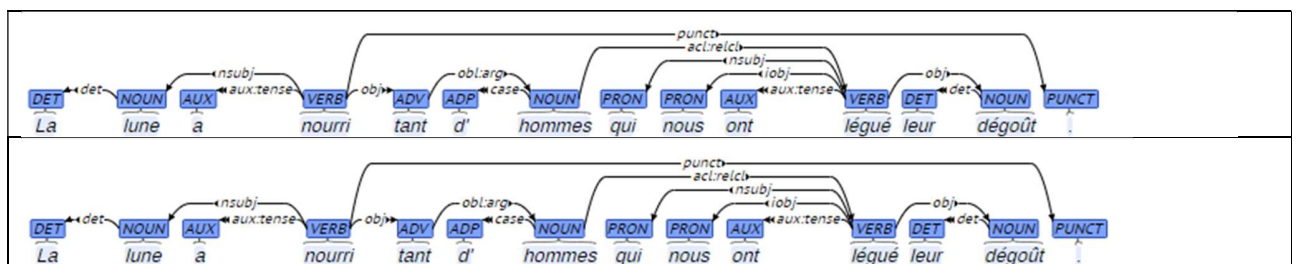
PA1



PA2



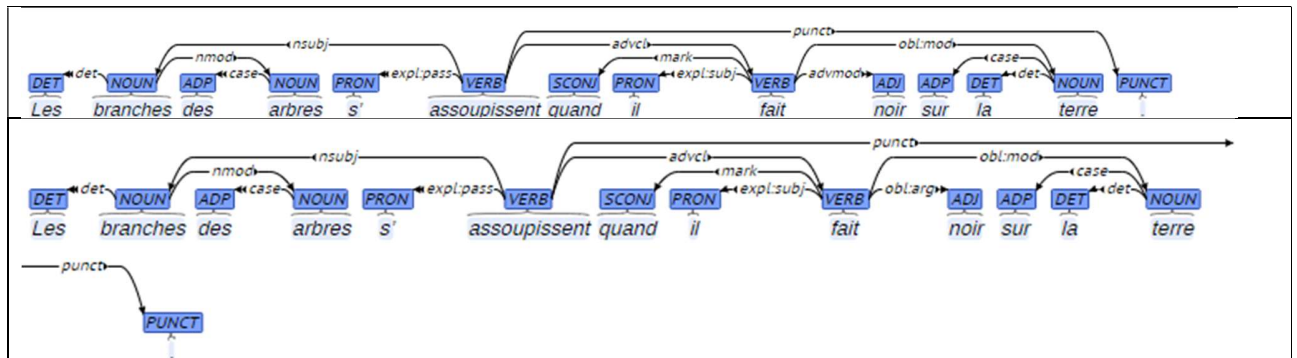
PA3



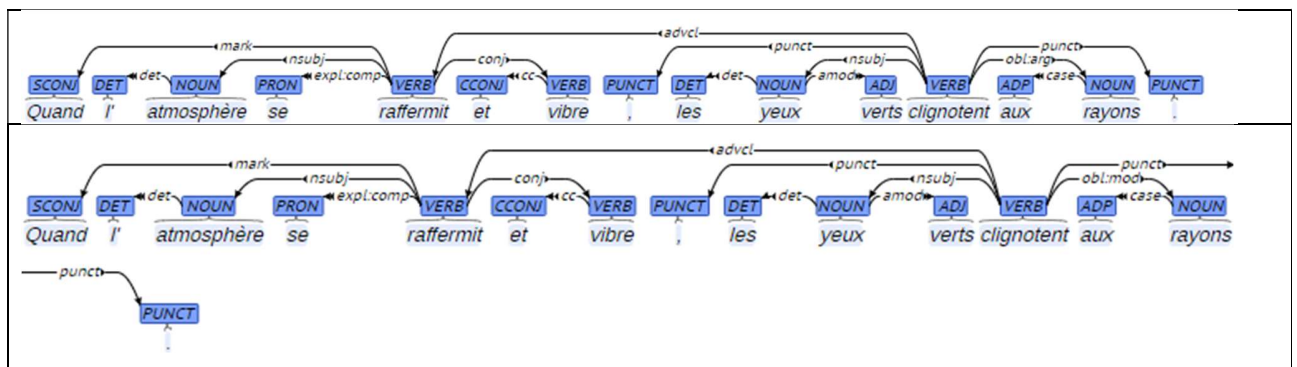
PA4



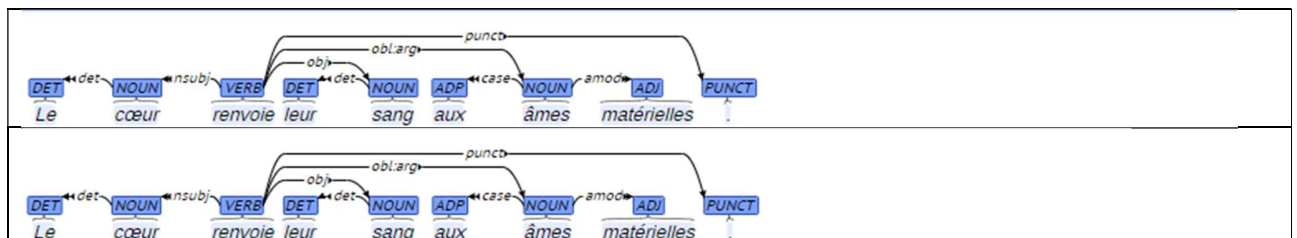
PA5



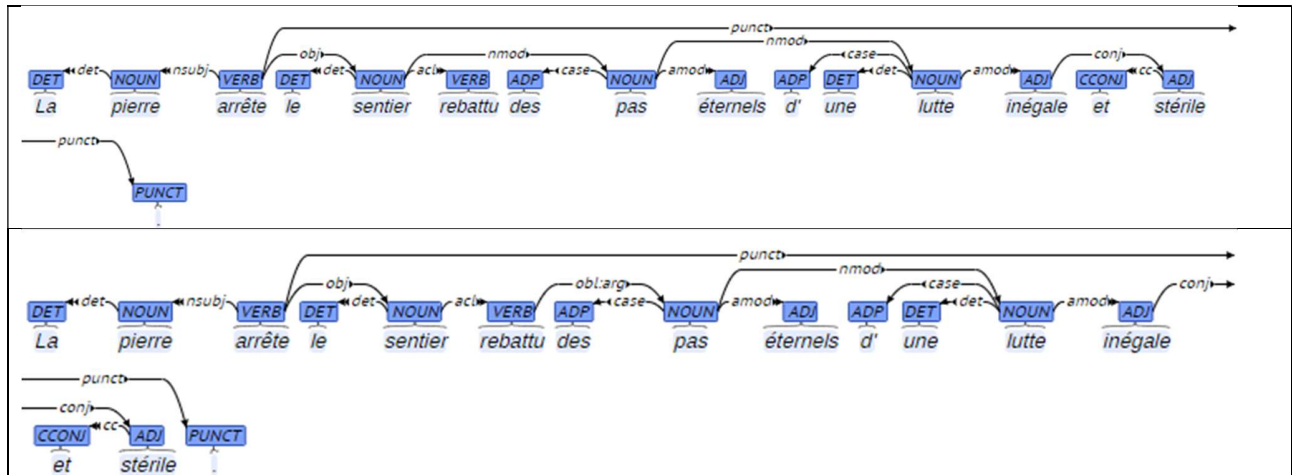
PA6



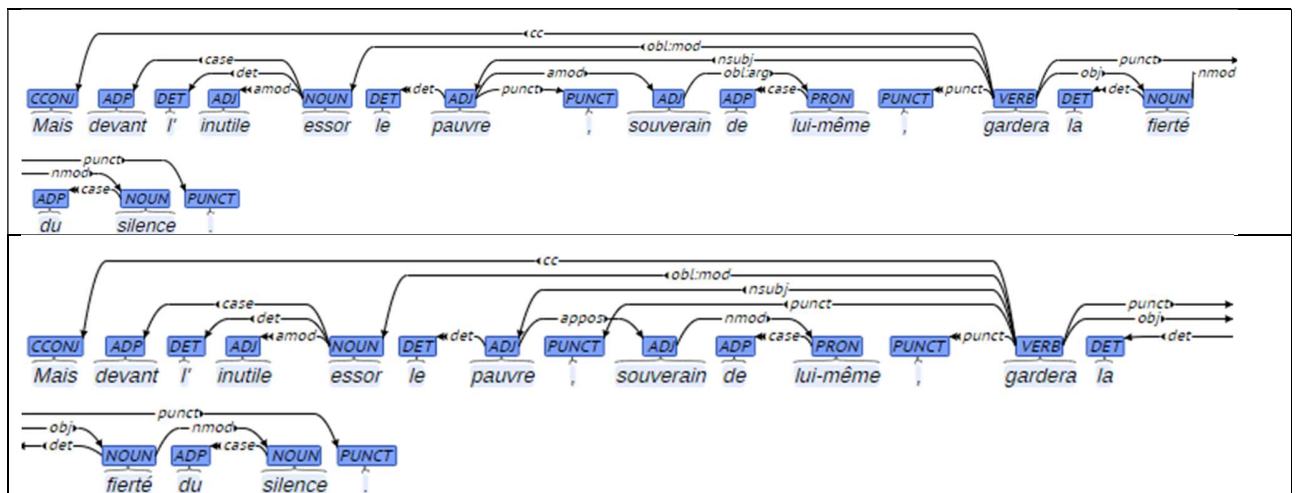
PA7



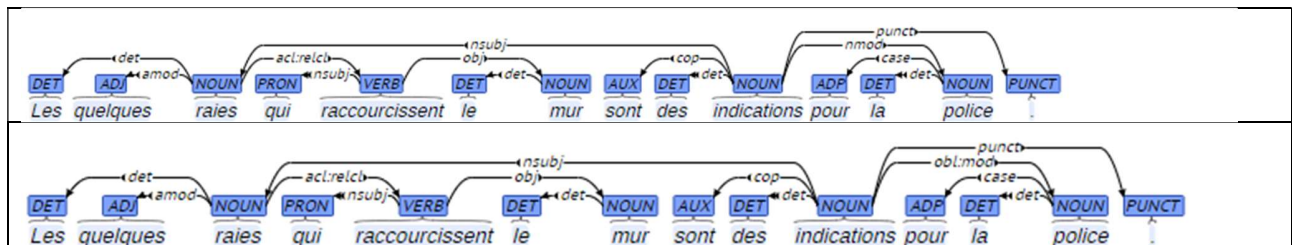
PA8



PA9

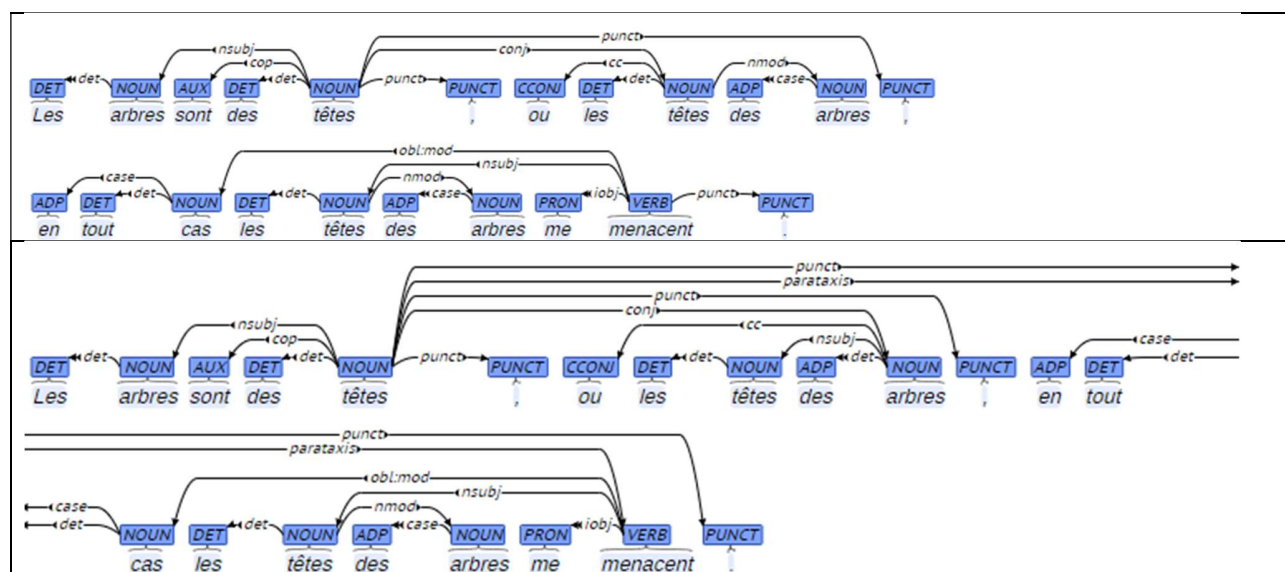


C1

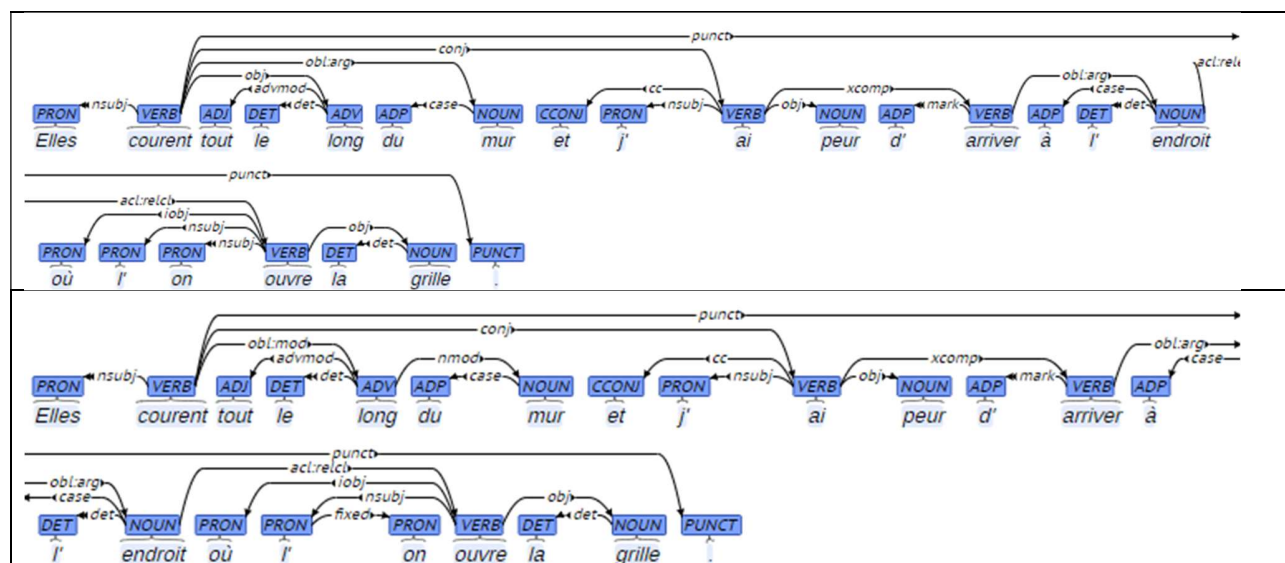




C2



C3



The image displays two syntactic tree diagrams for the French sentence: "Sur la route mon ombre me suit oblique et me dit que je cours trop vite."

**Top Diagram:** This diagram illustrates the full syntactic structure of the sentence. The words are grouped into phrases: "Sur la route" (ADP, DET, NOUN), "mon ombre" (DET, NOUN), "me" (PRON), "suit" (VERB), "oblique" (ADJ), "et" (CCONJ), "me" (PRON), "dit" (VERB), "que je cours trop vite" (SCONJ, PRON, VERB, ADV, ADV, PUNCT). The diagram shows various grammatical relations such as *case*, *det*, *obl:mod*, *nsubj*, *obj*, *amod*, *punct*, *conj*, *cc*, *iobj*, *ccomp*, and *mark*.

**Bottom Diagram:** This diagram shows the same sentence with some words highlighted in blue: "Sur", "la", "route", "mon", "ombre", "me", "suit", "oblique", "et", "me", "dit", "que", "je", "cours", "trop", "vite". The syntactic structure is similar to the top diagram, but the highlighted words suggest a specific focus or analysis, possibly related to the "Je cours trop vite" (I run too fast) part of the sentence.

The top diagram illustrates the syntactic structure of the sentence "C'est moi qui ai l'air d'un voleur !". The words are grouped into boxes: PRON (C'), AUX (est), PRON (moi), PRON (qui), VERB (ai), DET (l'), NOUN (air), ADP (d'), DET (un), NOUN (voleur), and PUNCT (!). Arrows indicate grammatical relations: expl:subj from C' to est, cop from est to moi, dep from moi to qui, nsubj from qui to ai, det from l' to air, obj from ai to d', nmod from d' to un, case from un to voleur, and punct from ! to the main clause.

The bottom diagram illustrates a more complex syntactic structure for the same sentence, showing multiple relative clauses and a final exclamation mark. The words are grouped into boxes: PRON (C'), AUX (est), PRON (moi), PRON (qui), VERB (ai), DET (l'), NOUN (air), ADP (d'), DET (un), NOUN (voleur), and PUNCT (!). Arrows indicate grammatical relations: expl:subj from C' to est, cop from est to moi, dep from moi to qui, nsubj from qui to ai, det from l' to air, obj from ai to d', nmod from d' to un, case from un to voleur, and punct from ! to the main clause.

The diagram illustrates the syntactic structure of two French sentences using a hierarchical tree model. The words are represented in blue boxes, and arrows indicate the grammatical relationships between them, labeled with syntactic functions.

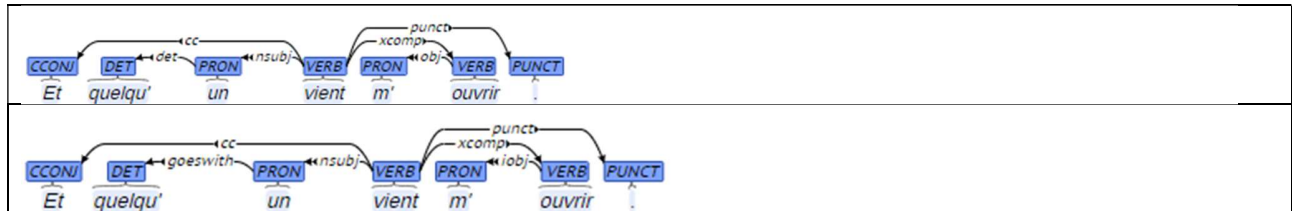
**Sentence 1: Enfin, près du petit bois d' où sort le pavillon, je vais crier.**

- ADV** Enfin (Adv)
  - Modifies the main clause (advmod).
- PUNCT** (Punct)
  - Modifies the main clause (punct).
- ADV** près (Adv)
  - Modifies the noun phrase "bois" (advmod).
- ADP** du (Prep)
  - Part of the prepositional phrase "du petit bois" (case).
- ADJ** petit (Adj)
  - Modifies the noun "bois" (amod).
- NOUN** bois (Noun)
  - Part of the noun phrase "bois d' où sort le pavillon" (acl:relc).
- ADP** d' (Prep)
  - Part of the prepositional phrase "d' où sort le pavillon" (case).
- PRON** où (Pron)
  - Part of the relative clause "où sort le pavillon" (dep).
- VERB** sort (Verb)
  - Verb of the relative clause (nsbj).
- DET** le (Det)
  - Modifies the noun "pavillon" (det).
- NOUN** pavillon (Noun)
  - Part of the noun phrase "pavillon" (nsbj).
- PUNCT** (Punct)
  - Modifies the main clause (punct).
- PRON** je (Pron)
  - Subject of the main clause (nsbj).
- VERB** vais (Verb)
  - Verb of the main clause (xcomp).
- VERB** crier (Verb)
  - Complement of the verb "vais" (xcomp).

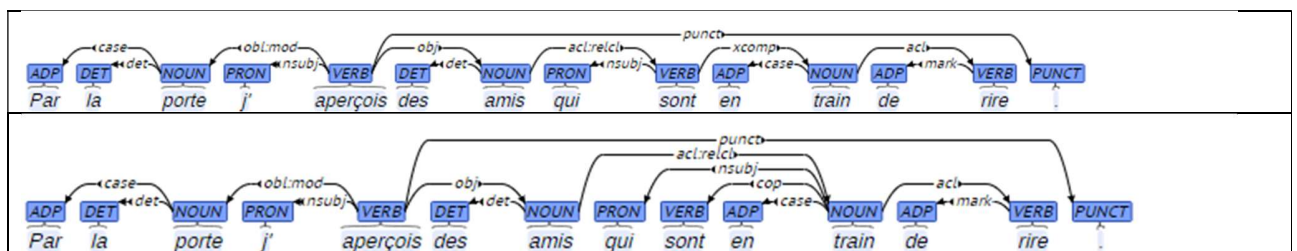
**Sentence 2: Je crie mais des pas tranquilles me rassurent.**

- PUNCT** (Punct)
  - Modifies the main clause (punct).
- PRON** je (Pron)
  - Subject of the main clause (nsbj).
- VERB** crie (Verb)
  - Verb of the main clause (xcomp).
- CCONJ** mais (Conj)
  - Conjunction connecting the two clauses (conj).
- DET** des (Det)
  - Modifies the noun phrase "pas tranquilles" (det).
- NOUN** pas (Noun)
  - Part of the noun phrase "pas tranquilles" (amod).
- ADJ** tranquilles (Adj)
  - Modifies the noun "pas" (amod).
- PRON** me (Pron)
  - Object of the verb "rassurent" (iobj).
- VERB** rassurent (Verb)
  - Verb of the second clause (nsbj).
- PUNCT** (Punct)
  - Modifies the main clause (punct).

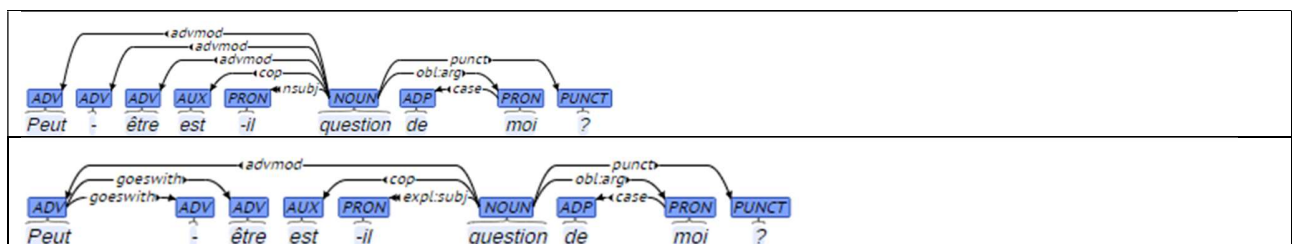
C7



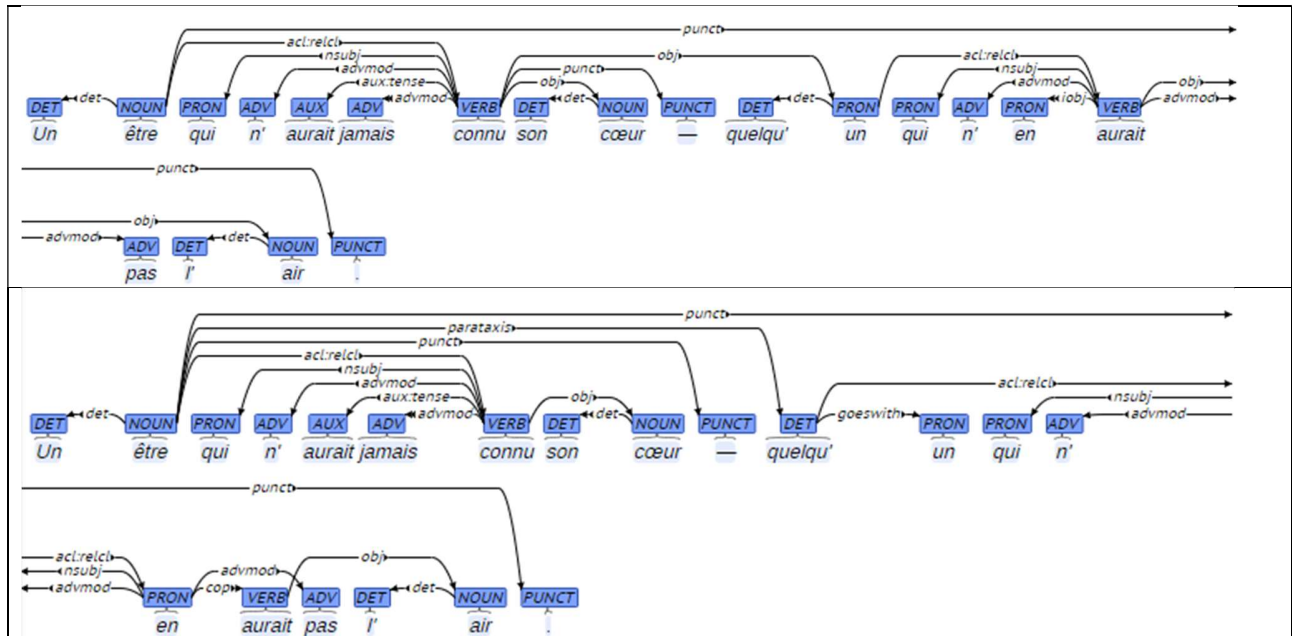
C8



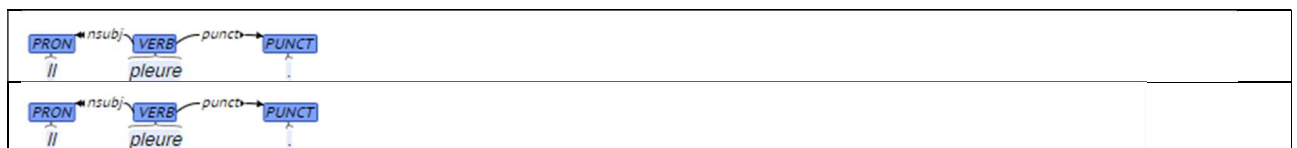
C9



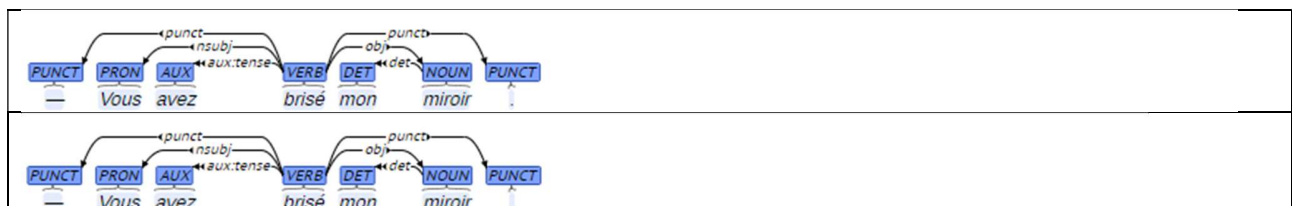
AR1



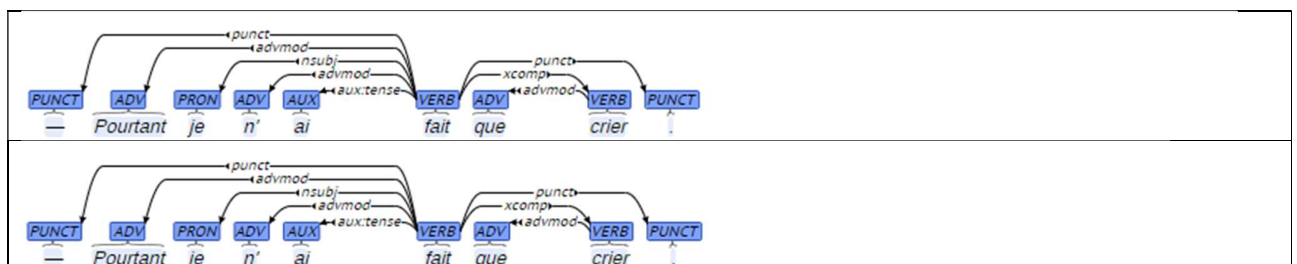
AR2



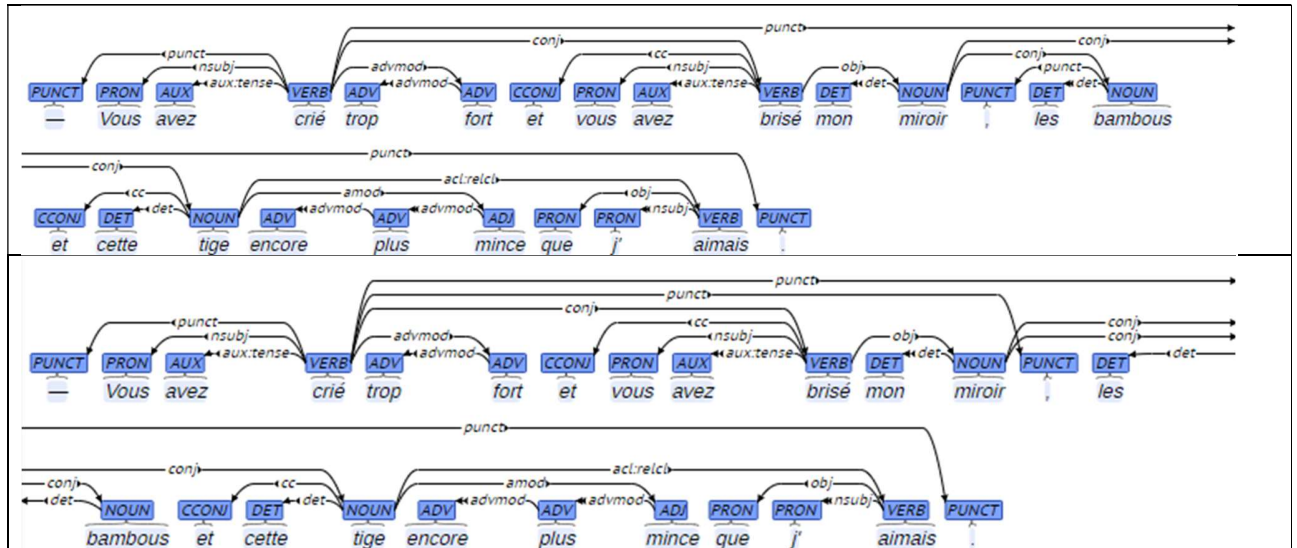
AR3



AR4



AR5



AR6





[illegible]

The image displays two syntactic tree diagrams for the sentence: "Elle n'est plus prise dans ton miroir, ni cachée derrière la fumée trop noire de ta pipe." The tokens are represented by blue boxes, and the grammatical relations are indicated by arrows with labels.

**Top Diagram (Partial Parse):**

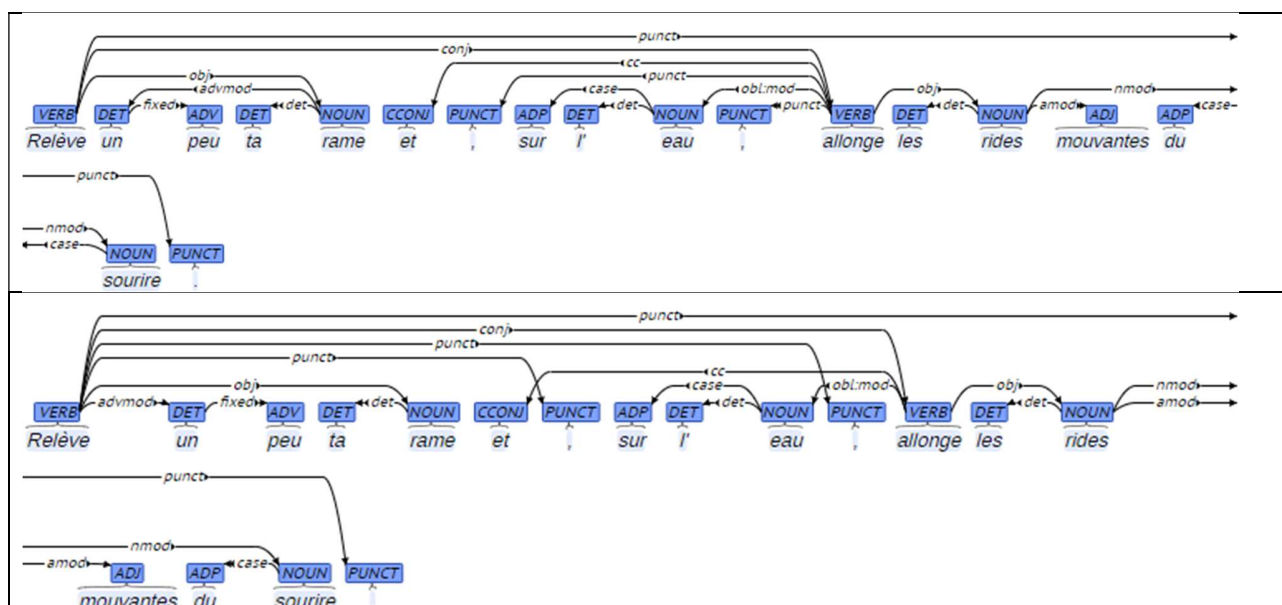
- Root:** **PUNCT** (comma)
- Left Branch:**
  - PUNCT** (period)
  - PRON** (Elle)
  - ADV** (n')
  - AUX** (est)
  - ADV** (plus)
  - VERB** (prise)
  - ADP** (dans)
  - DET** (ton)
  - NOUN** (miroir)
  - PUNCT** (comma)
  - CCONJ** (ni)
  - VERB** (cachée)
  - ADP** (derrière)
  - DET** (la)
  - NOUN** (fumée)
  - ADV** (trop)
  - ADJ** (noire)
- Right Branch:**
  - ADP** (de)
  - DET** (ta)
  - NOUN** (pipe)
  - PUNCT** (period)

**Bottom Diagram (Complete Parse):**

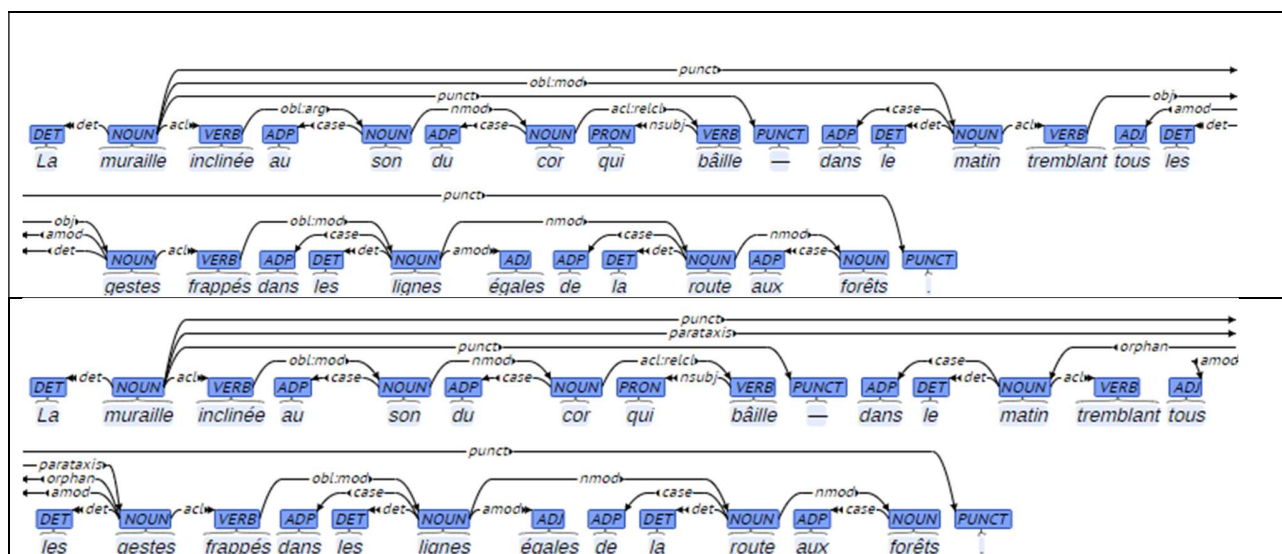
- Root:** **PUNCT** (comma)
- Left Branch:**
  - PUNCT** (period)
  - PRON** (Elle)
  - ADV** (n')
  - AUX** (est)
  - ADV** (plus)
  - VERB** (prise)
  - ADP** (dans)
  - DET** (ton)
  - NOUN** (miroir)
  - PUNCT** (comma)
  - CCONJ** (ni)
  - VERB** (cachée)
  - ADP** (derrière)
  - DET** (la)
  - NOUN** (fumée)
  - ADV** (trop)
  - ADJ** (noire)
- Right Branch:**
  - ADP** (de)
  - DET** (ta)
  - NOUN** (pipe)
  - PUNCT** (period)



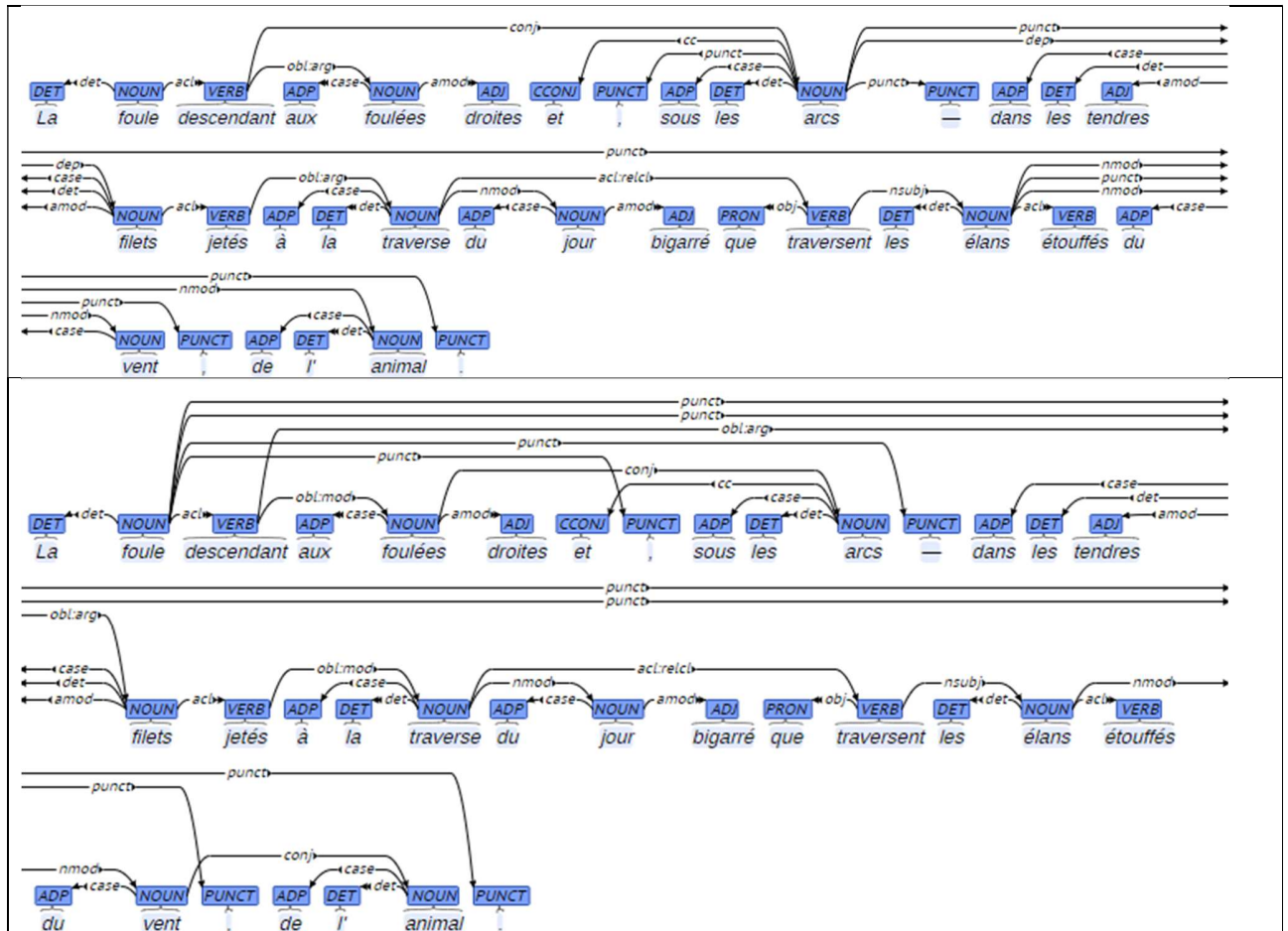
AR9



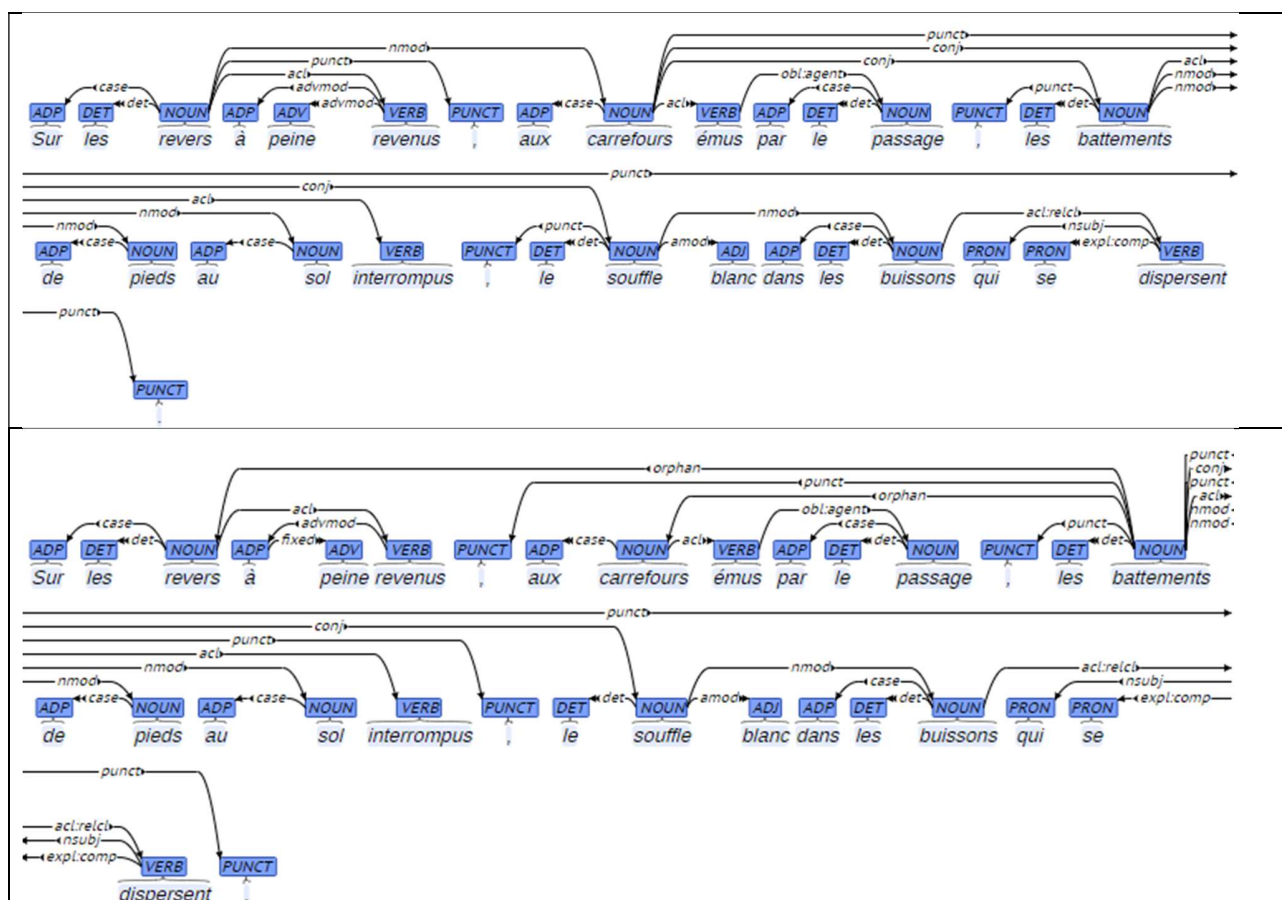
PT1

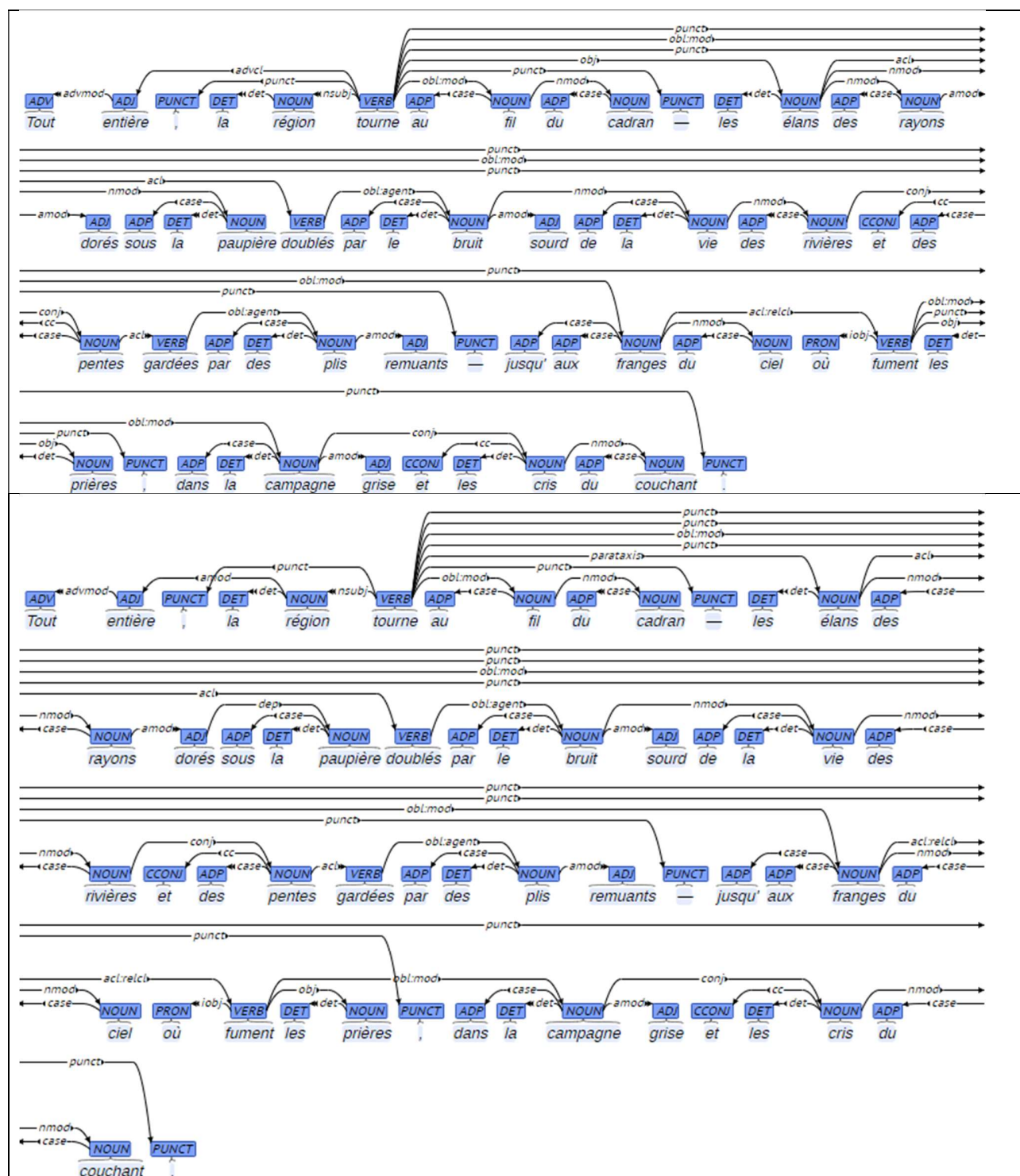


PT2

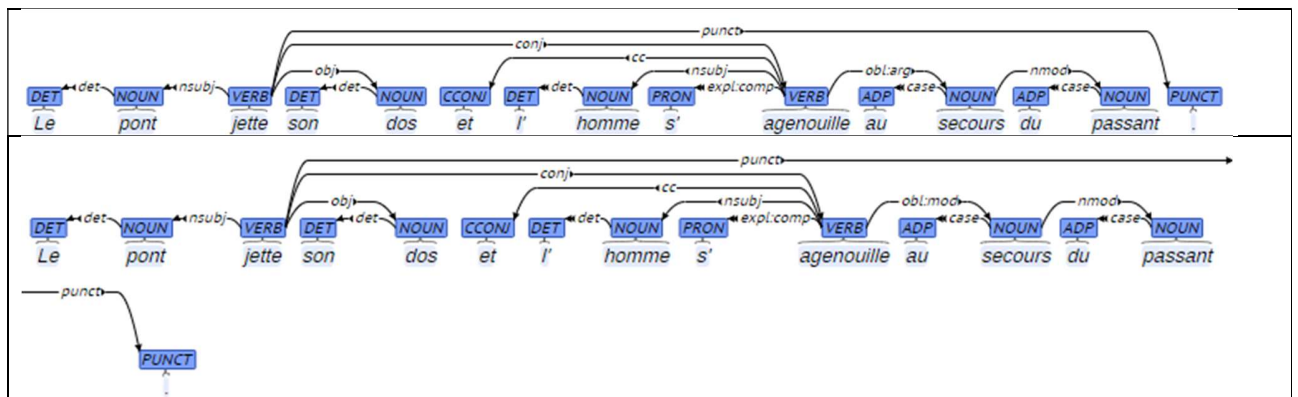


PT3

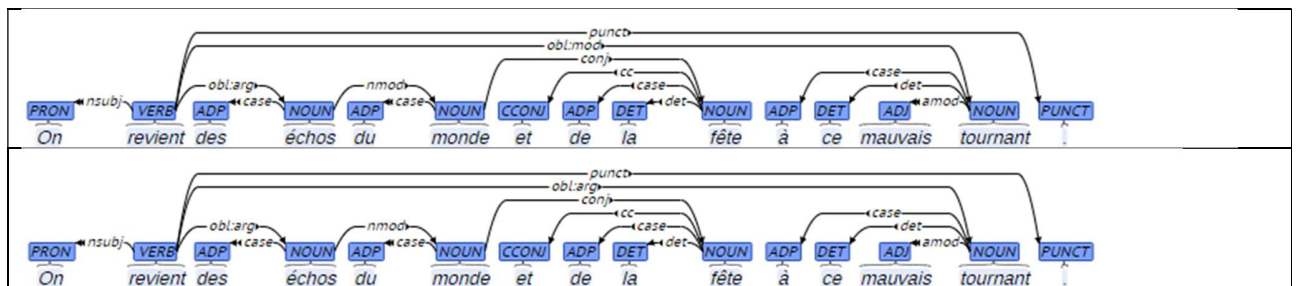




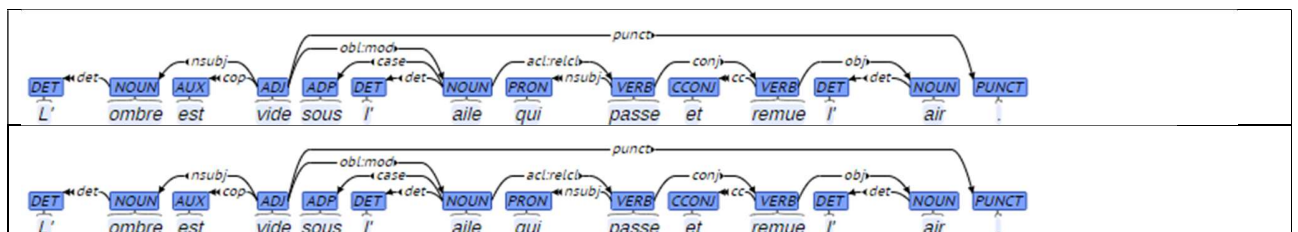
PT5



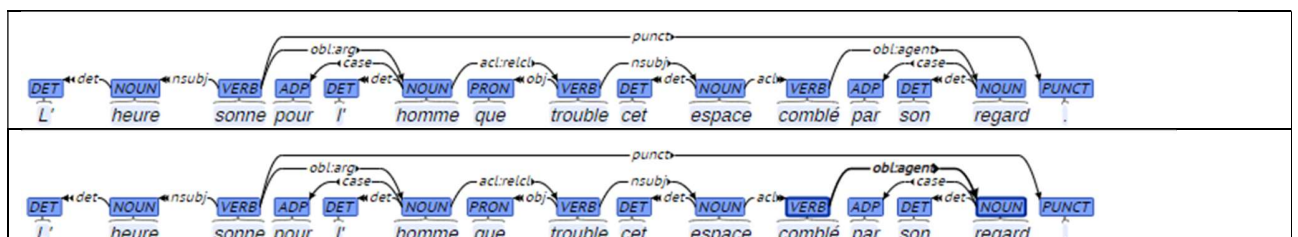
PT6



PT7



PT8

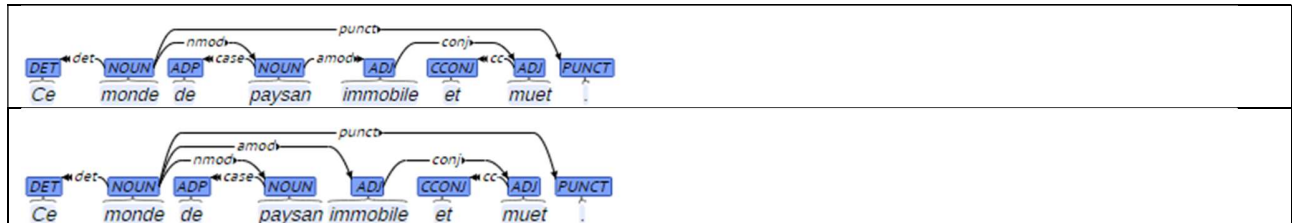




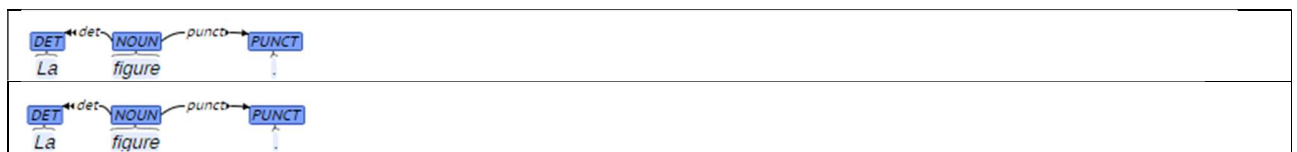
La campagne s'étire et l'eau se remet à couler.



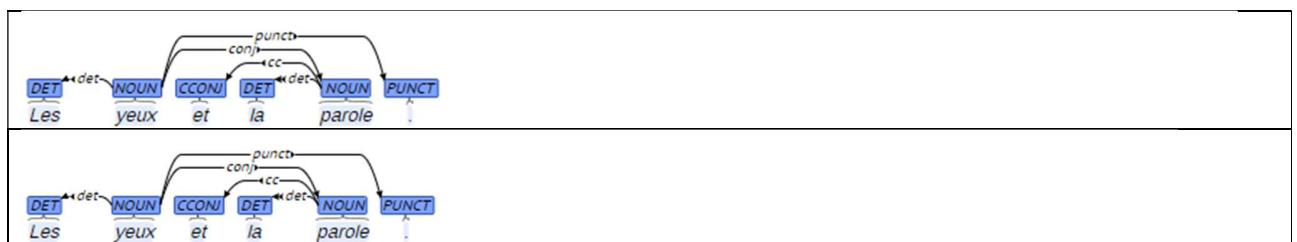
FP4



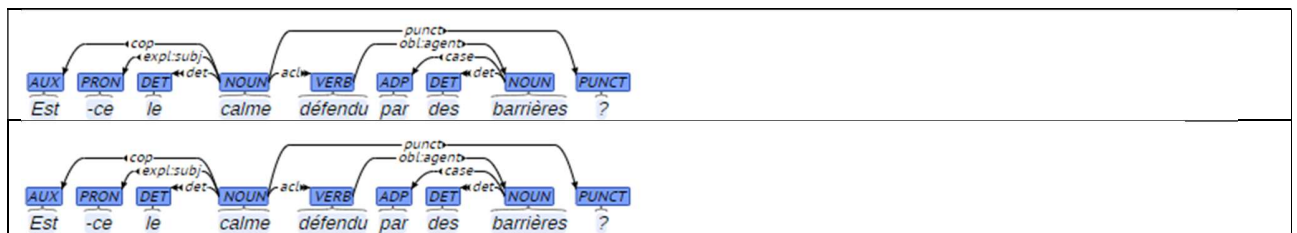
FP5



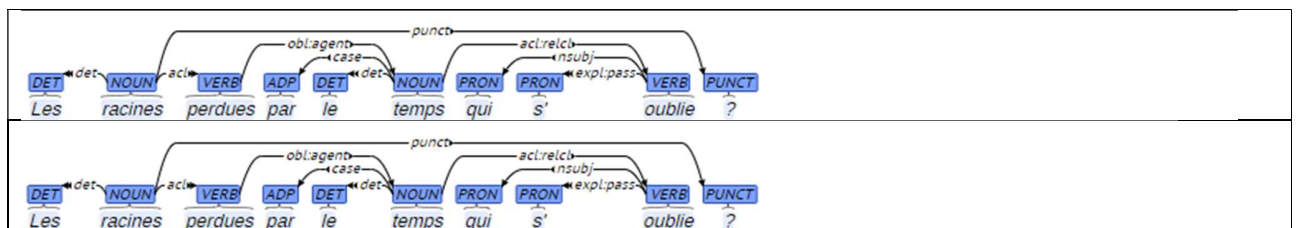
FP6



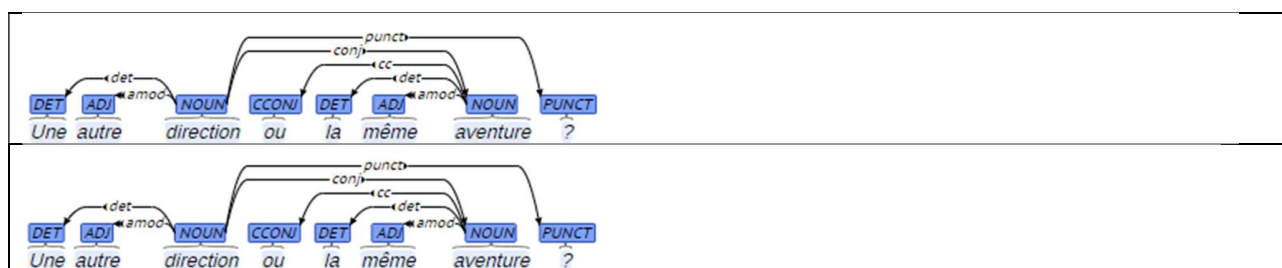
FP7



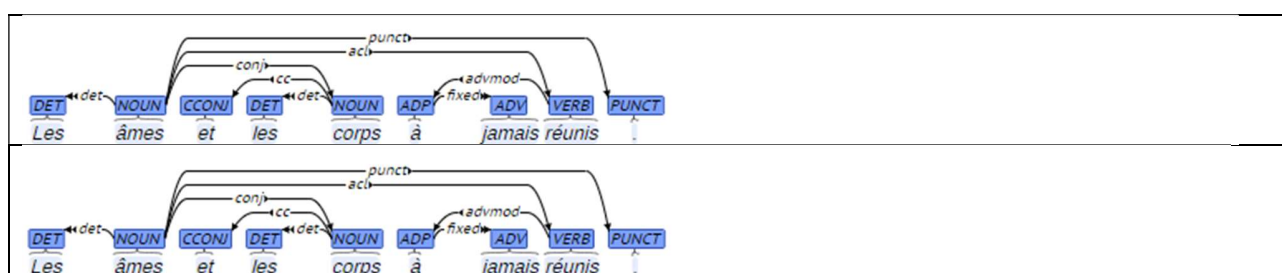
FP8



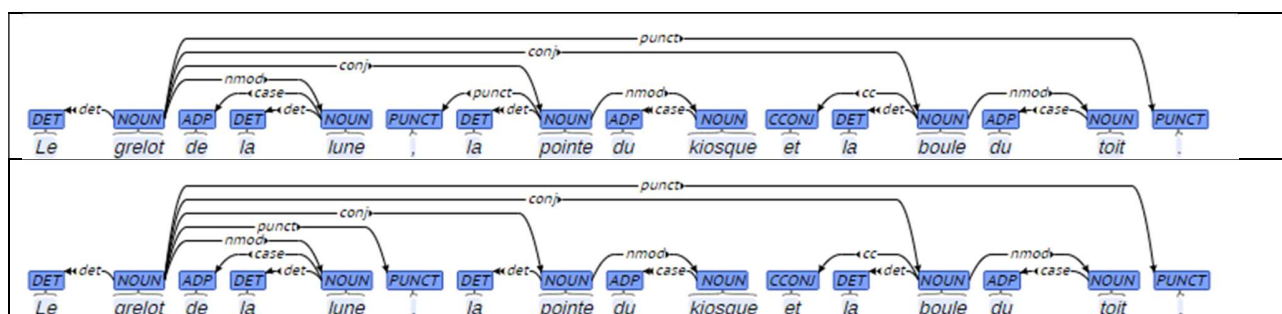
FP9



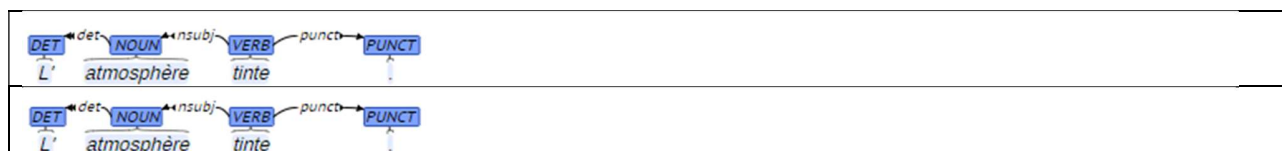
FP10



VV1



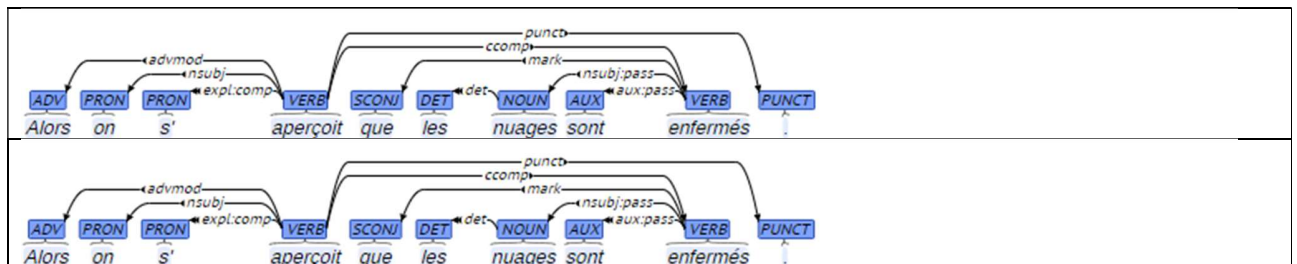
VV2



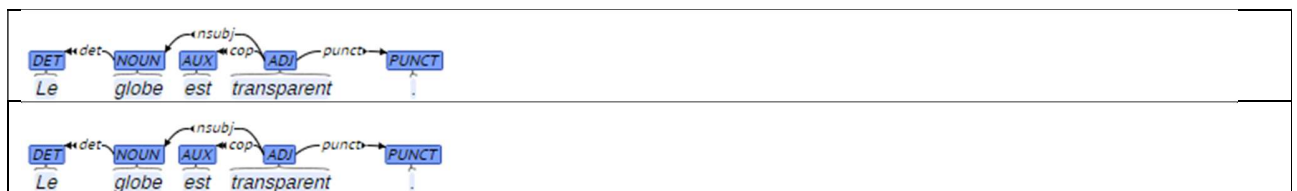
VV3



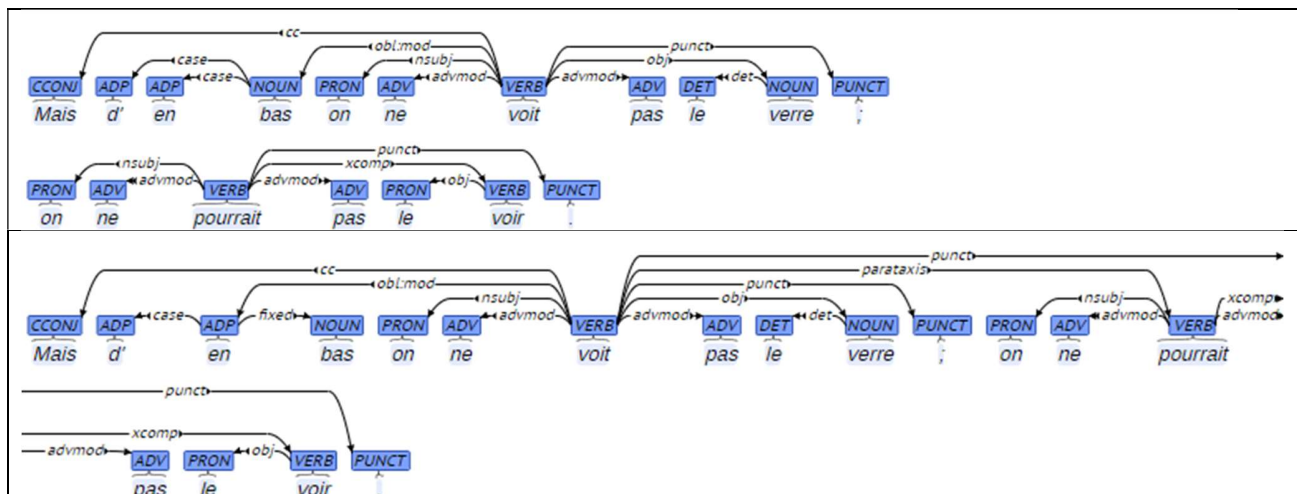
VV4



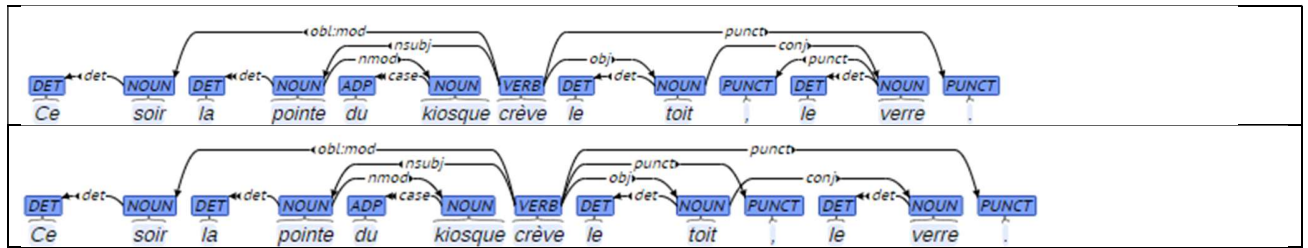
VV5



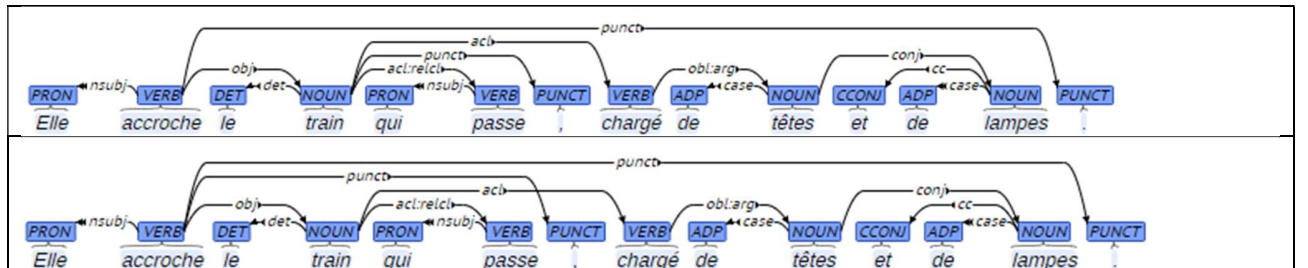
VV6



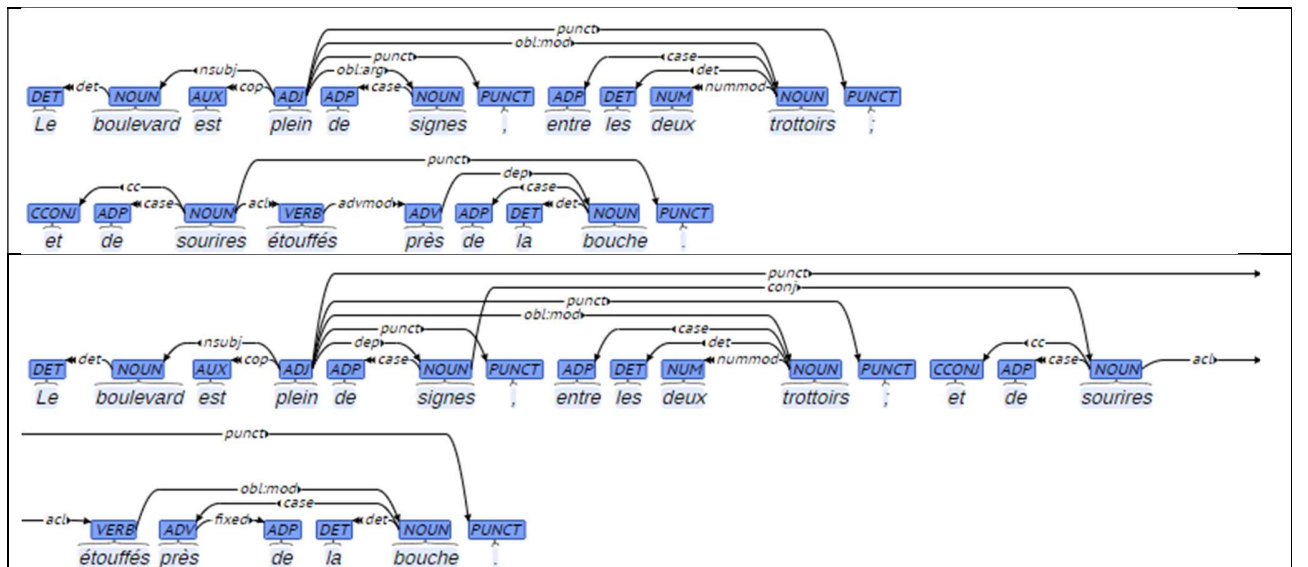
VV7



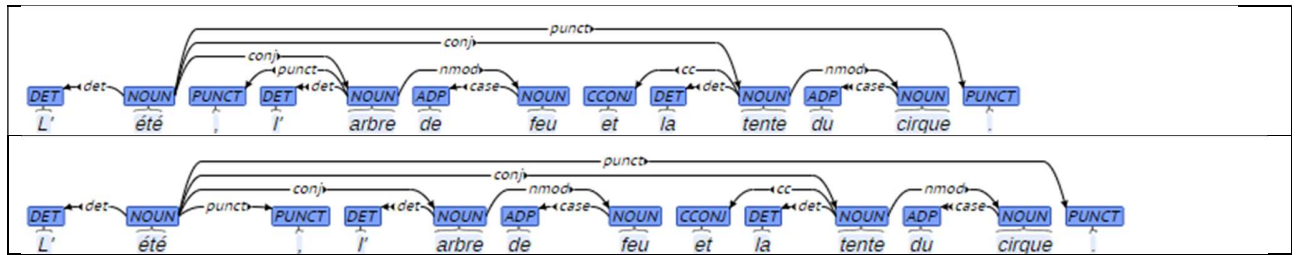
VV8



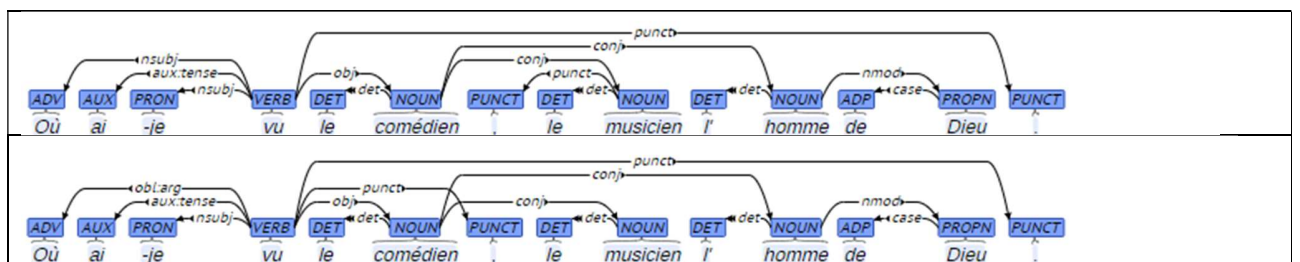
VV9



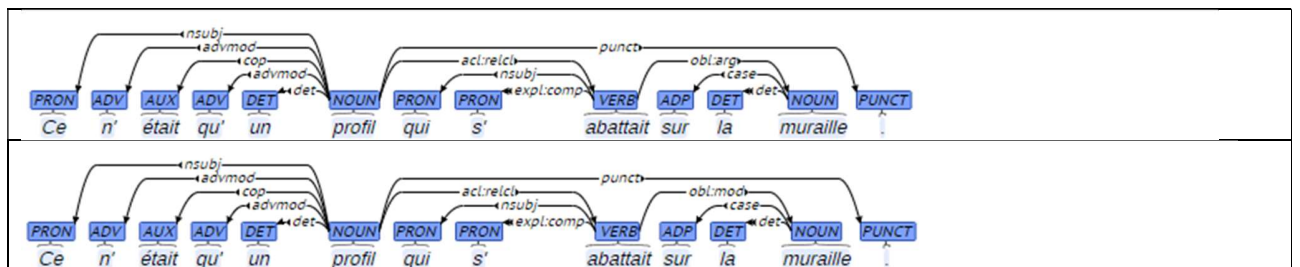
VV10



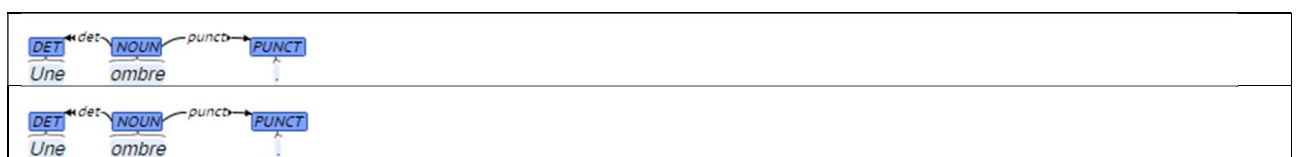
G1



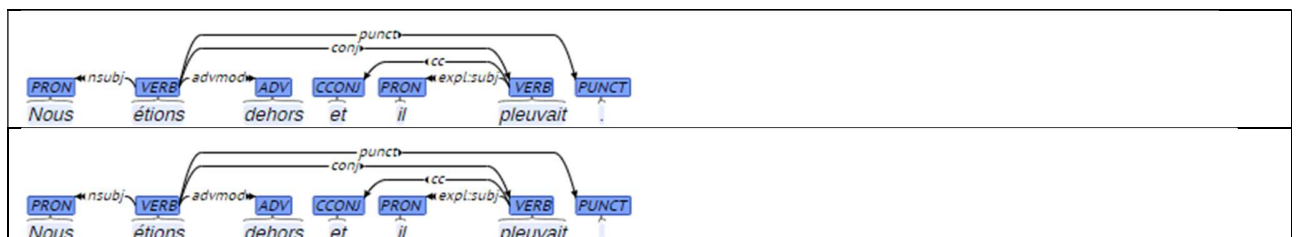
G2



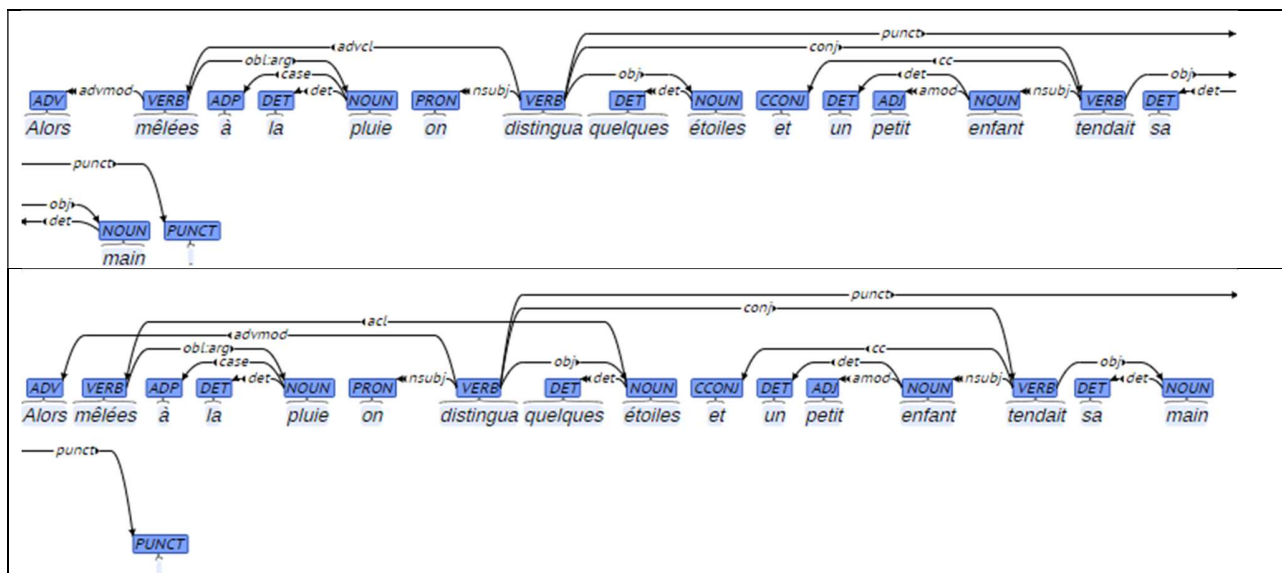
G3



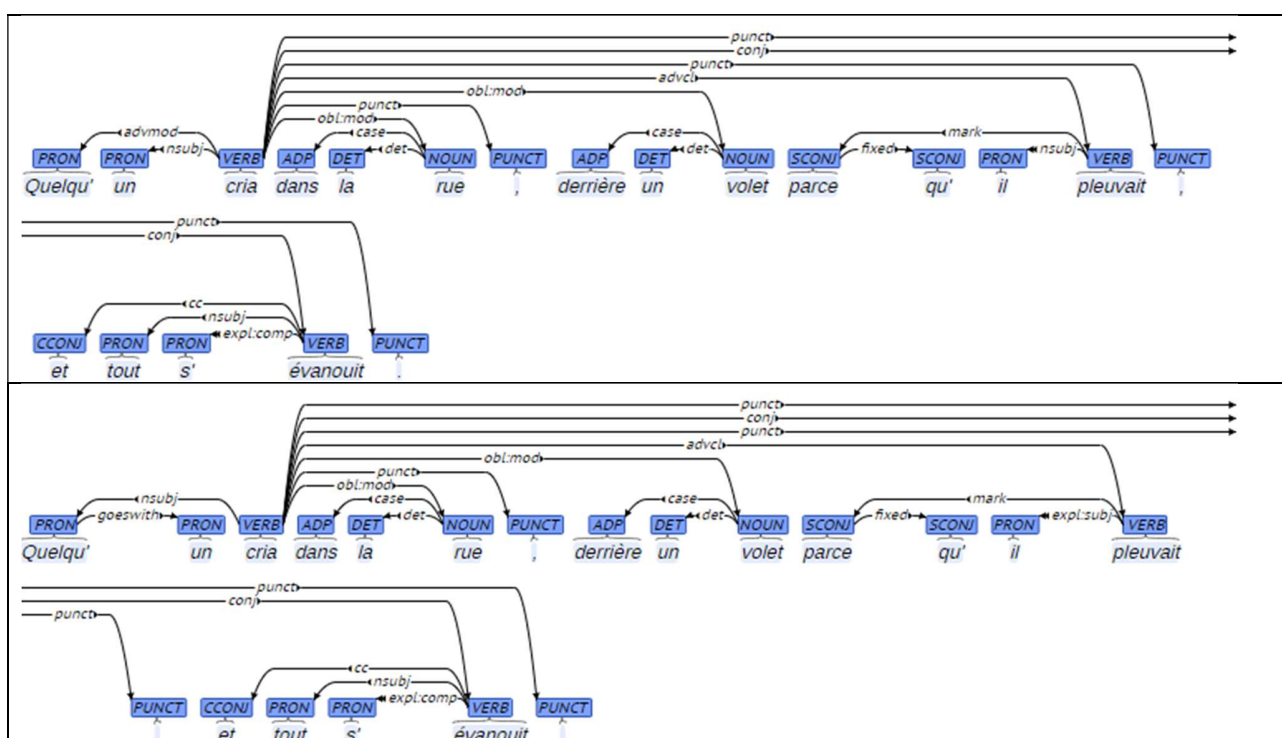
G4



G5

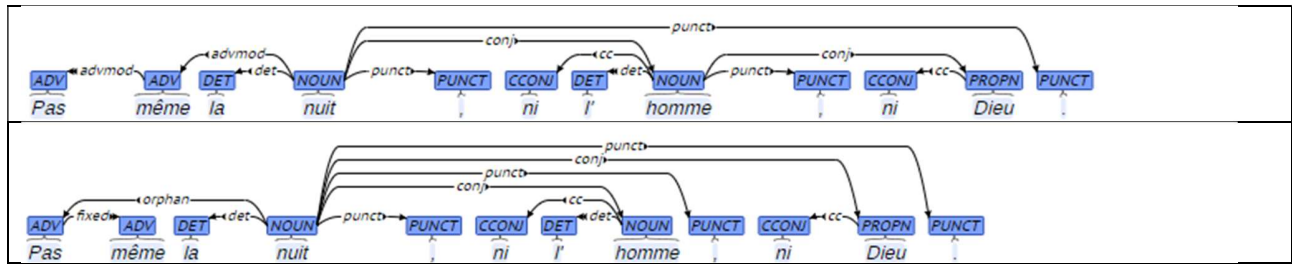


G6

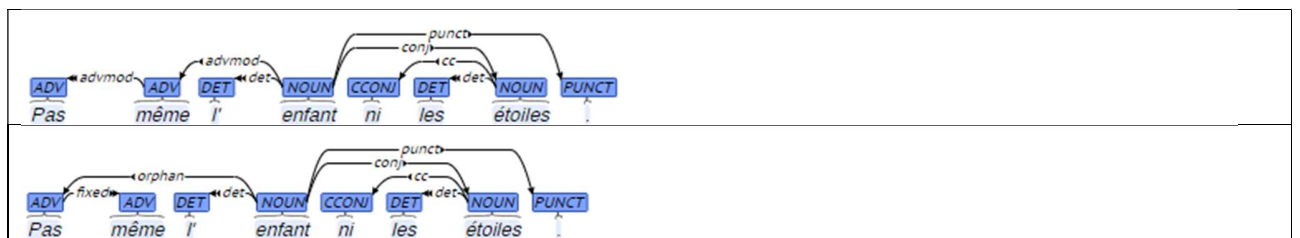




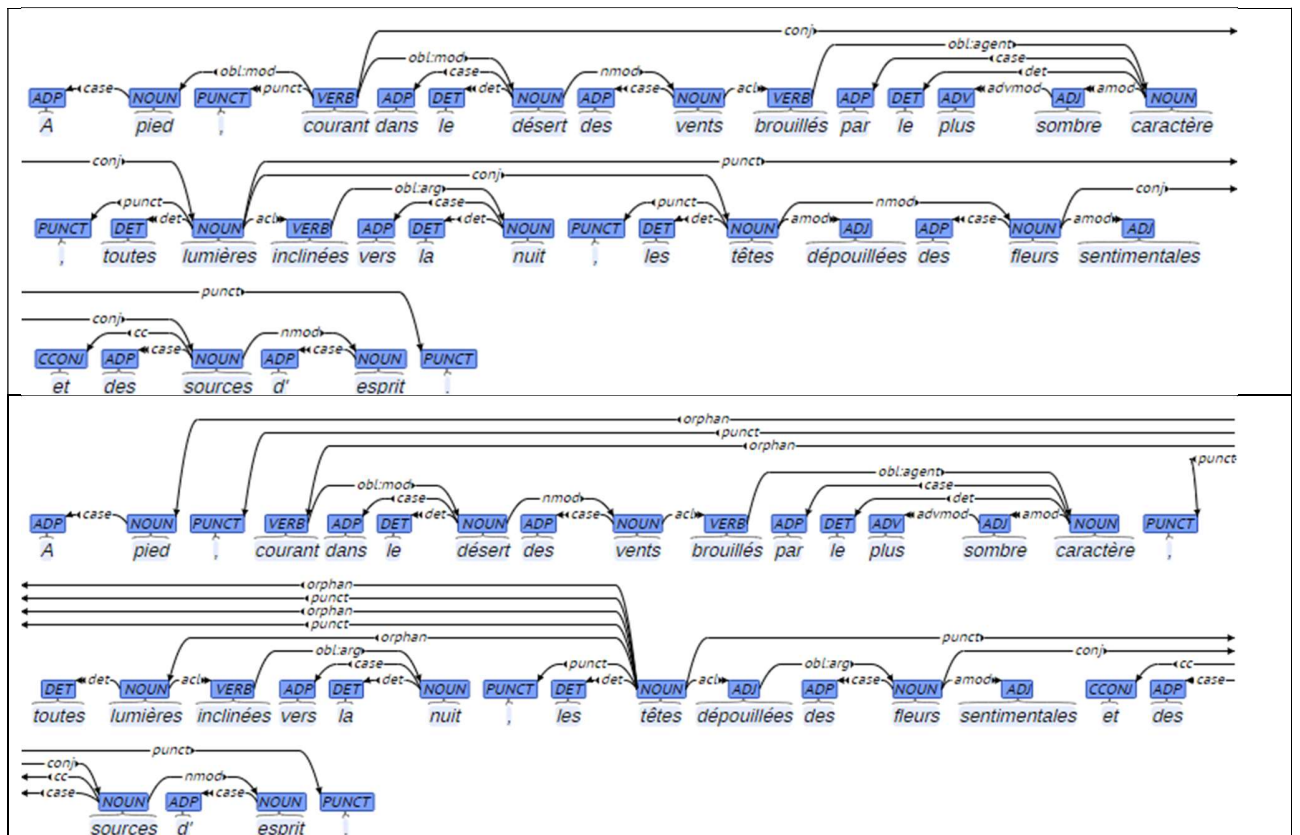
G7



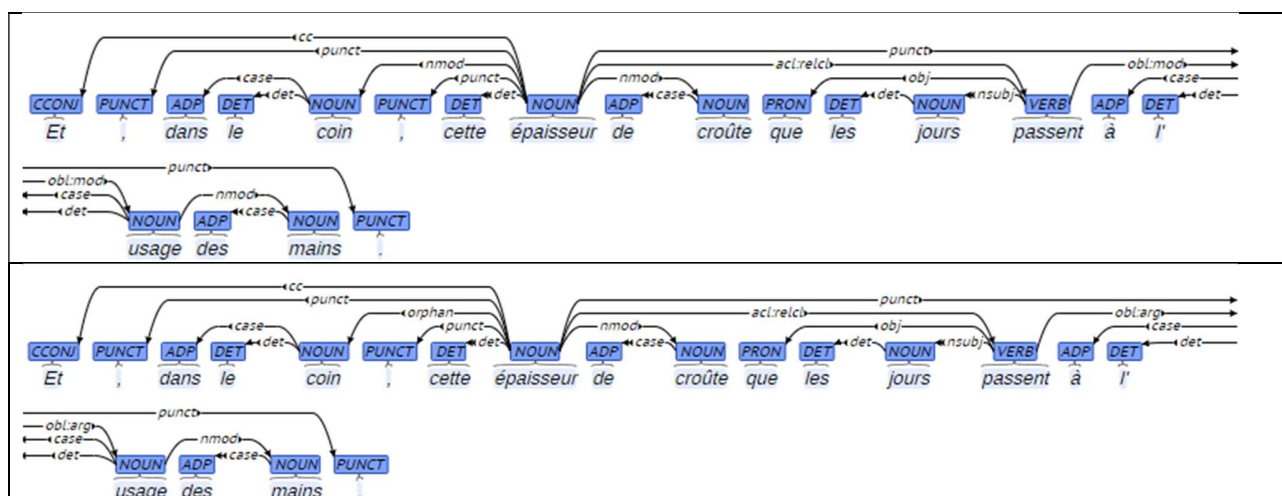
G8



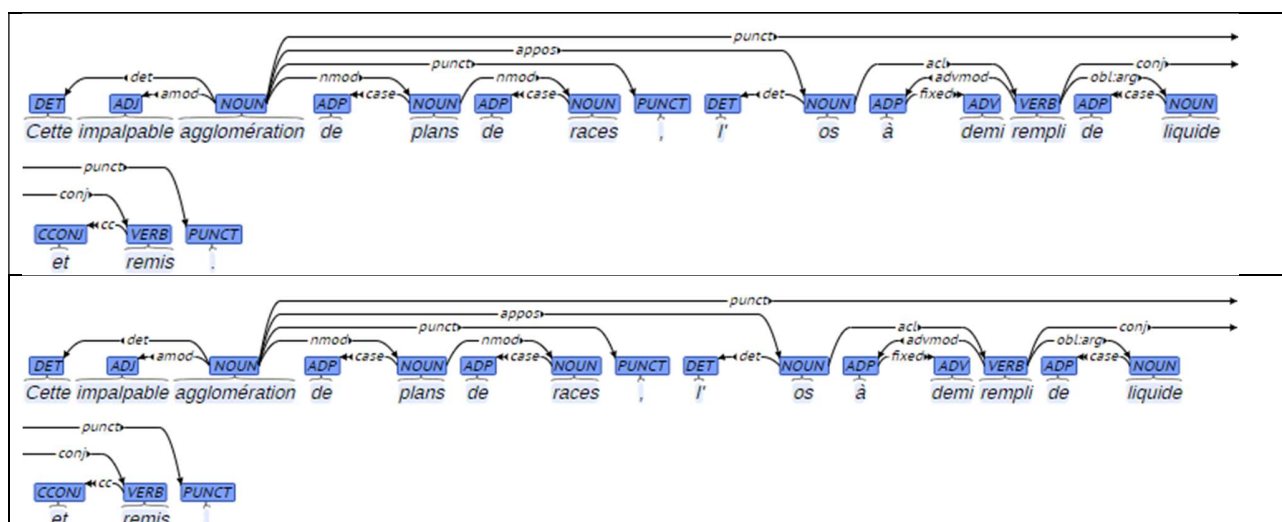
CS1



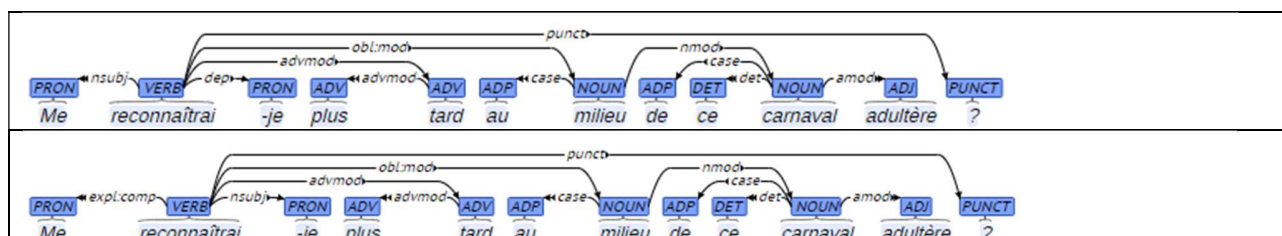
CS2



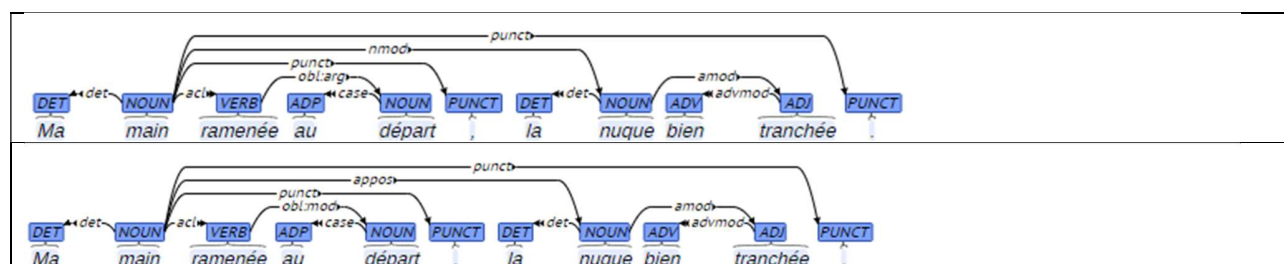
CS3



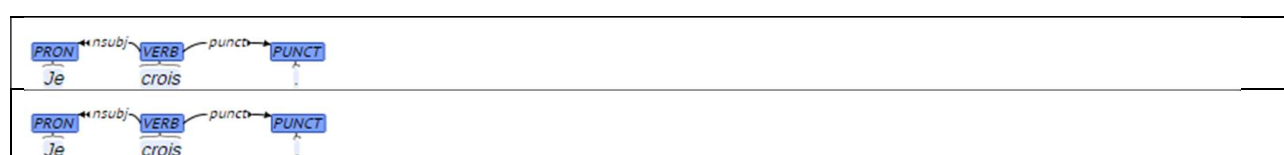
CS4



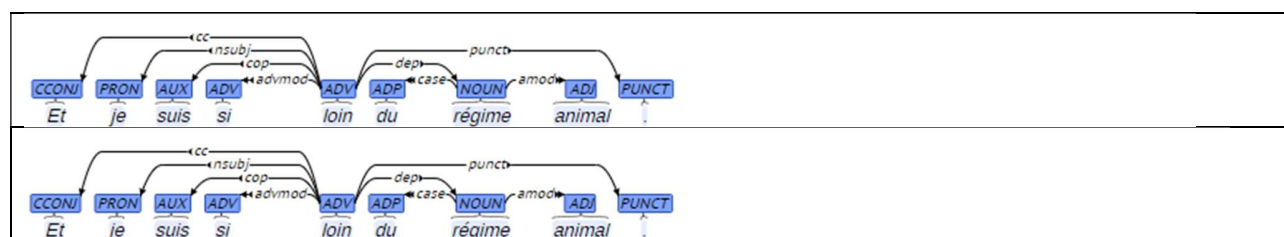
CS5



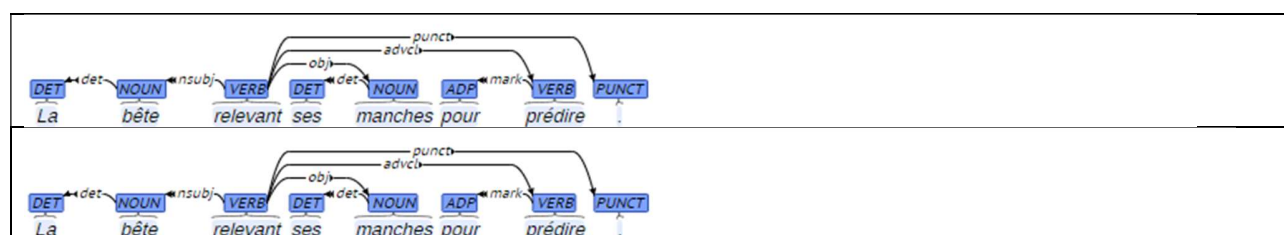
CS6



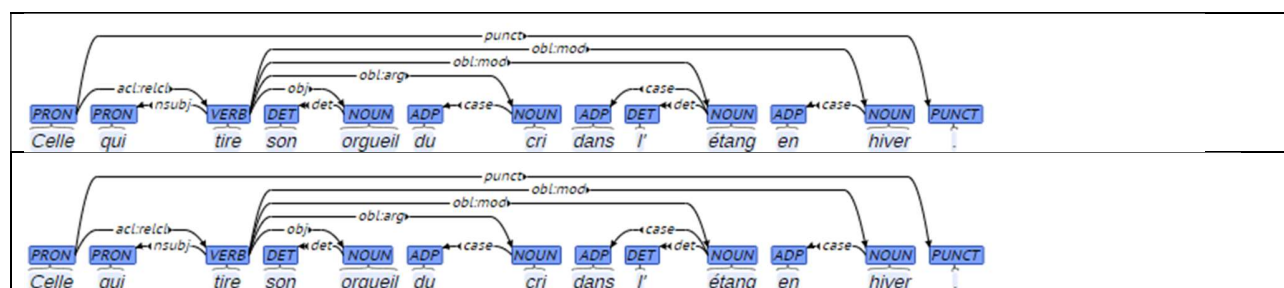
CS7



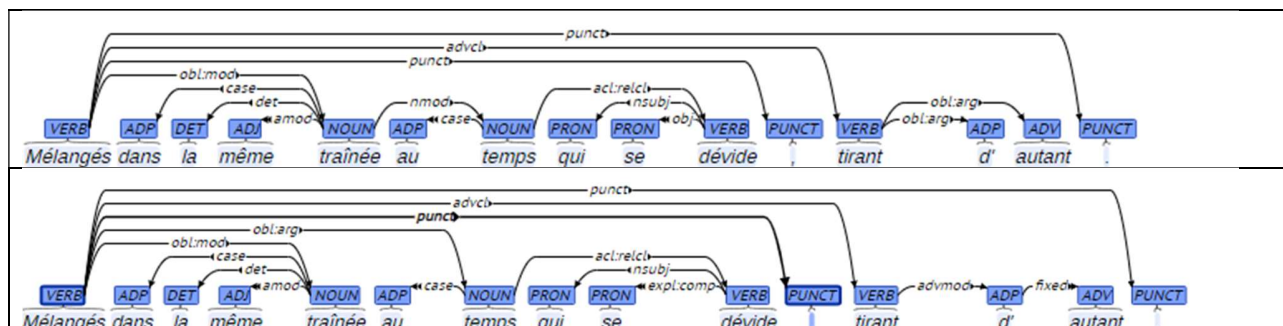
CS8



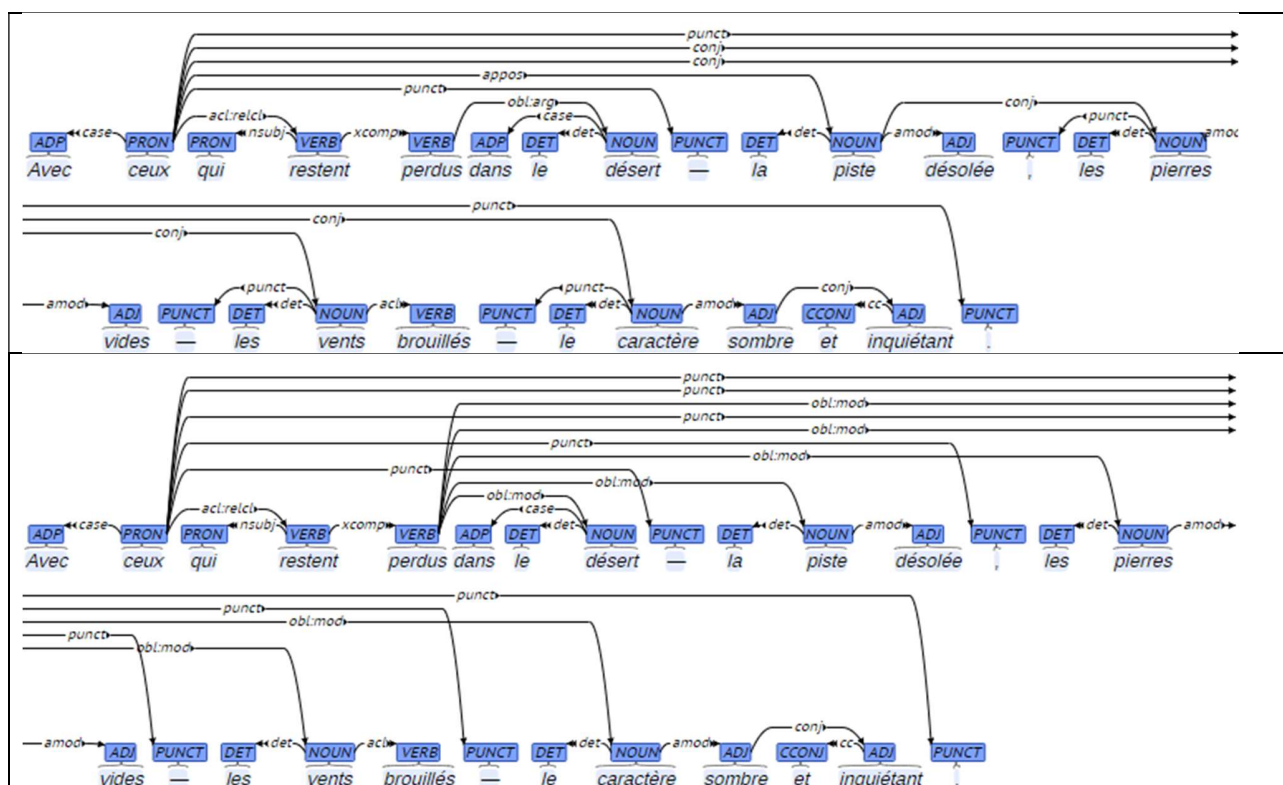
CS9



CS10



CS11



[illegible]

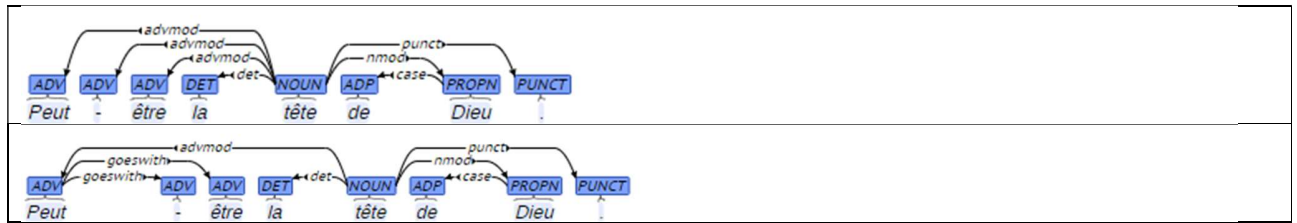
The image displays two identical syntactic tree diagrams for the sentence: "La lumière s'affaisse et sur le mur la tête contre la poitrine et le vitrail". The words are categorized into parts of speech: DET (La, le, le, la, la, le), NOUN (lumière, mur, tête, poitrine, vitrail), PRON (s'), VERB (affaisse), CCONJ (et), and PUNCT (punctuation mark). The diagram illustrates the hierarchical structure of the sentence, showing how the main clause "La lumière s'affaisse" is connected to a series of prepositional phrases "et sur le mur la tête contre la poitrine et le vitrail". The tree structure is as follows:

- Root Node:** A horizontal line representing the sentence structure.
- Main Clause:**
  - DET (La)** is connected to **NOUN (lumière)** via a *det* relation.
  - NOUN (lumière)** is connected to **PRON (s')** via an *nsubj* relation.
  - PRON (s')** is connected to **VERB (affaisse)** via an *expl.pass* relation.
- Conjunction:** **VERB (affaisse)** is connected to **CCONJ (et)** via a *conj* relation.
- Prepositional Phrase:**
  - CCONJ (et)** is connected to **ADP (sur)** via a *cc* relation.
  - ADP (sur)** is connected to **DET (le)** via a *case* relation.
  - DET (le)** is connected to **NOUN (mur)** via a *det* relation.
  - NOUN (mur)** is connected to **DET (la)** via an *nmod* relation.
  - DET (la)** is connected to **NOUN (tête)** via a *det* relation.
  - NOUN (tête)** is connected to **ADP (contre)** via a *dep* relation.
  - ADP (contre)** is connected to **DET (la)** via a *case* relation.
  - DET (la)** is connected to **NOUN (poitrine)** via a *det* relation.
  - NOUN (poitrine)** is connected to **CCONJ (et)** via a *conj* relation.
  - CCONJ (et)** is connected to **DET (le)** via a *cc* relation.
  - DET (le)** is connected to **NOUN (vitrail)** via a *det* relation.
- Punctuation:** A **PUNCT** node is connected to the root line via a *punct* relation.

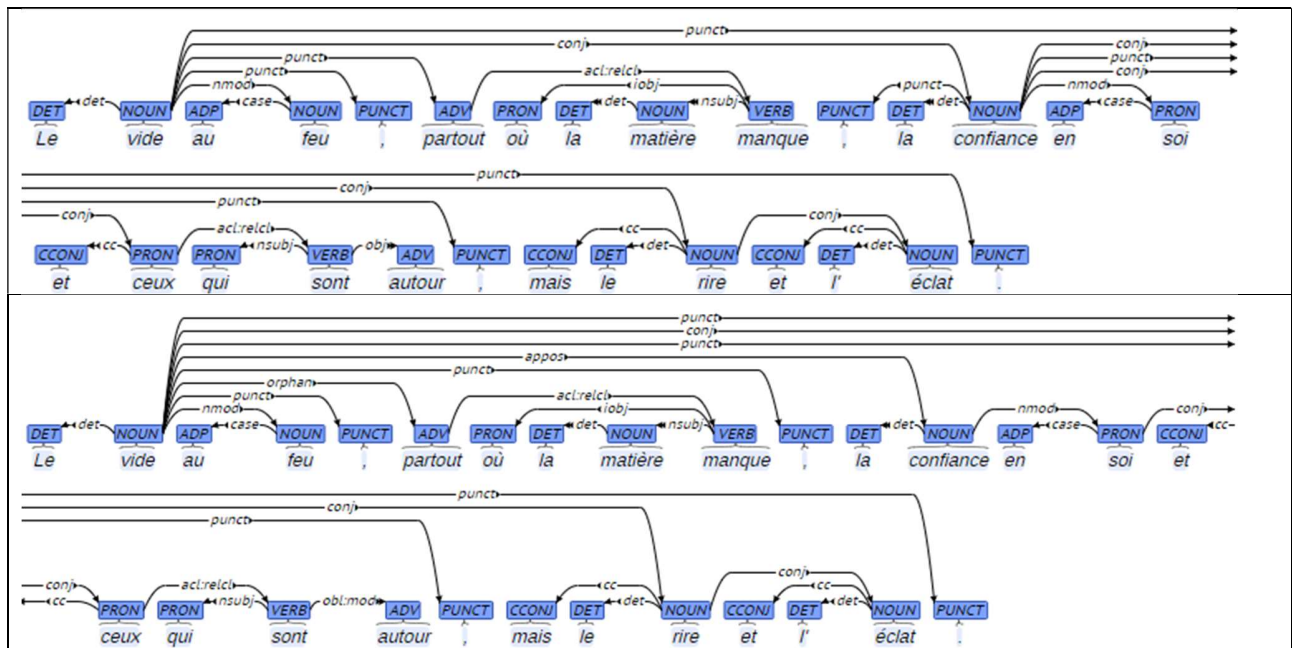
Figure 10: The two possible parse trees for the sentence "La tête." The first tree is the correct parse tree, and the second tree is an incorrect parse tree.



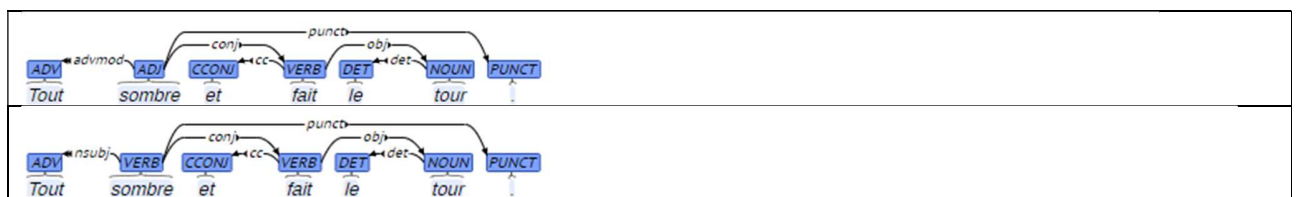
VF4



VF5

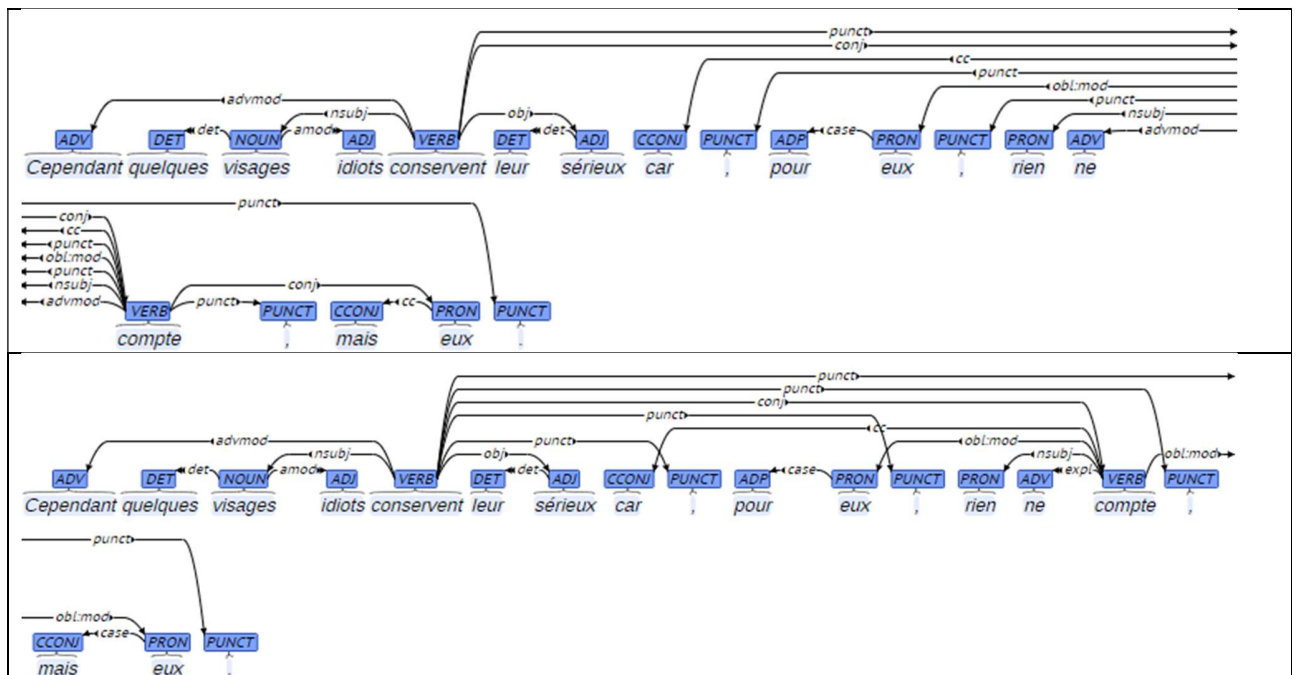


VF6

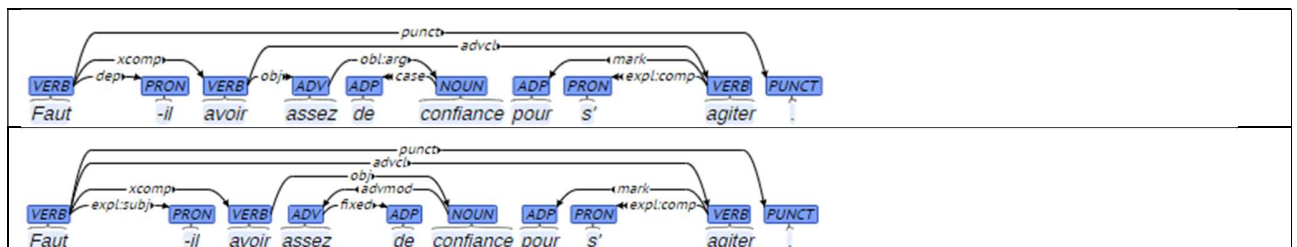




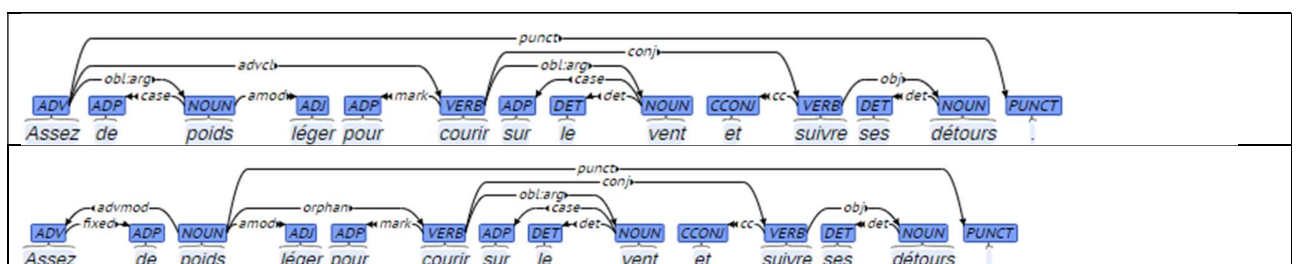
VF7



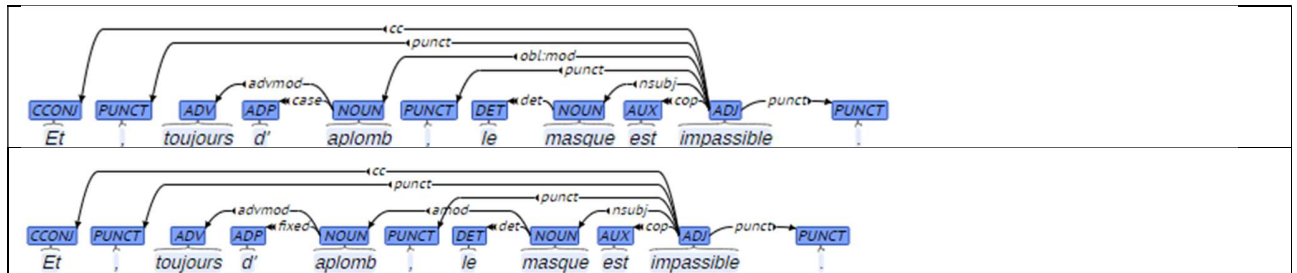
VF8



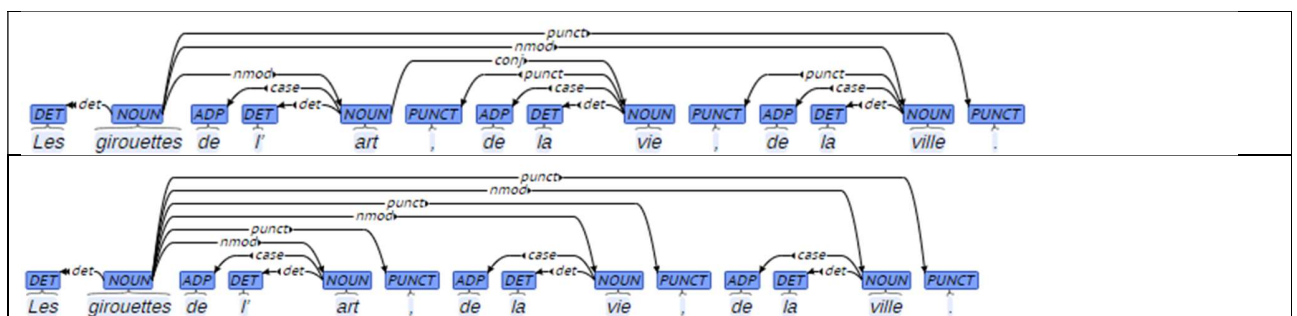
VF9



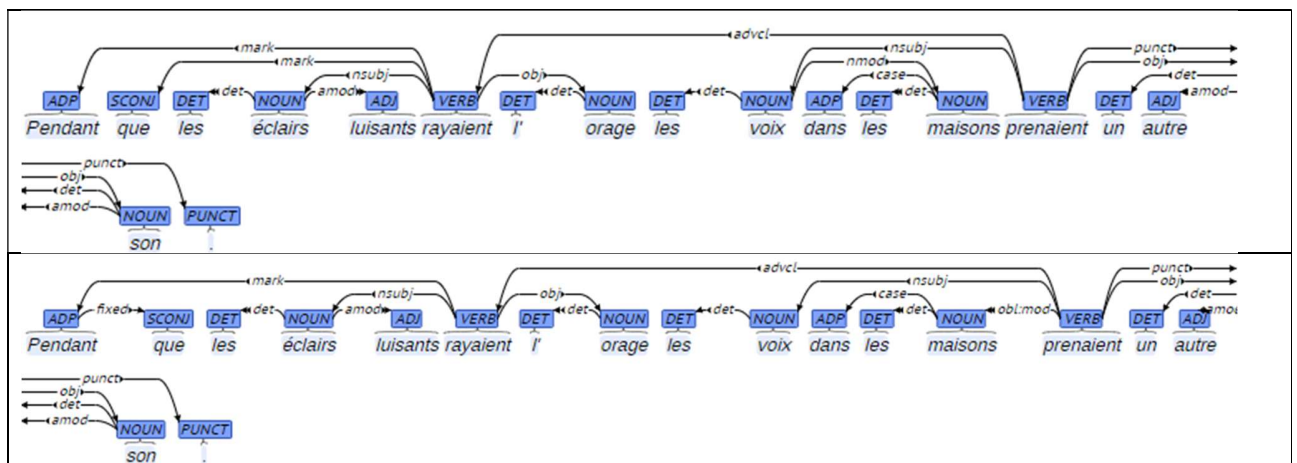
VF10



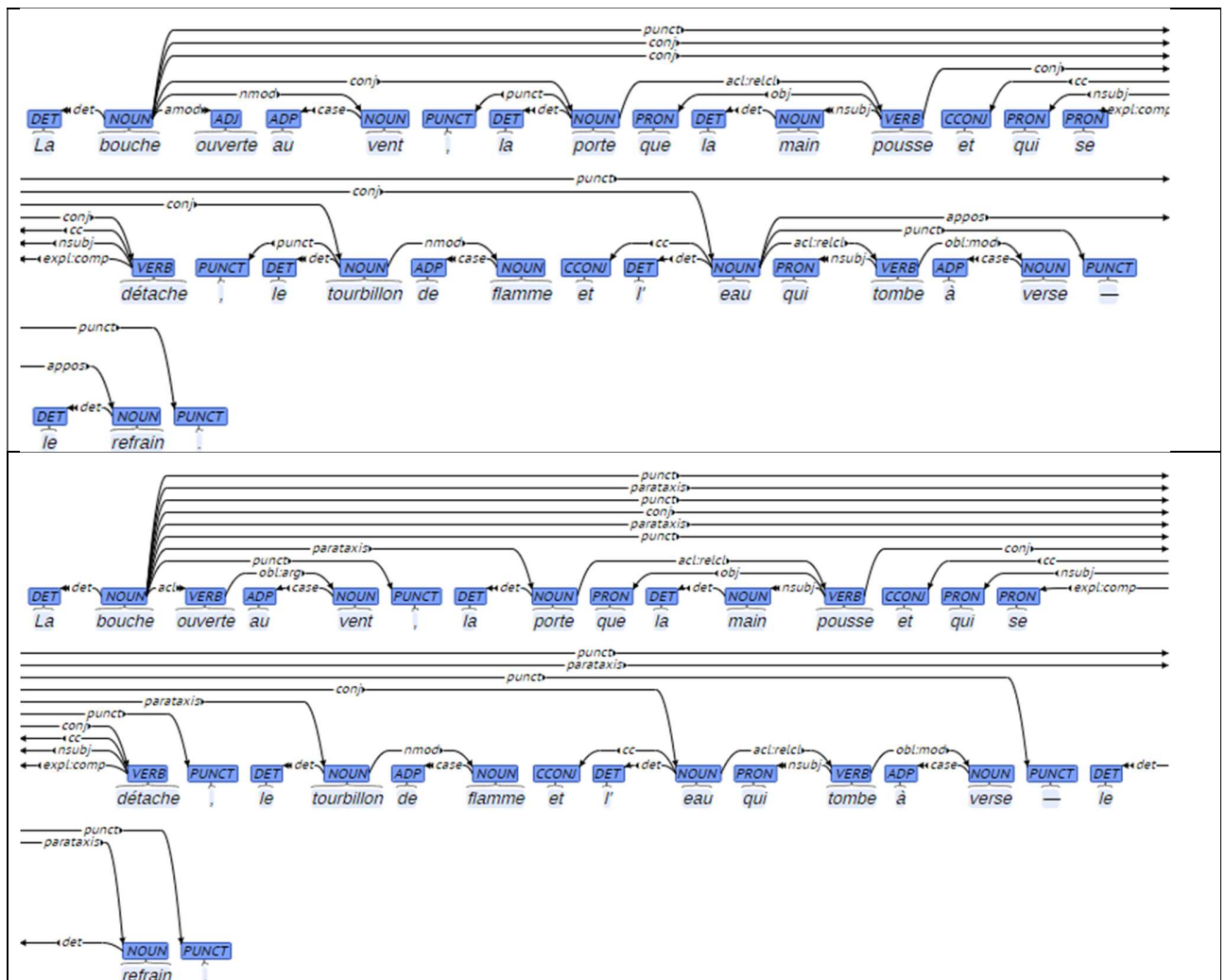
VF11



SA1



SA2



SA3

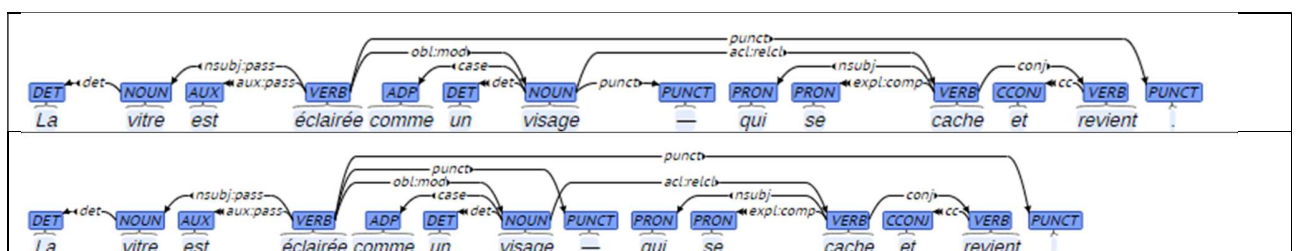
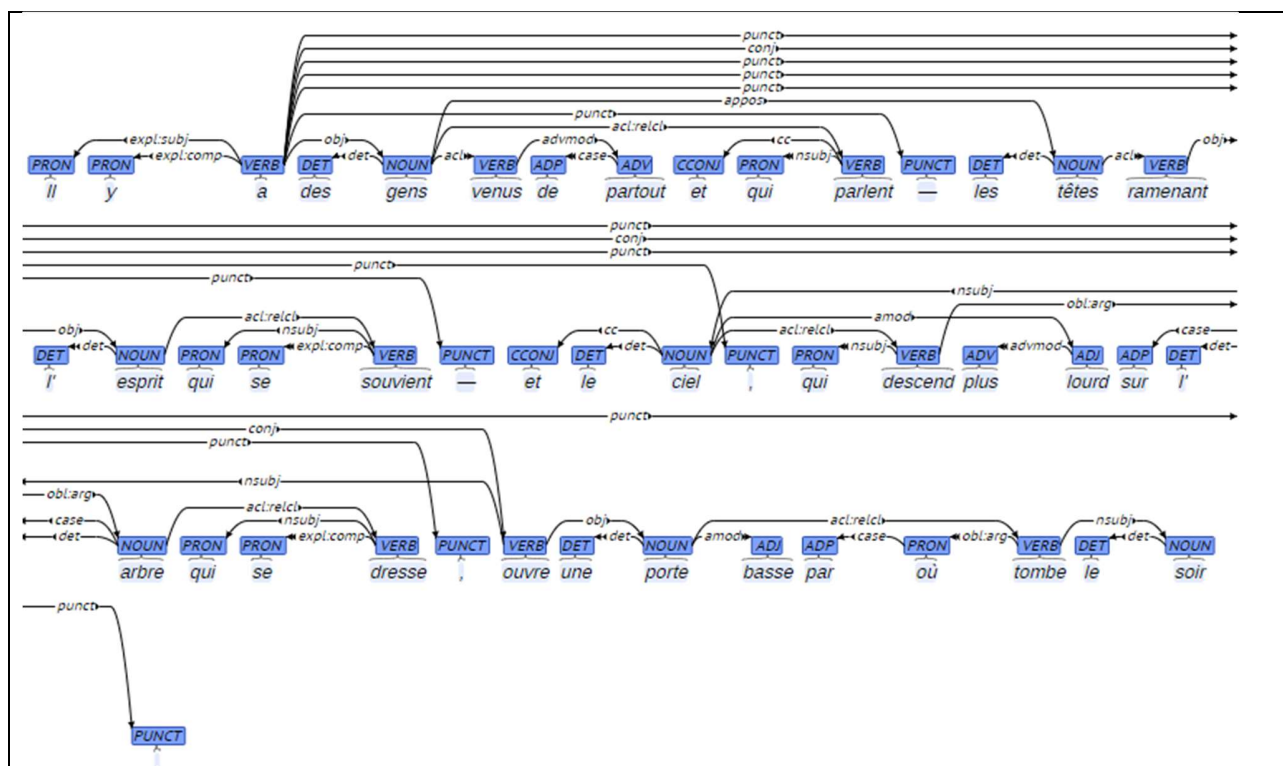
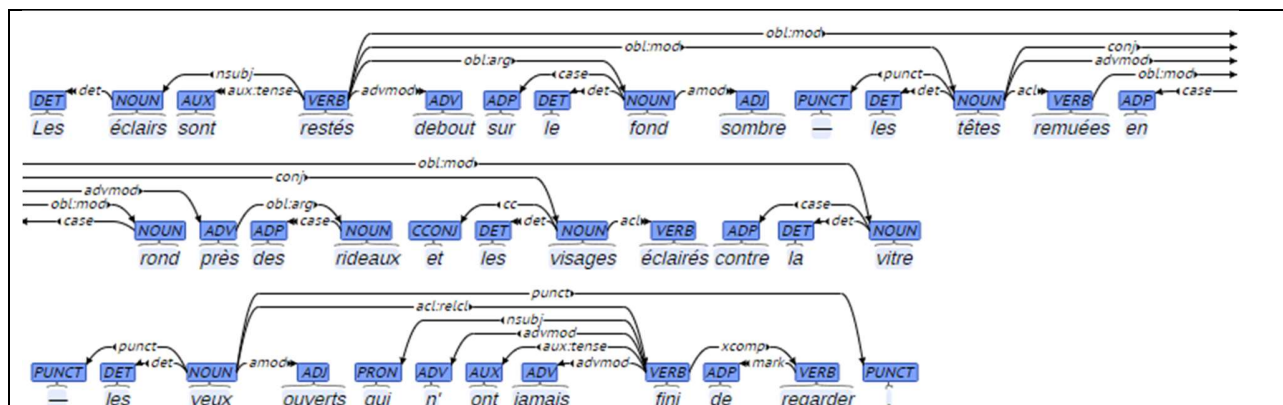


Figure 10: A comparison of the two models. The top model is the baseline model, and the bottom model is the proposed model. The top model's dependency parse tree for the sentence "Dans les rideaux le mouvement du temps et l'esprit qui se lasse quand la pendule saute les heures en écoutant" is shown. The bottom model's dependency parse tree for the same sentence is shown. The bottom model's tree is more accurate, as it correctly identifies the dependencies between the words "pendule" and "saut", "heures" and "écoute", and "l'esprit" and "se lasse".

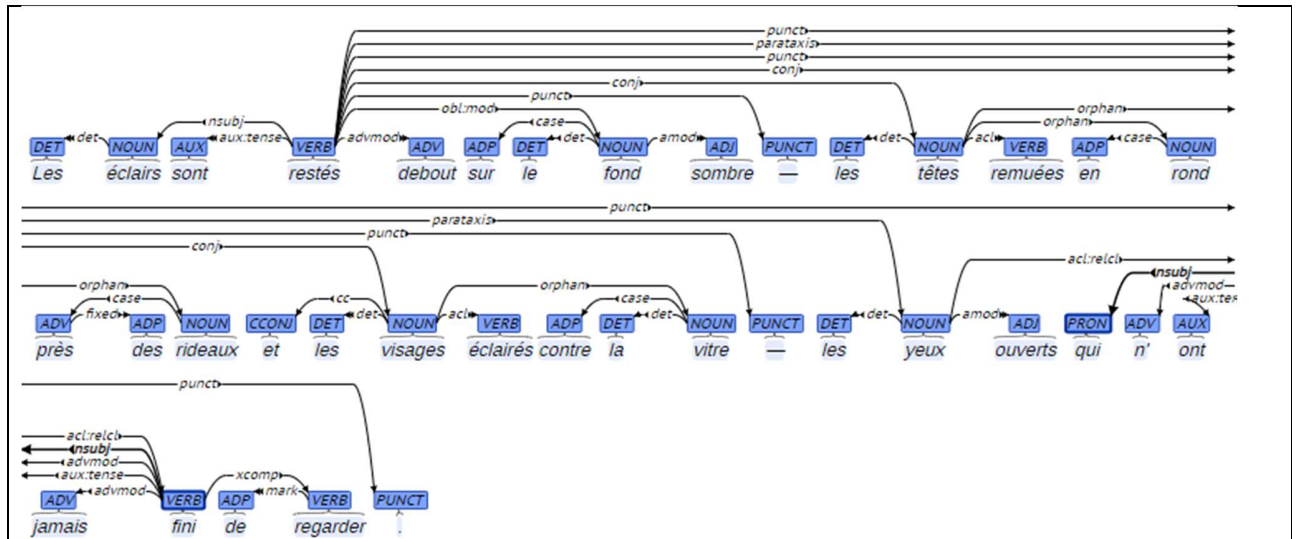
The diagram illustrates the syntactic structure of the sentence: "Il y a des gens venus de partout et qui parlent les têtes ramenant l'esprit qui se souvient et le ciel qui descend plus lourd sur l'arbre qui se dresse ouvre une porte basse par où tombe le soir." The words are grouped into boxes representing parts of speech: PRON (Il, y), VERB (a), DET (des), NOUN (gens), VERB (venus), ADP (de), ADV (partout), CCONJ (et), PRON (qui), VERB (parlent), PUNCT (—), DET (les), NOUN (têtes), VERB (ramenant), DET (l'), NOUN (esprit), PRON (qui), PRON (se), VERB (souvient), PUNCT (—), CCONJ (et), DET (le), NOUN (ciel), PUNCT (—), PRON (qui), VERB (descend), ADV (plus), ADJ (lourd), ADP (sur), DET (l'), NOUN (arbre), PRON (qui), PRON (se), VERB (dresse), PUNCT (—), VERB (ouvre), DET (une), NOUN (porte), ADJ (basse), ADP (par), PRON (où), VERB (tombe), DET (le), NOUN (soir), and PUNCT (—). The diagram shows the hierarchical structure of the sentence, with nodes for parts of speech and their grammatical functions (e.g., expl:subj, obj, acti, obl:arg, conj, cc, nsbj, acti:rele, xcomp, advmod, case, amod, acti:rele, case).



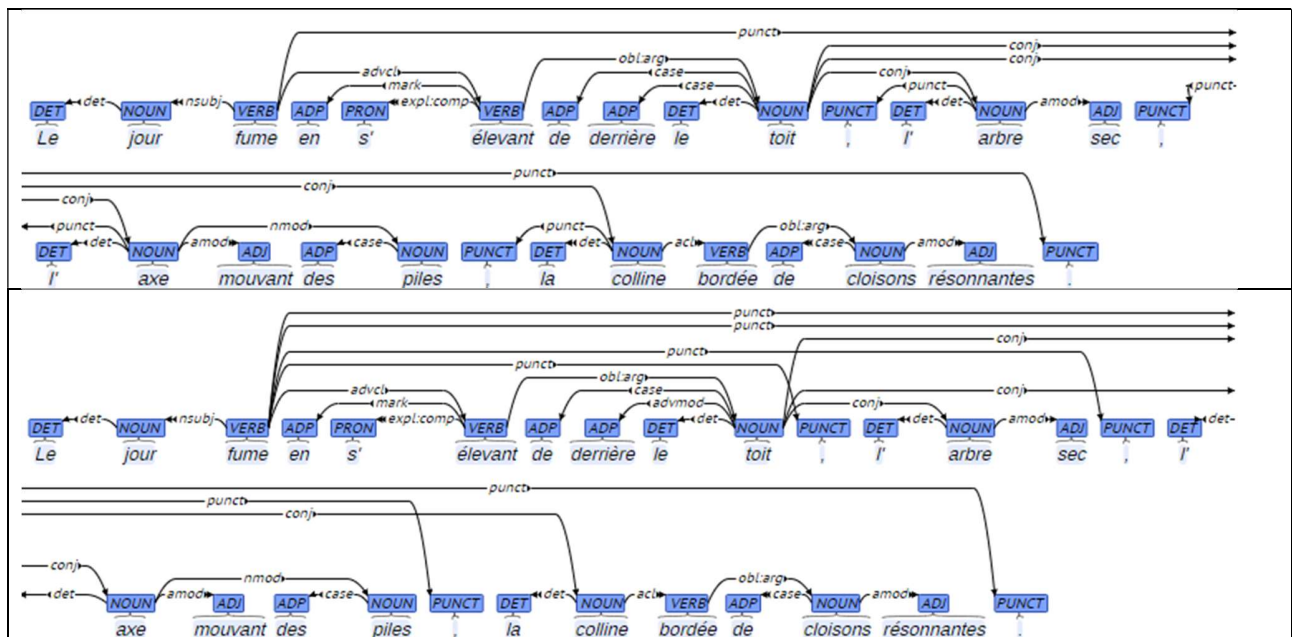
SA6



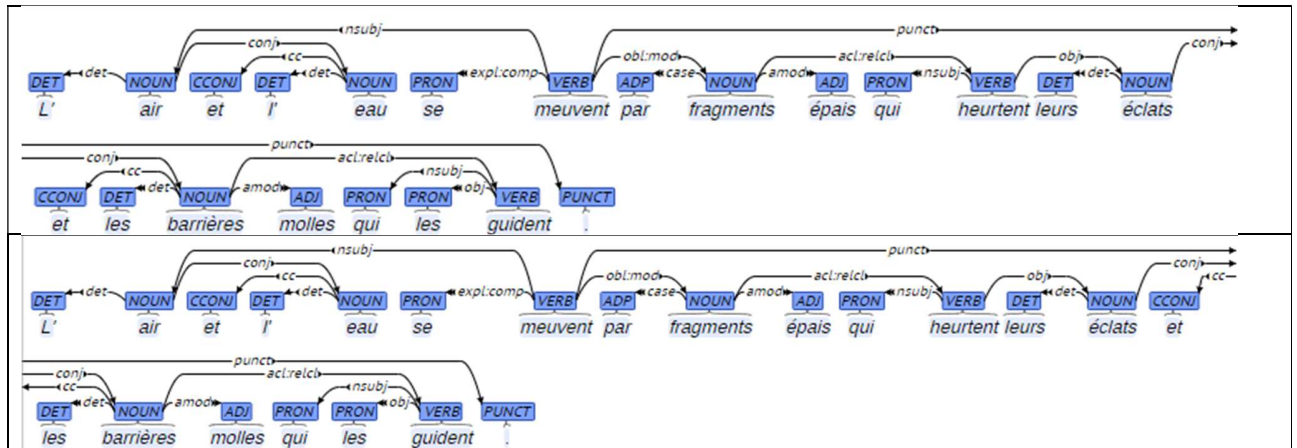




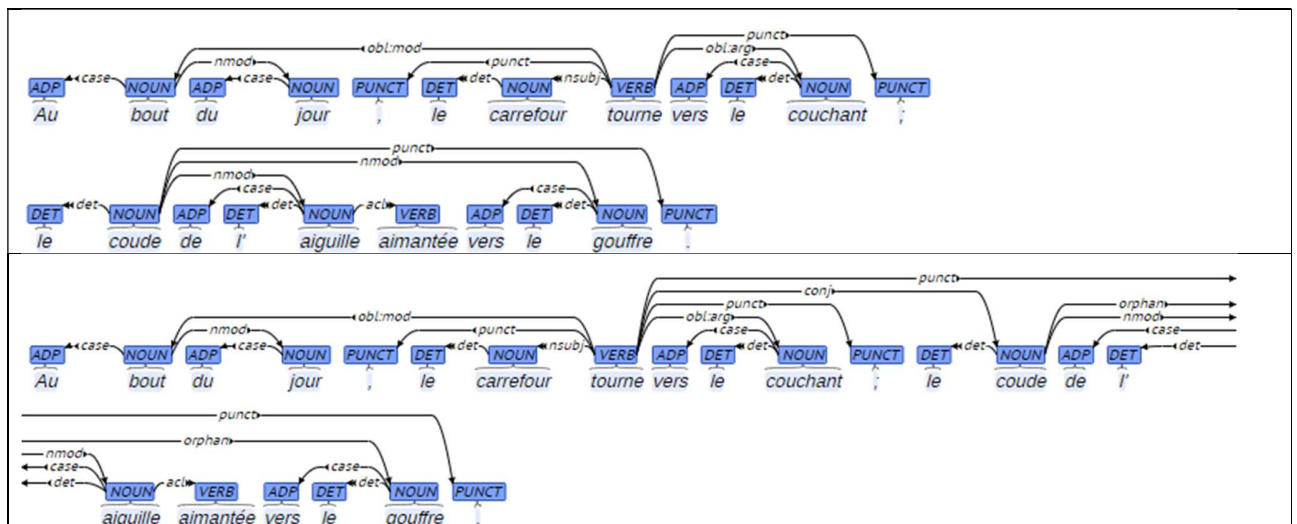
DC1



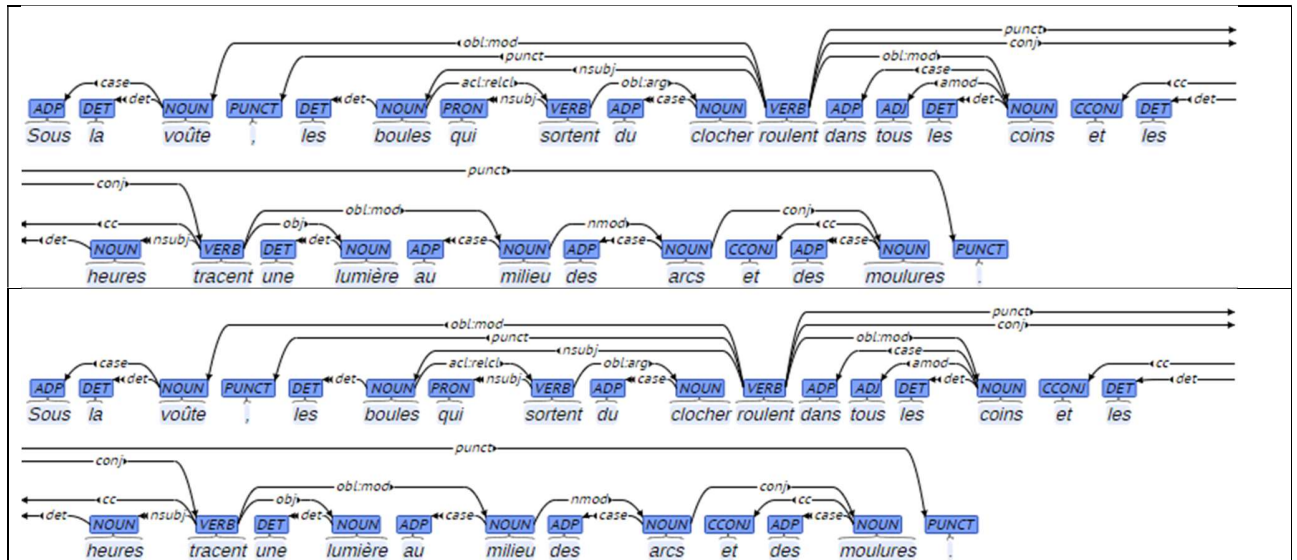
DC2

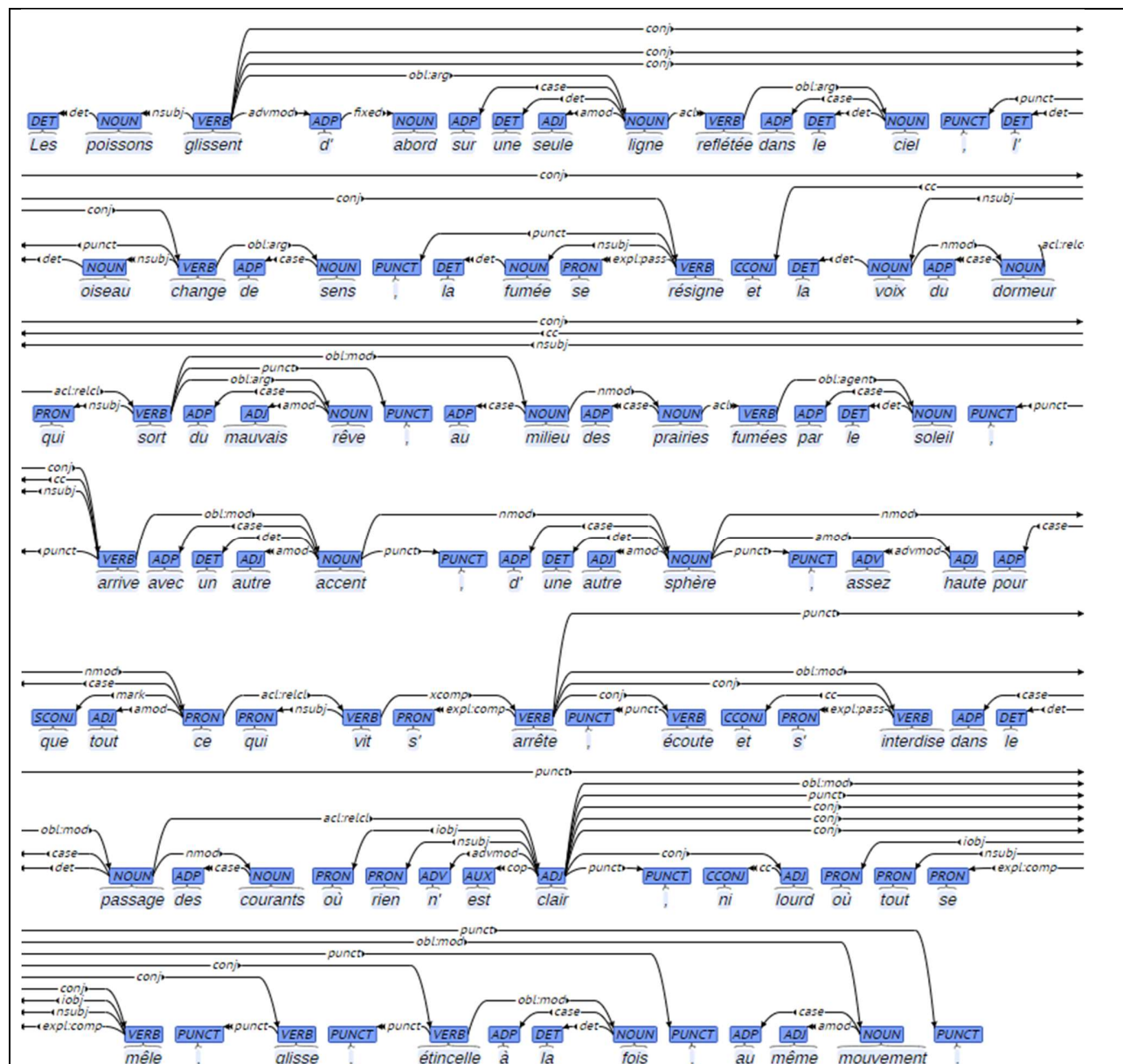


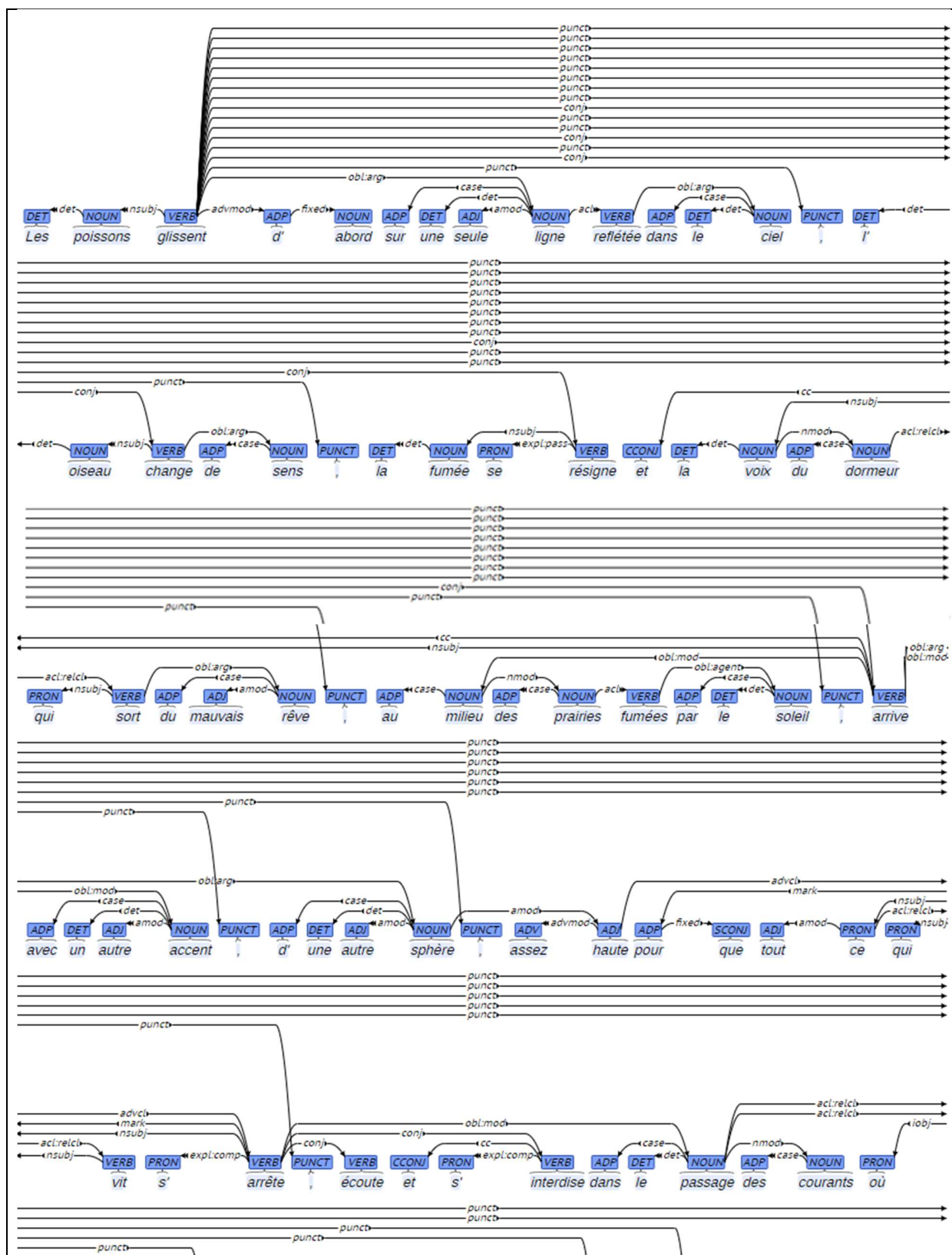
DC3



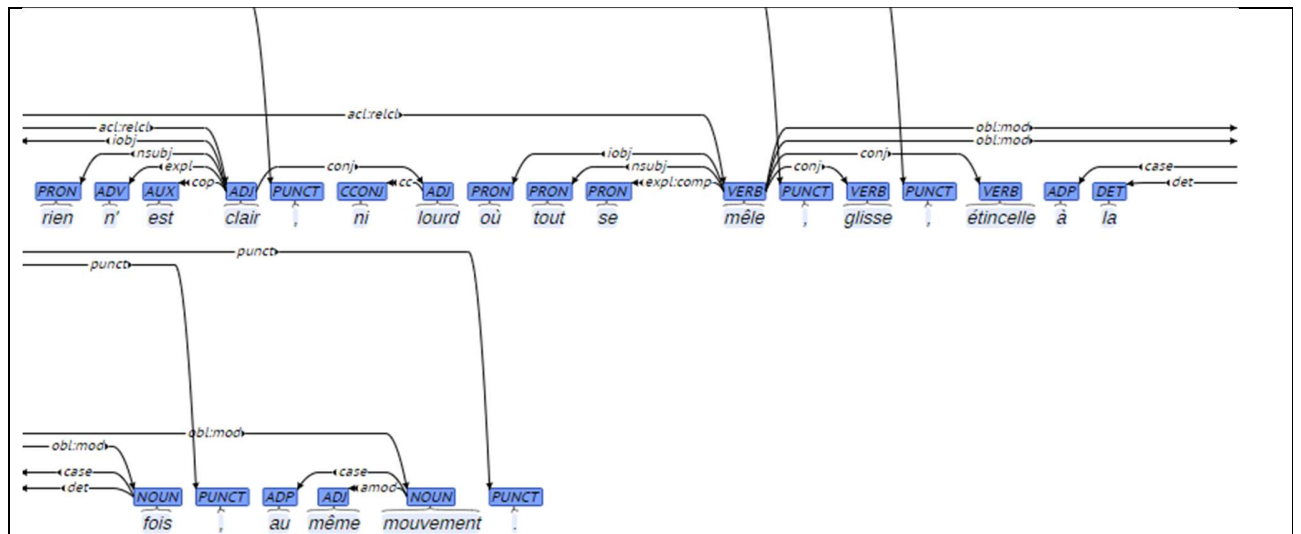
DC4



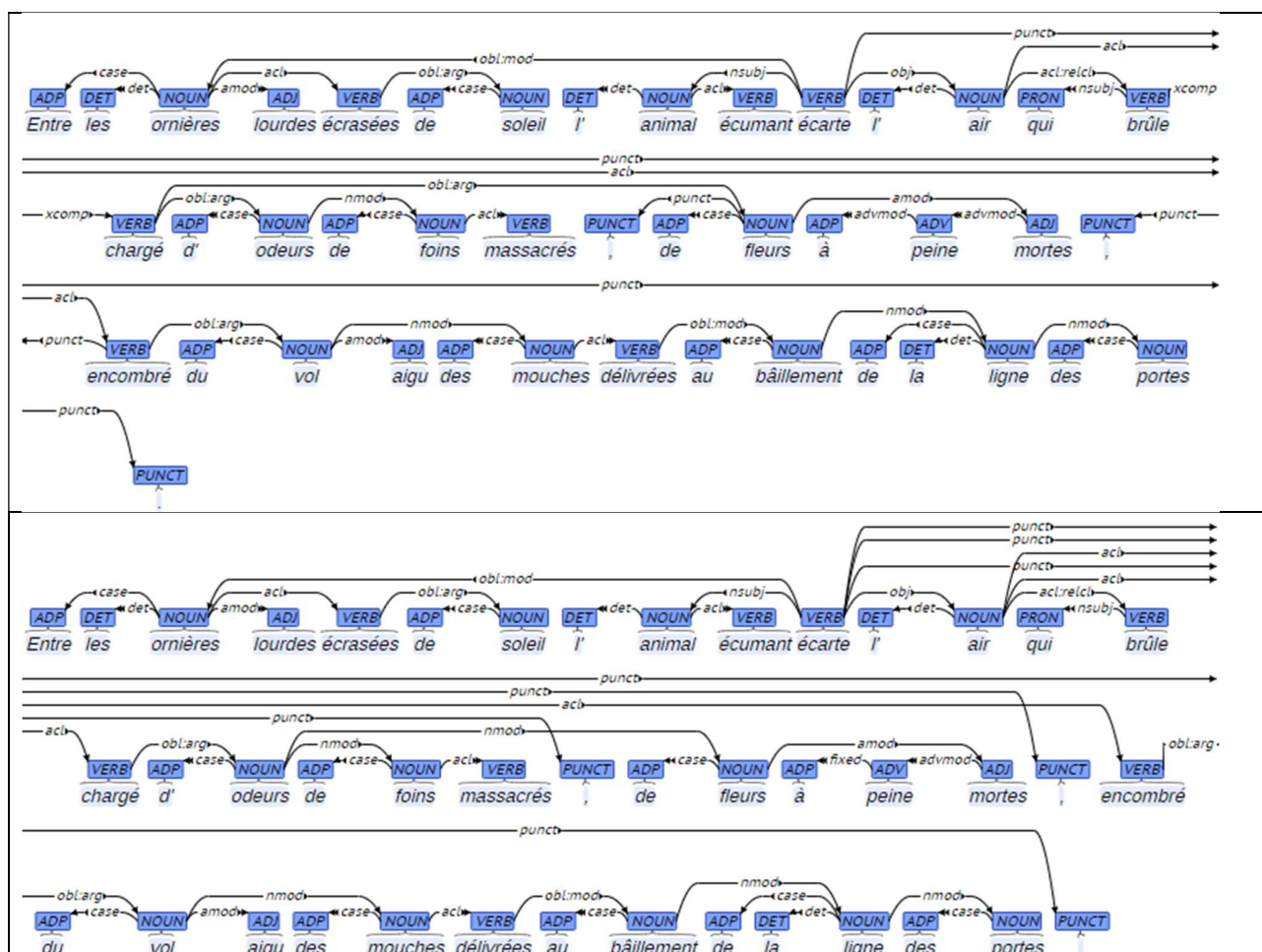




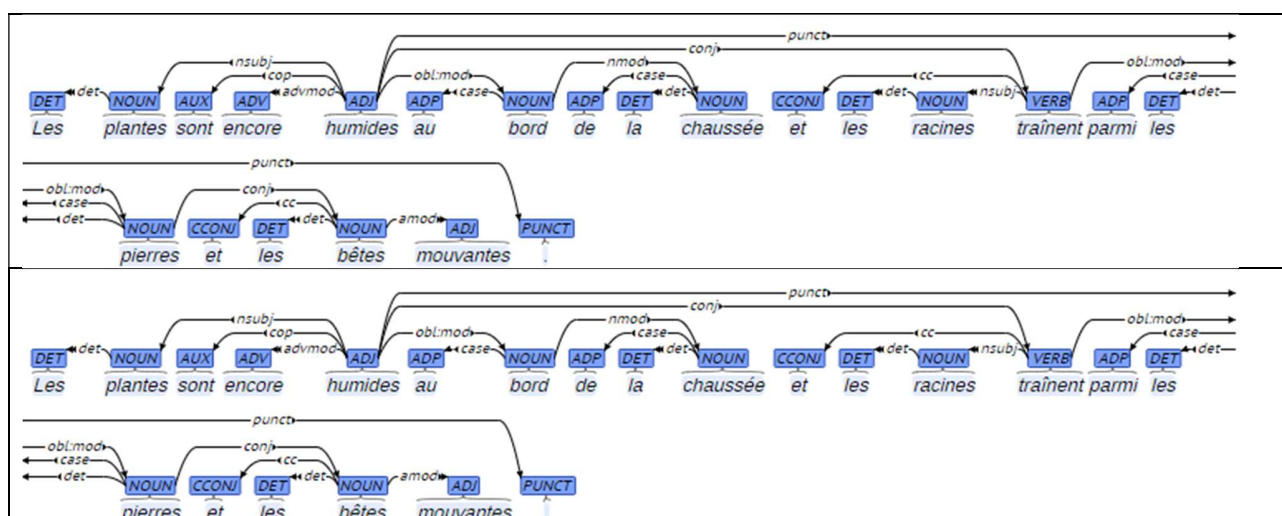




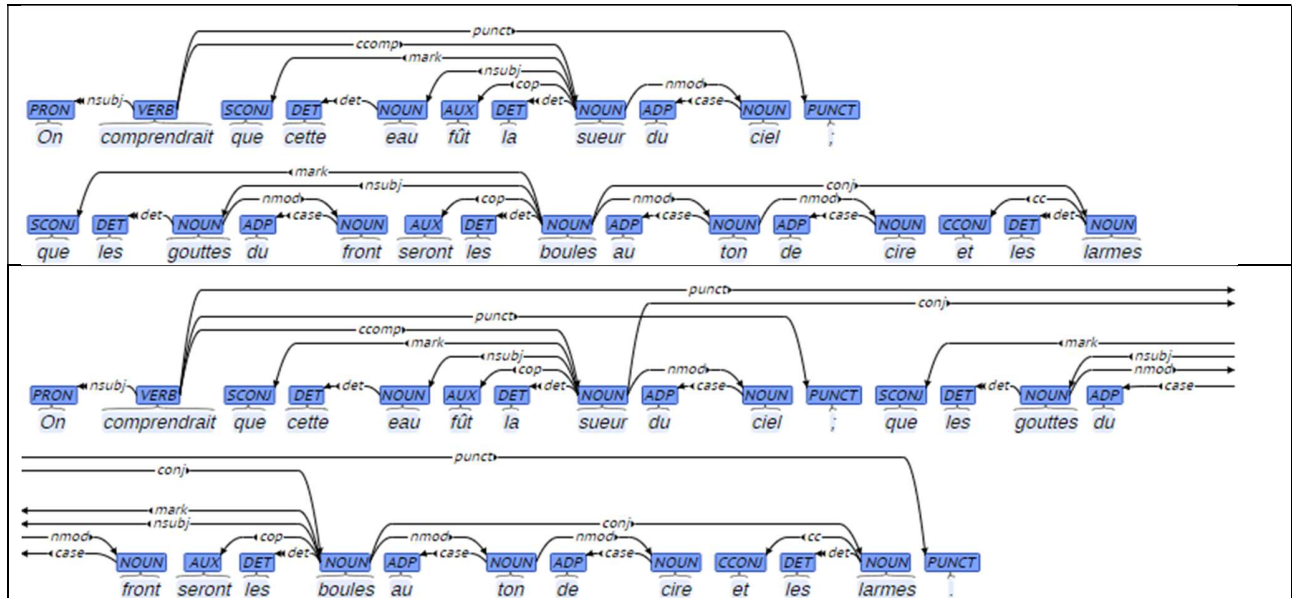
# APN1



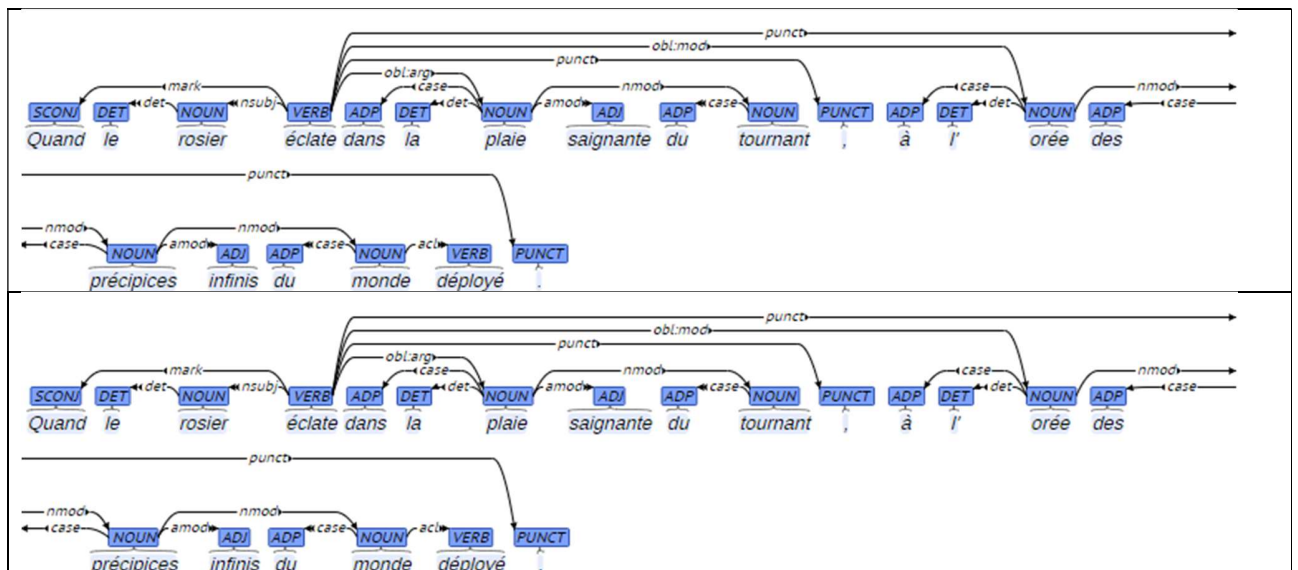
# APN2



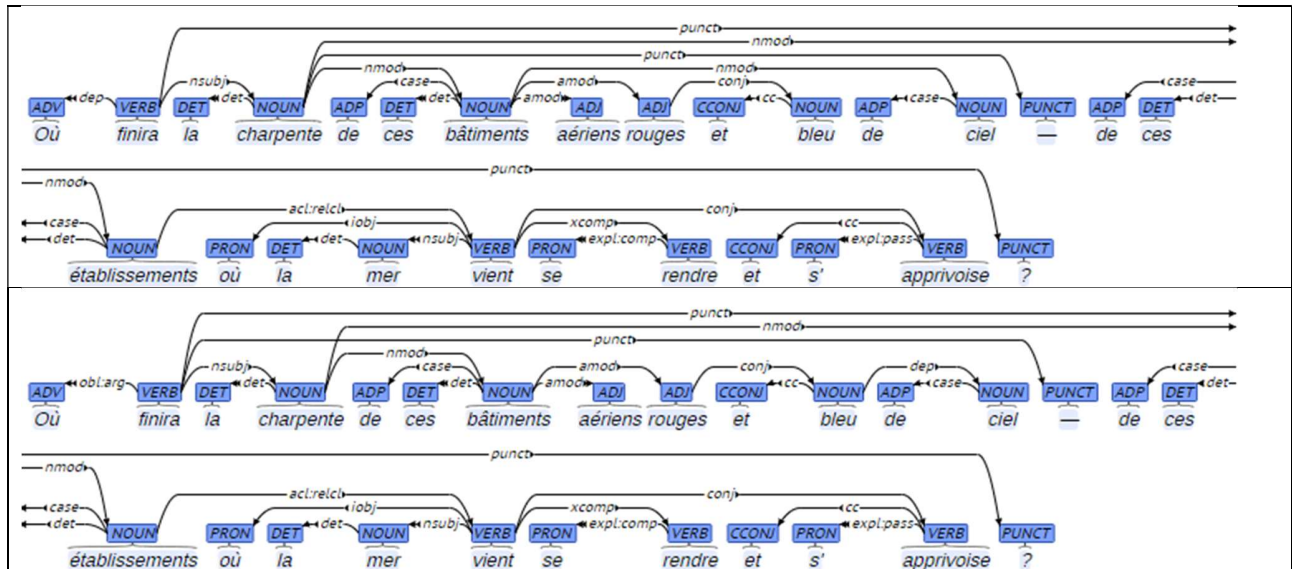
### APN3

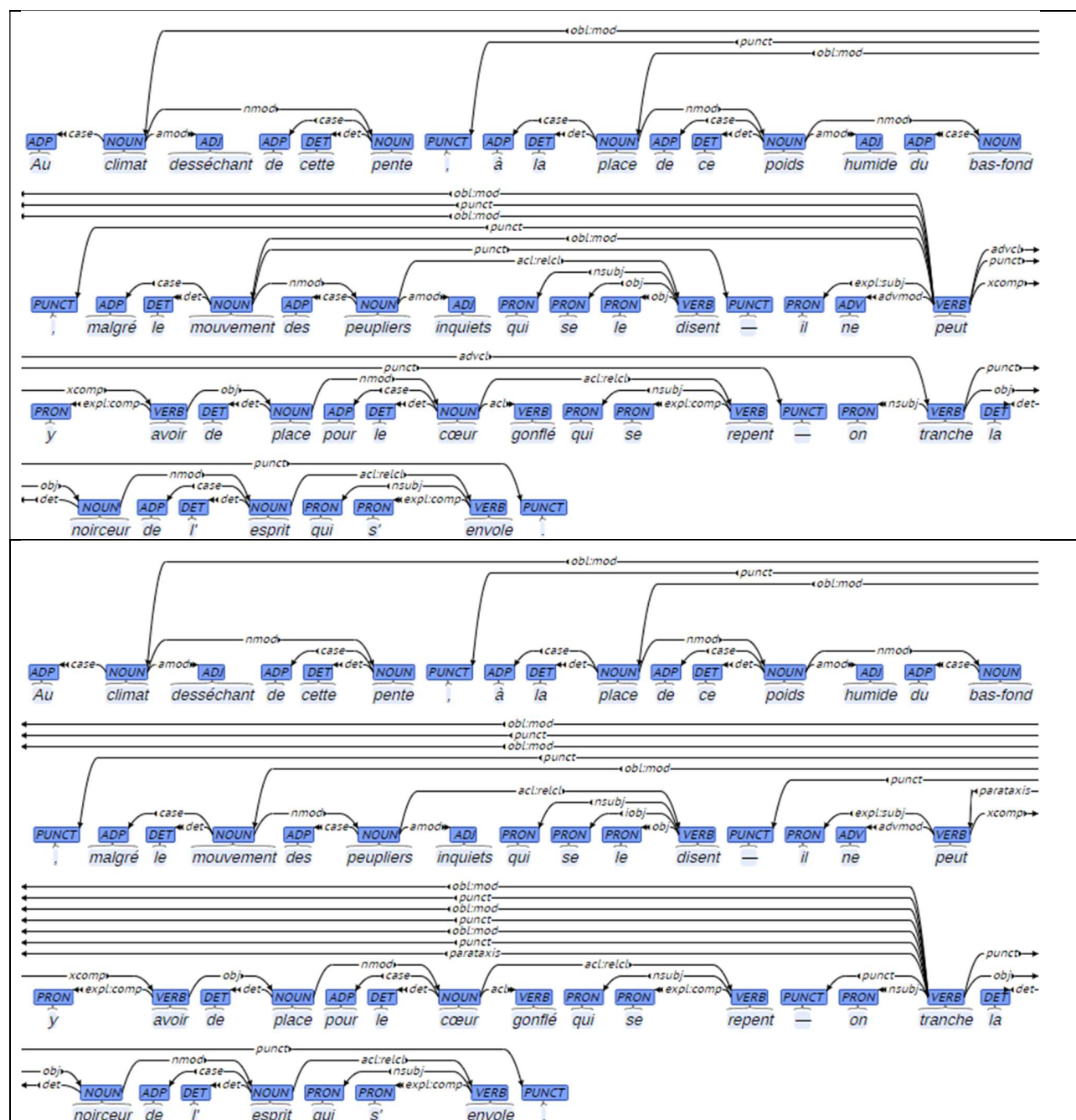


### APN4



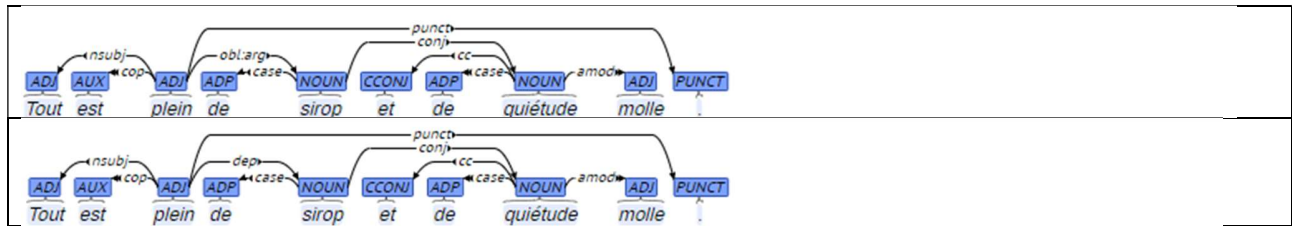
APN5



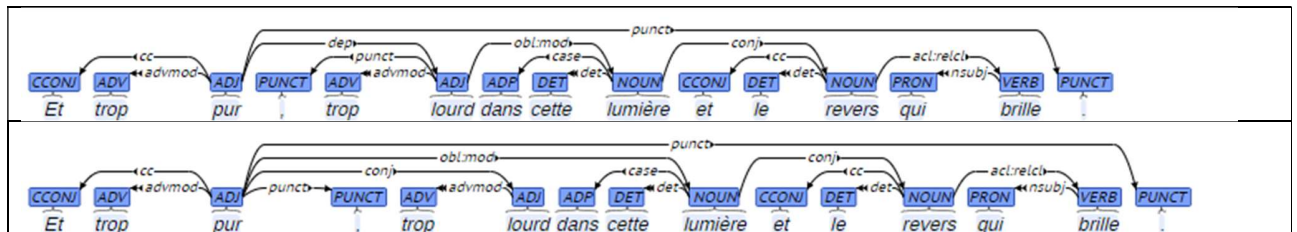




APN7



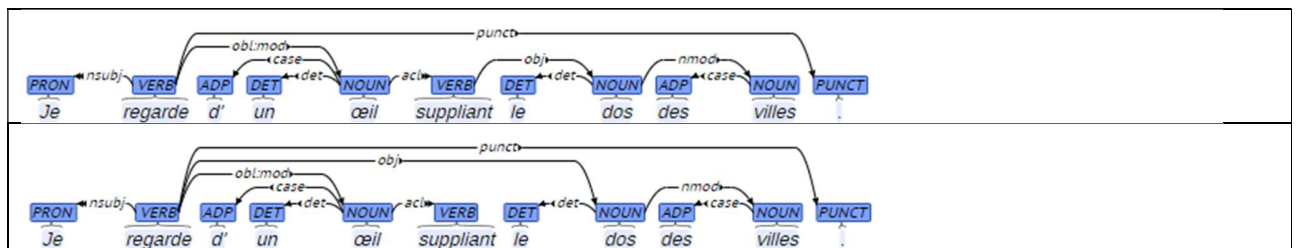
APN8



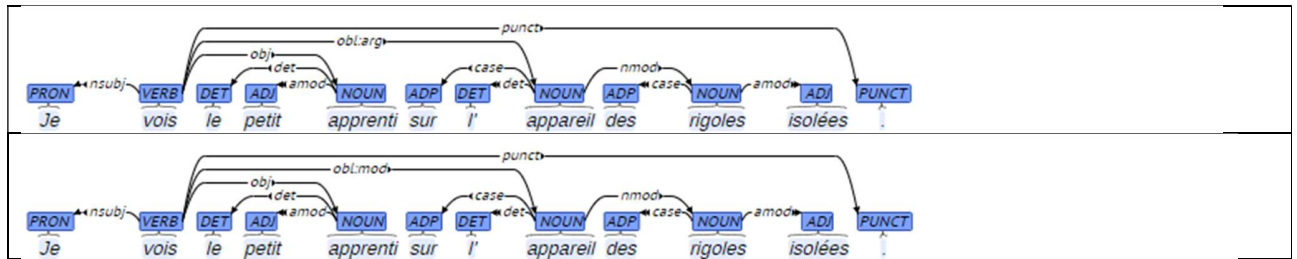
APN9



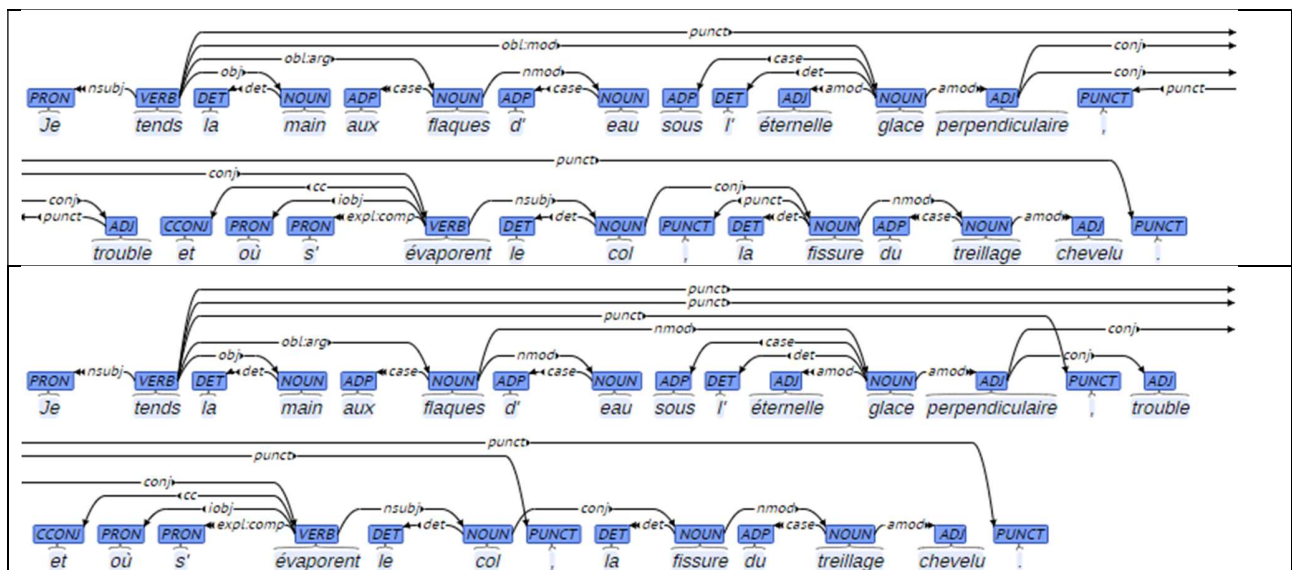
APN10

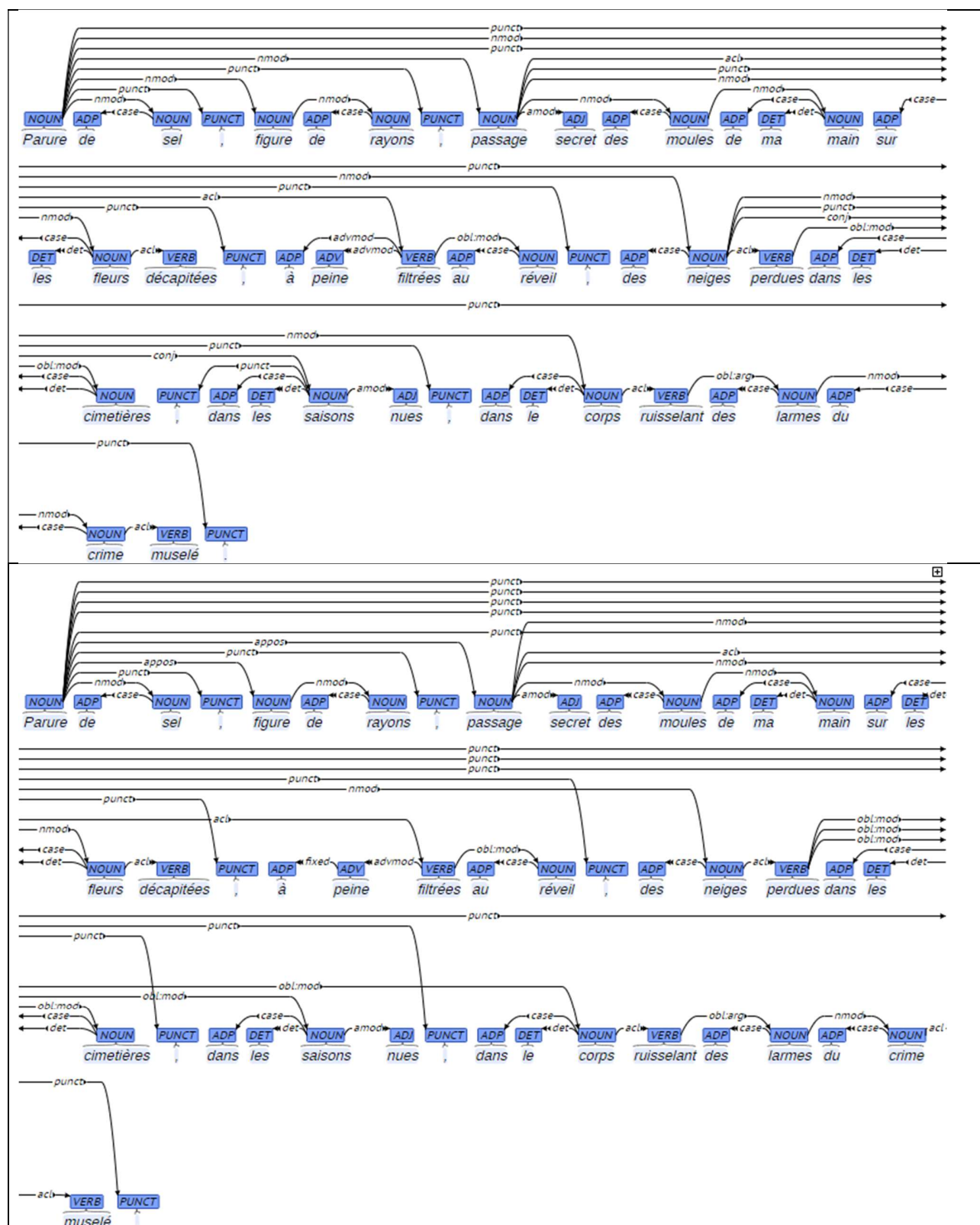


R1



R2

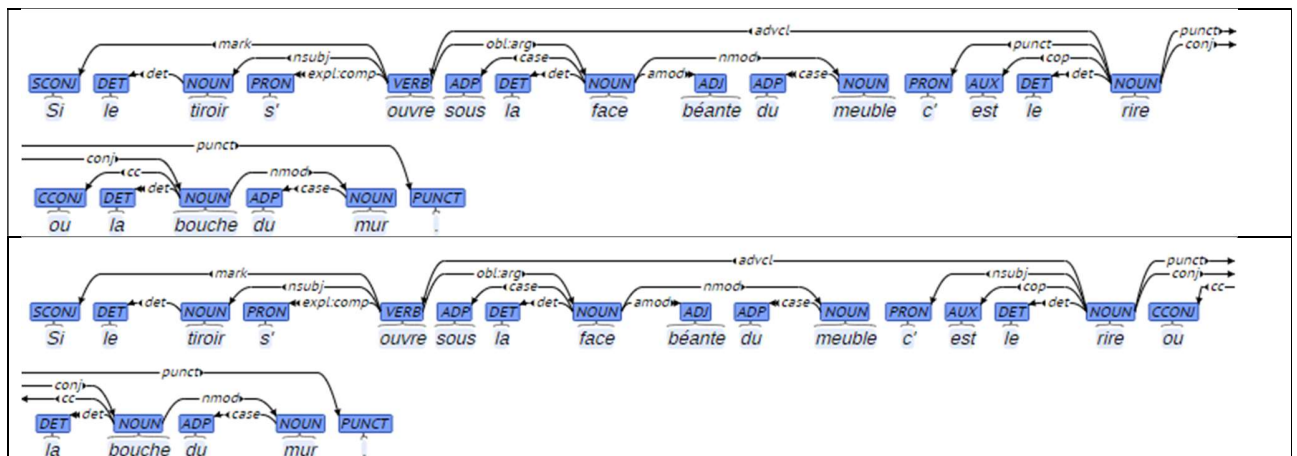




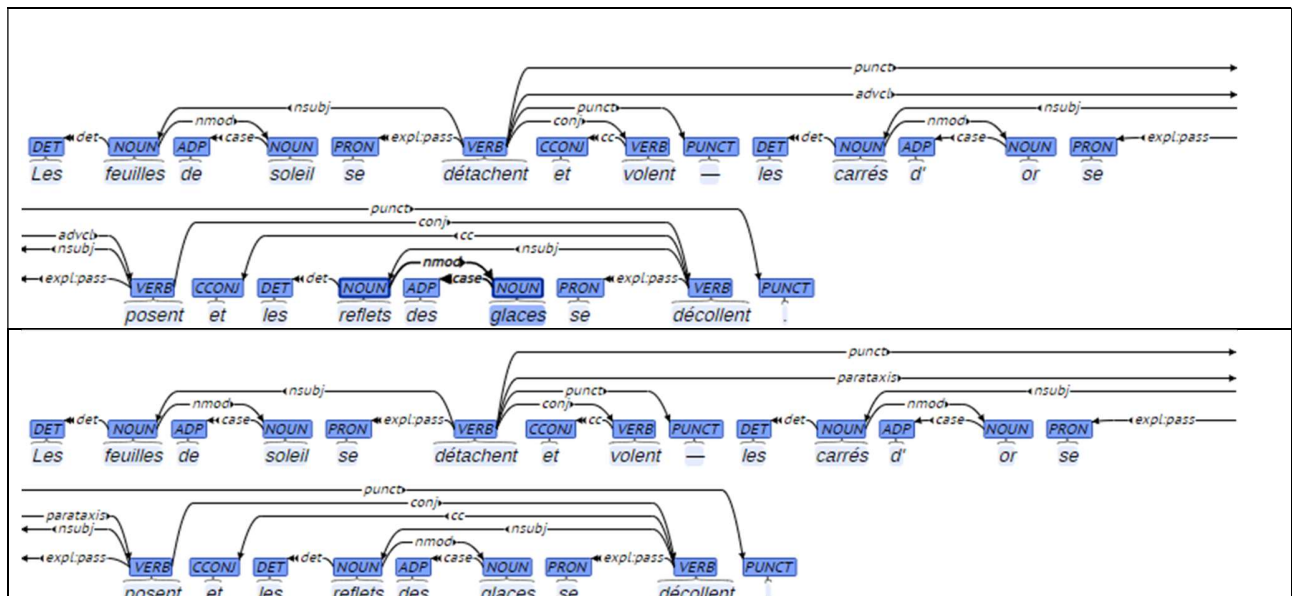
R4



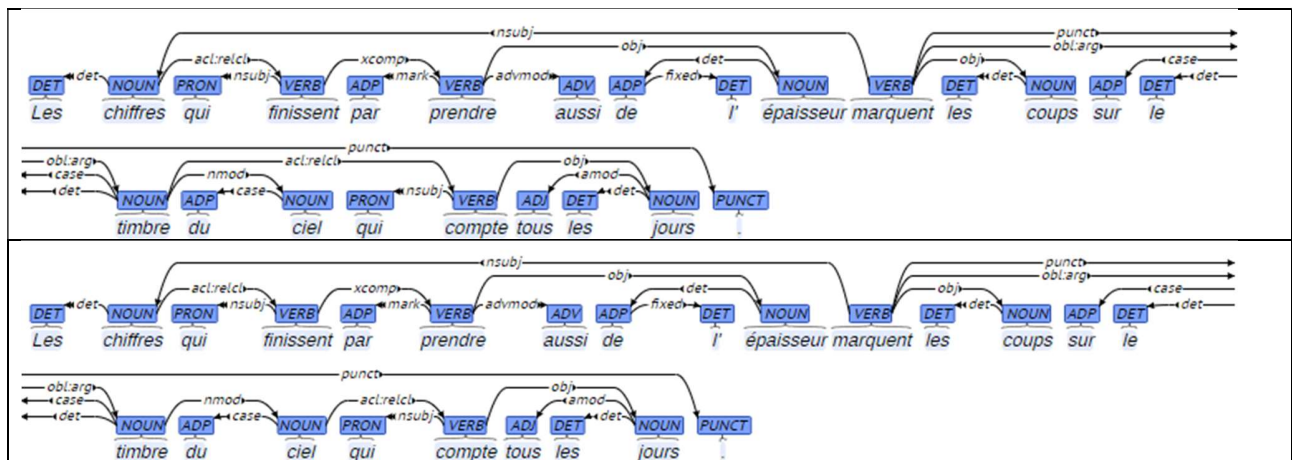
RI1



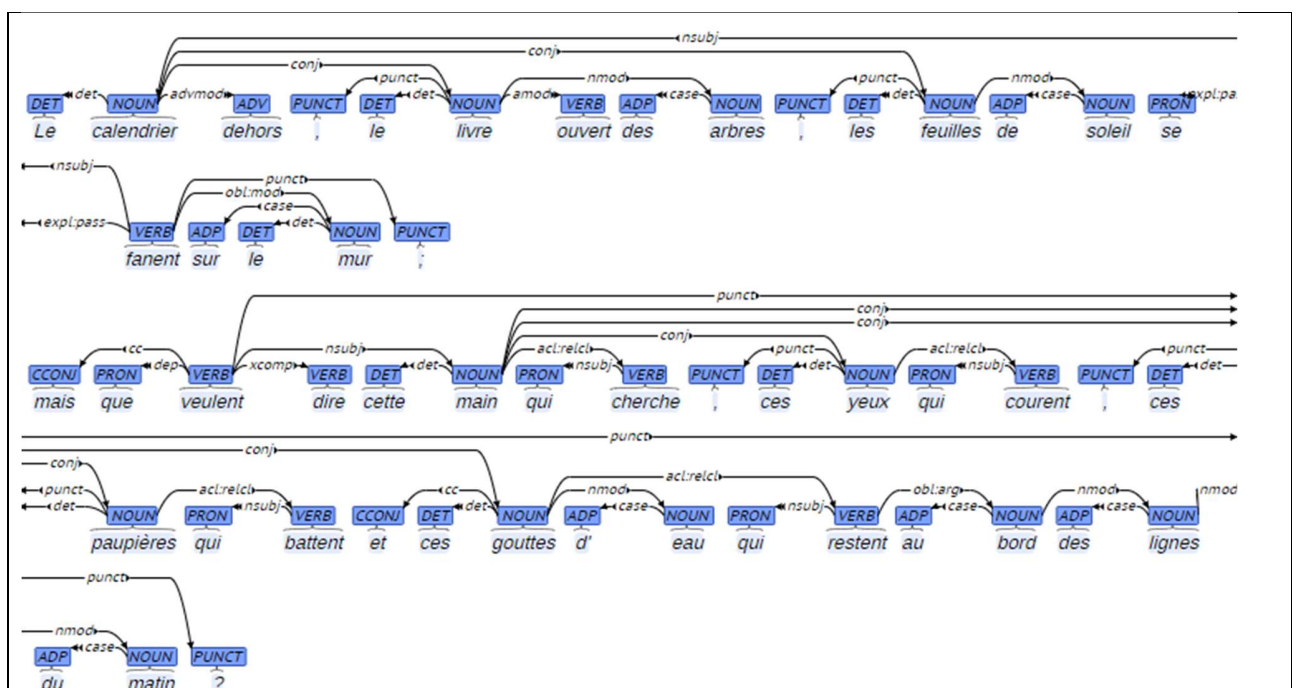
RI2



RI3



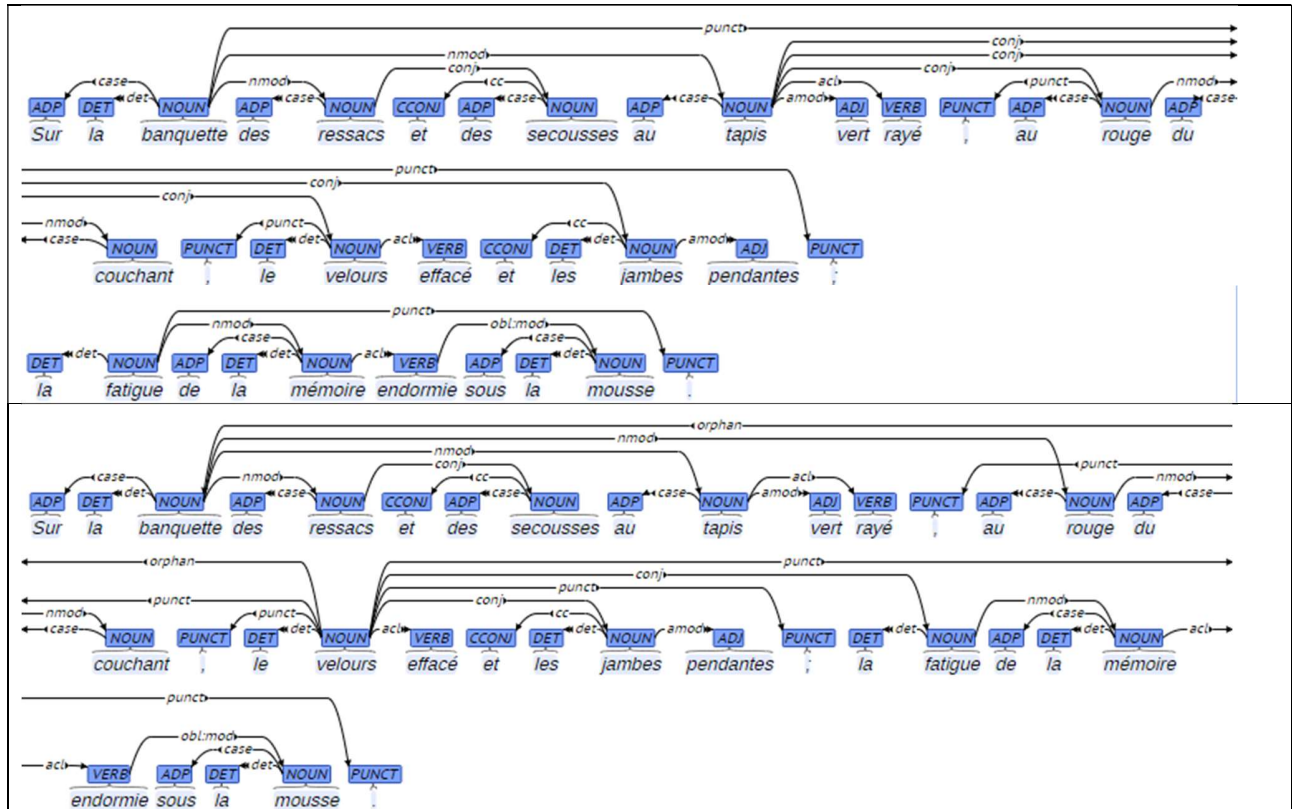
RI4



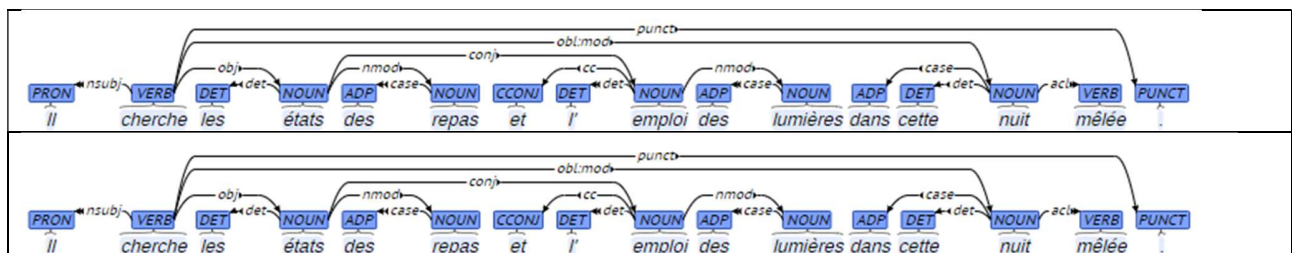




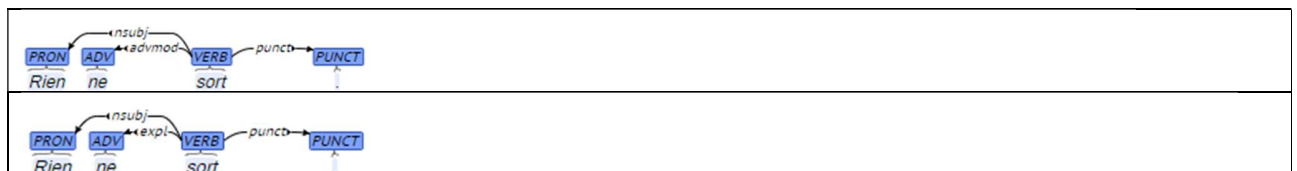
BT2



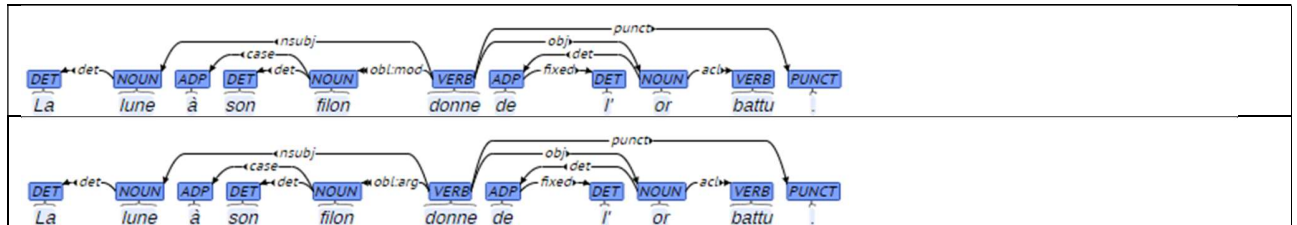
BT3



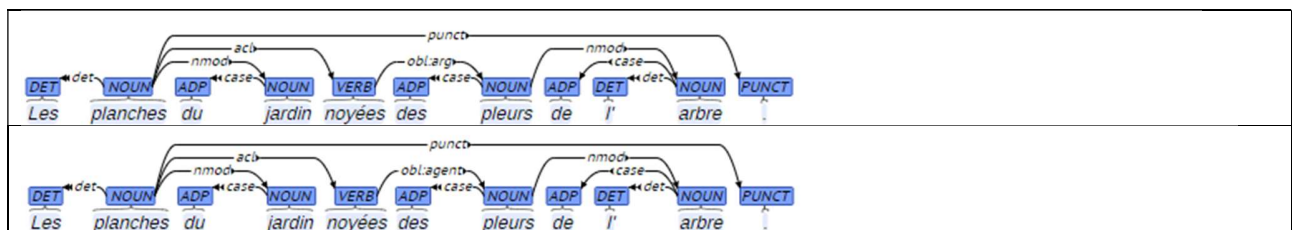
BT4



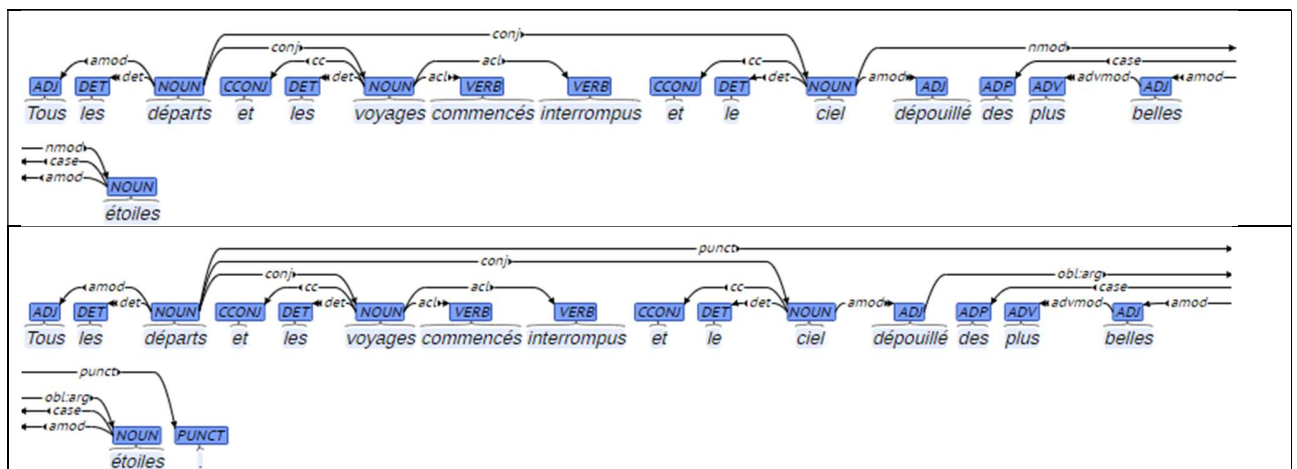
BT5



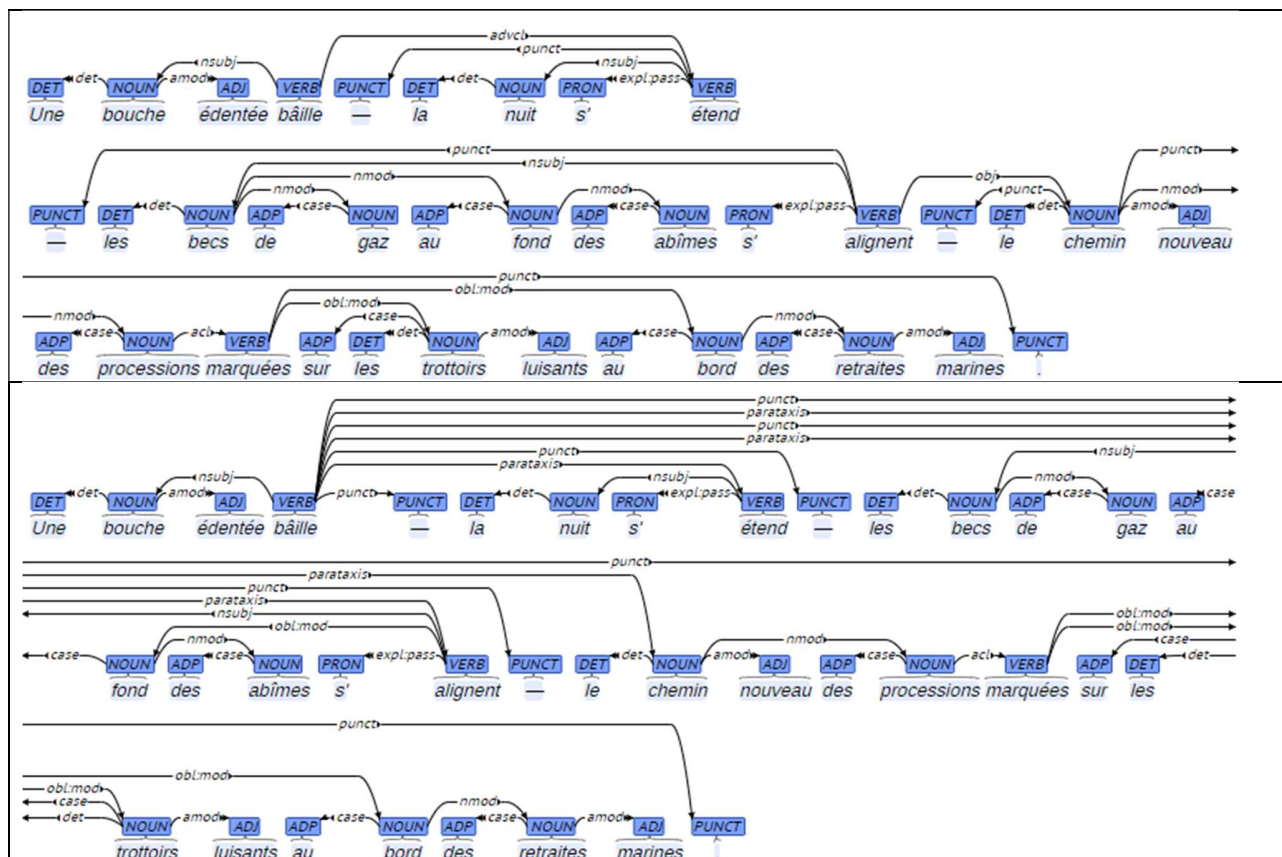
BT6



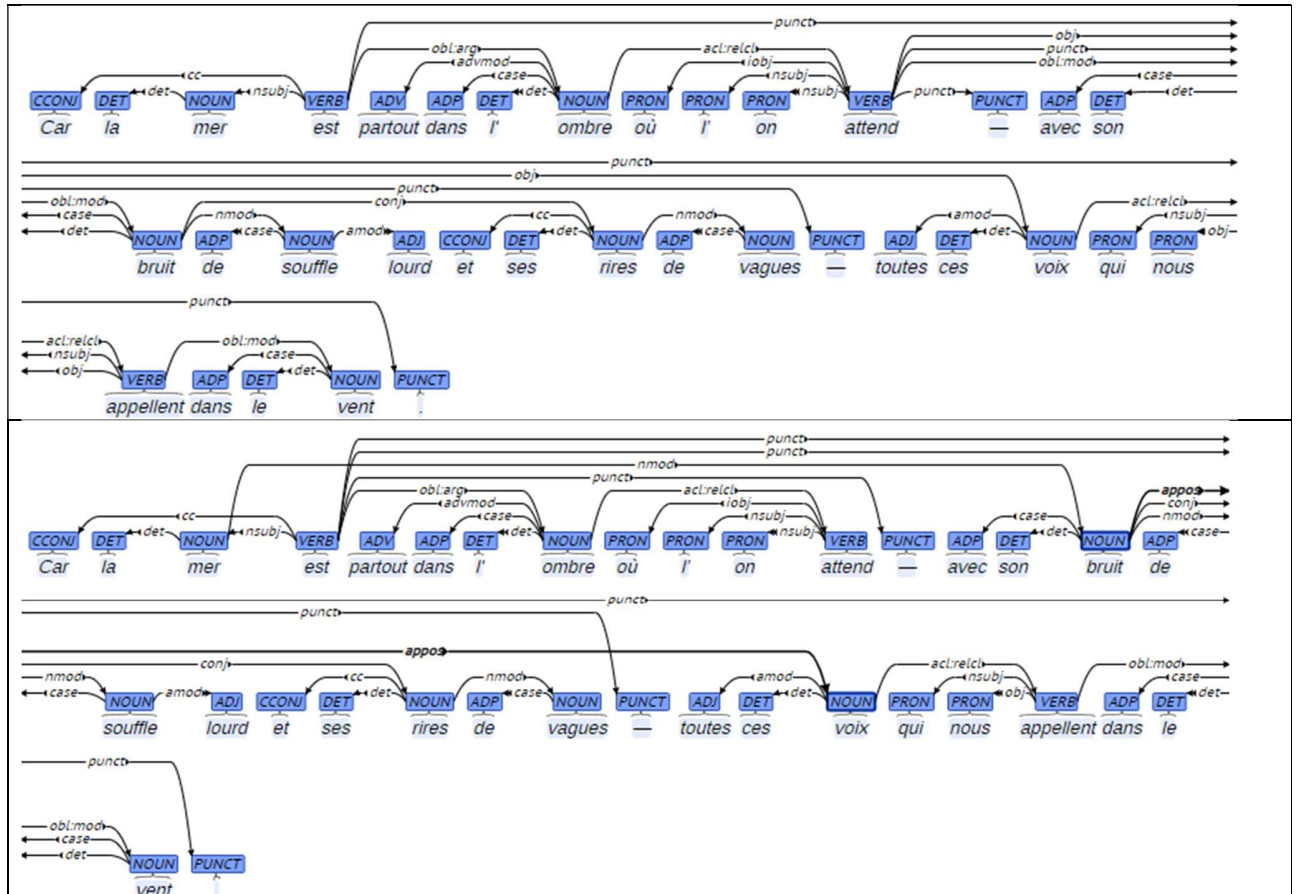
BT7



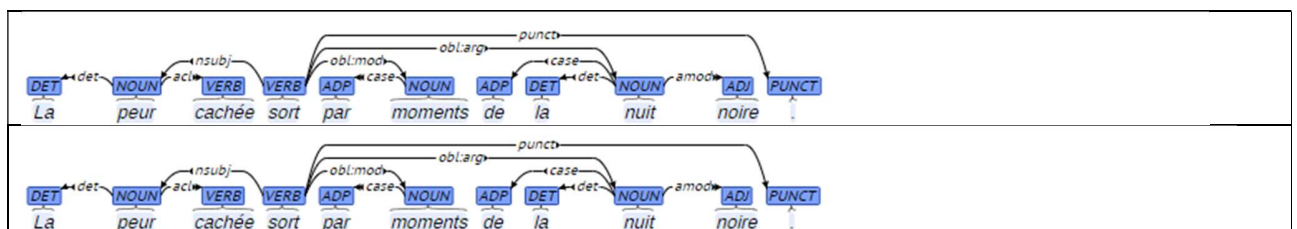
BT8



BT9

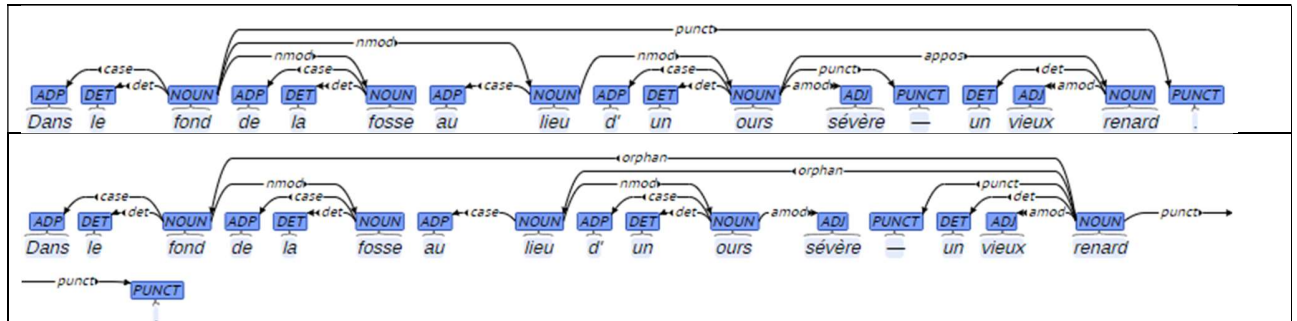


BT10



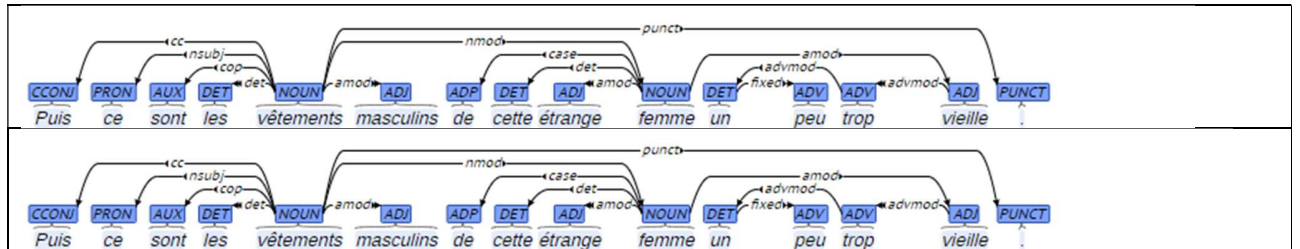


BT11

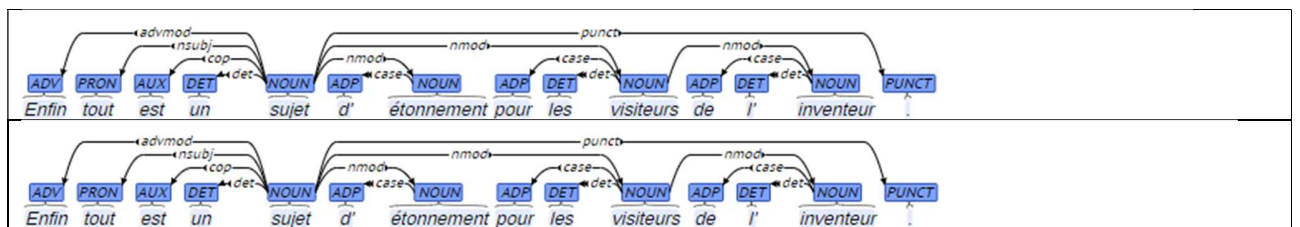




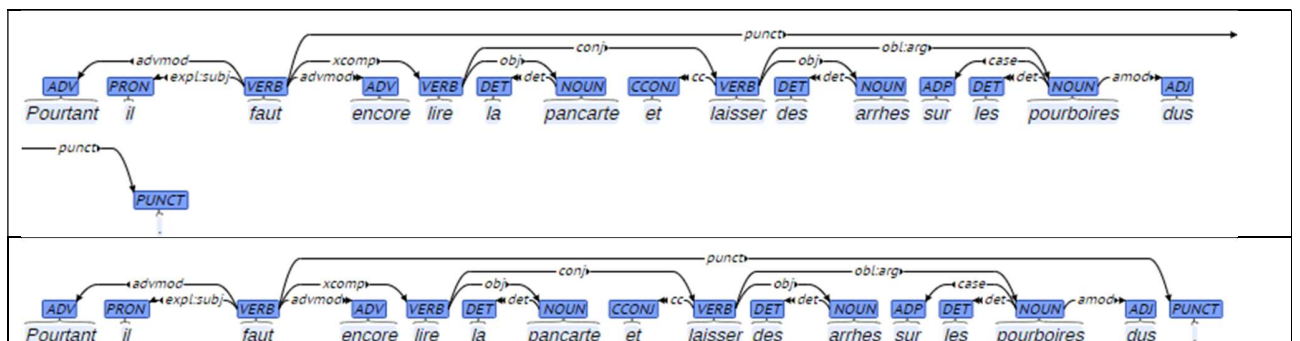
TE2



TE3

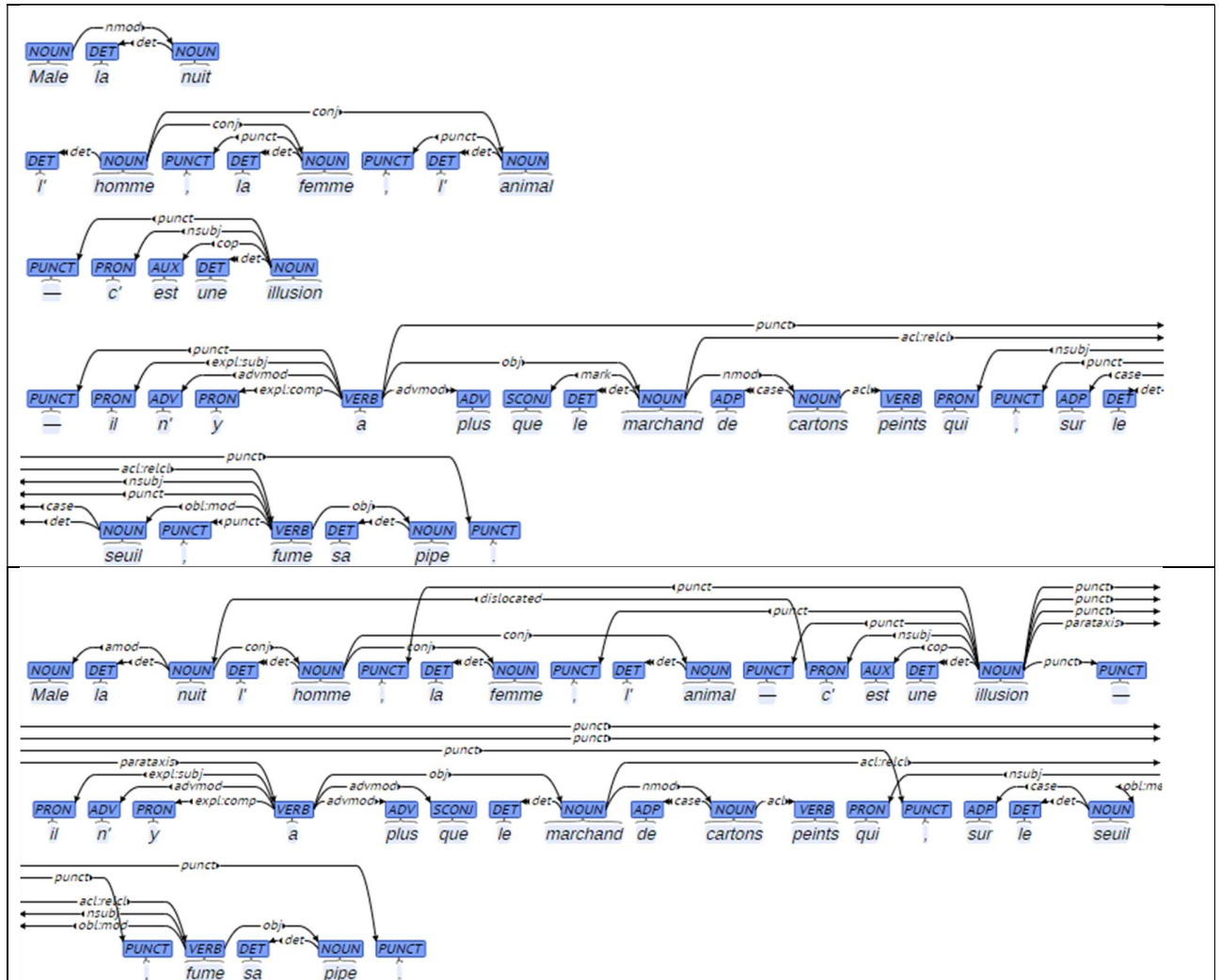


TE4





TE6





The image displays two syntactic tree diagrams for the sentence: "Doucement la poudre de saveur couleur des fonds tombe sur la moulure égratignée du cadre".

**Top Diagram:** This tree represents a full sentence structure. The root node is **S** (Sentence), which branches into **advmod** (adverbial modifier) and **nsbj** (nominal subject). The **advmod** branch leads to the word "Doucement" (ADV). The **nsbj** branch leads to a complex noun phrase structure: **det** (determiner) "la" (DET) → **nmod** (nominal modifier) "poudre" (NOUN) → **case** (case) "de" (ADP) → **nmod** "saveur" (NOUN) → **punct** (punctuation) " ," (PUNCT) → **nmod** "couleur" (NOUN) → **case** "des" (ADP) → **nmod** "fonds" (NOUN) → **verb** (verb) "tombe" (VERB) → **obl** (oblique) "sur" (ADP) → **case** "la" (DET) → **nmod** "moulure" (NOUN) → **acl** (adjectival clause) "égratignée" (VERB) → **nmod** "du" (ADP) → **case** "cadre" (NOUN). A separate **punct** branch from the root **S** leads to a period "." (PUNCT).

**Bottom Diagram:** This tree represents a noun phrase structure, likely for a title or a specific context. The root node is **NP** (Noun Phrase), which branches into **advmod** and **nsbj**. The **advmod** branch leads to "Doucement" (ADV). The **nsbj** branch leads to a noun phrase: **det** "la" (DET) → **nmod** "poudre" (NOUN) → **case** "de" (ADP) → **nmod** "saveur" (NOUN) → **punct** " ," (PUNCT) → **nmod** "couleur" (NOUN) → **case** "des" (ADP) → **nmod** "fonds" (NOUN) → **verb** "tombe" (VERB) → **obl** "sur" (ADP) → **case** "la" (DET) → **nmod** "moulure" (NOUN) → **acl** "égratignée" (VERB) → **nmod** "du" (ADP) → **case** "cadre" (NOUN). A separate **punct** branch from the root **NP** leads to a period "." (PUNCT).

The image displays two identical syntactic tree diagrams for the sentence: "La tempête se déchaîne trop haut pour troubler le calme des buissons des parcs lumineux et des sombres racines".

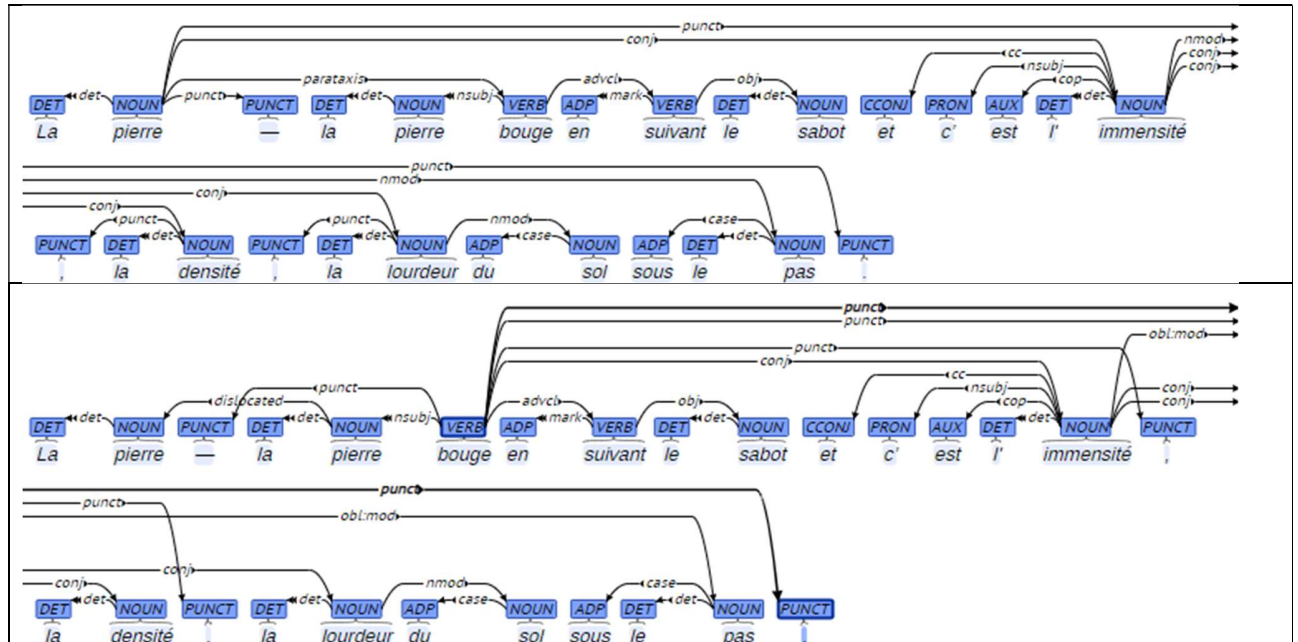
**Top Sentence Analysis:**

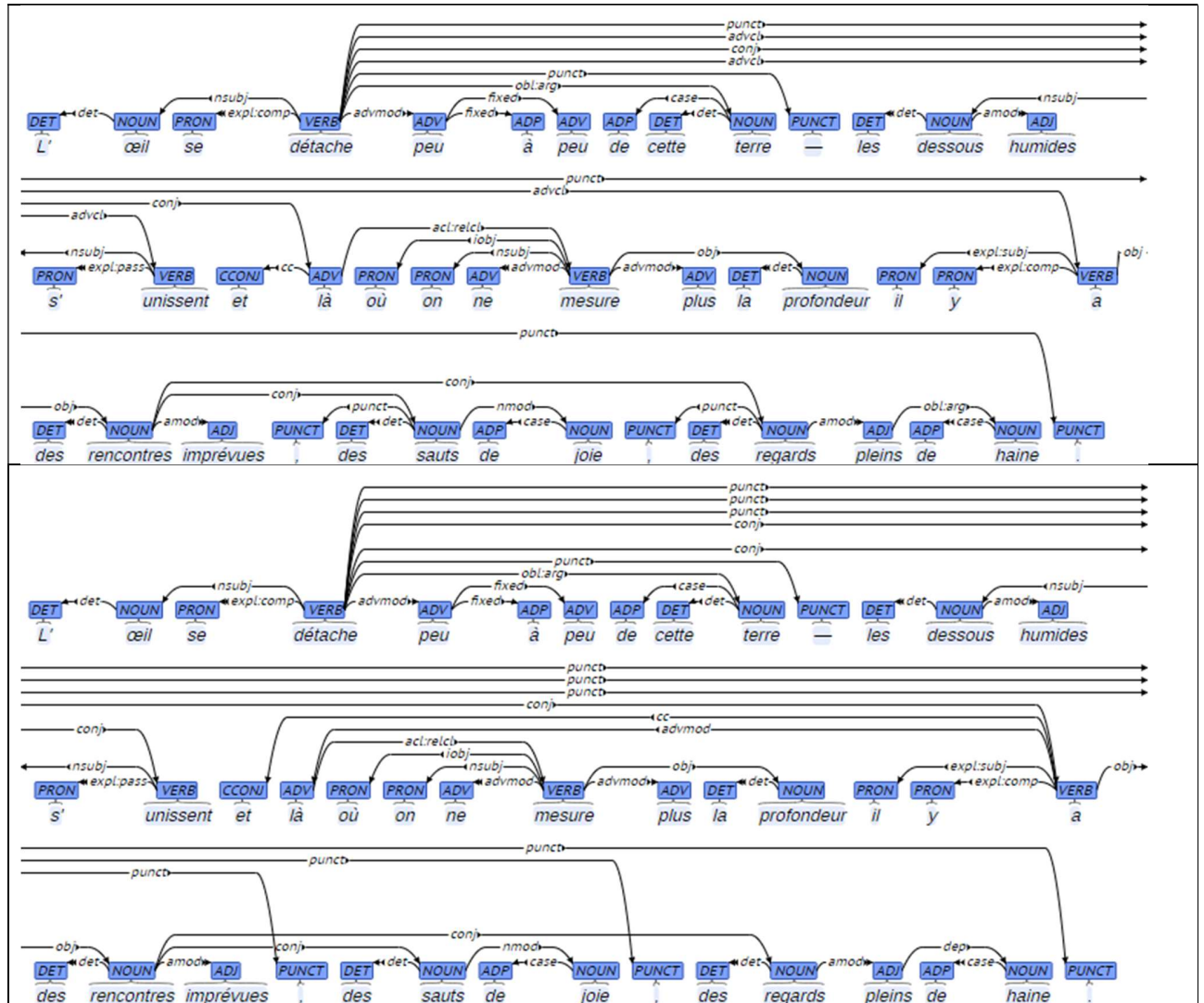
- La** (DET) is the determiner of **tempête** (NOUN).
- se** (PRON) is the clitic object of **déchaîne** (VERB).
- déchaîne** (VERB) is the main verb, modified by **trop** (ADV) via **advmod** and **advcl** relations.
- trop** (ADV) is modified by **haut** (ADV) via **advmod**.
- haut** (ADV) is the modifier of **pour** (ADP), which is the preposition marking the infinitive clause.
- troubler** (VERB) is the infinitive verb, taking **le** (DET) as its object.
- le** (DET) is the determiner of **calme** (NOUN).
- calme** (NOUN) is modified by **des** (ADP) via **nmod** and **case** relations.
- des** (ADP) is the preposition marking the noun phrase **buissons** (NOUN).
- buissons** (NOUN) is the object of the infinitive **troubler**.
- des** (ADP) is the preposition marking the noun phrase **parcs** (NOUN).
- parcs** (NOUN) is modified by **lumineux** (ADJ) via **amod** and **case** relations.
- et** (CCONJ) is the conjunction connecting **parcs** and **sombres** (ADJ).
- sombres** (ADJ) is modified by **racines** (NOUN) via **amod** and **case** relations.
- racines** (NOUN) is the object of the infinitive **troubler**.

**Bottom Sentence Analysis:**

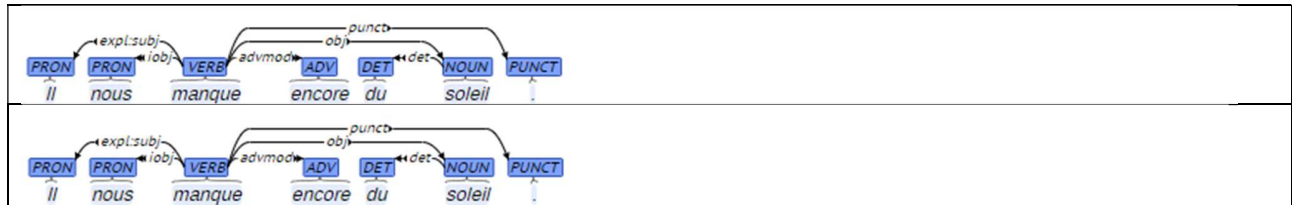
This diagram is identical to the one above, showing the same syntactic structure and grammatical relations for the sentence.

LPN3

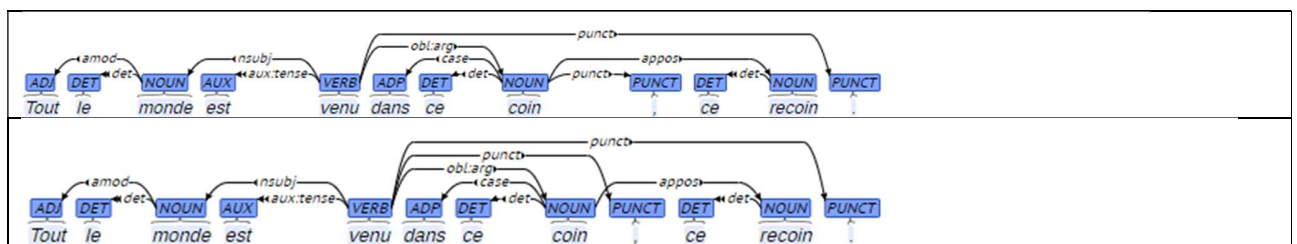


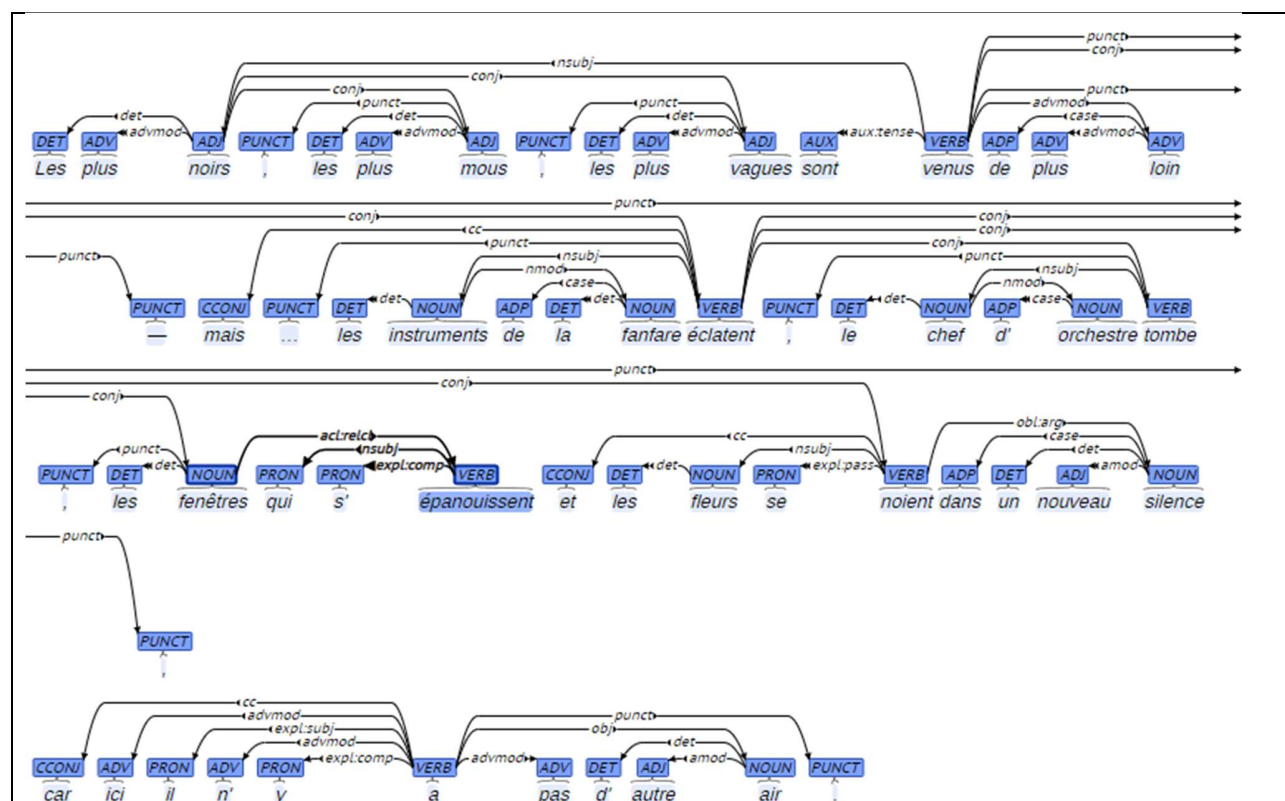


LPN5

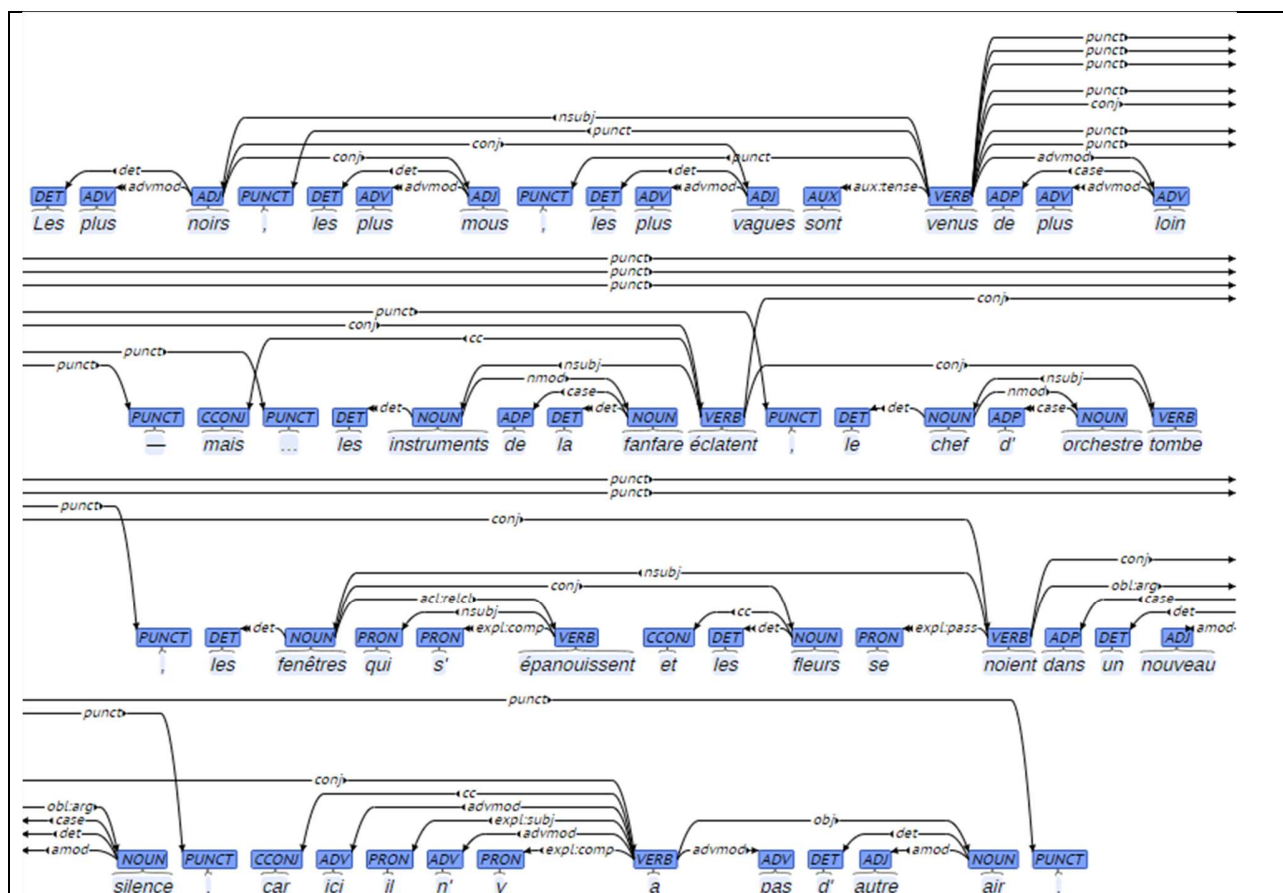


LPN6

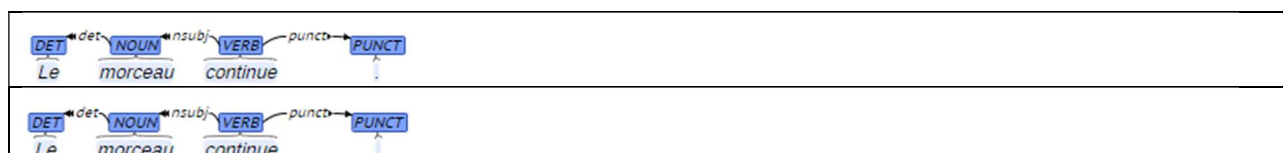








LPN8



The diagram illustrates the hierarchical structure of a French sentence using a dependency grammar. The sentence is: "Celui qui descend parmi les avalanches derrière les toits blancs et les arbres qui plient, celui qui se regarde s'arrête et tend son bras jusqu'à la paroi de verre qui est peut-être la seule ligne courbe de l'infini." The diagram shows the syntactic dependencies between words, categorized by grammatical functions such as act:relc, nsubj, obl:arg, case, obl:mod, conj, cc, aconj, amod, nmod, and punct. The words are color-coded: blue for pronouns, green for verbs, yellow for adjectives, orange for adverbs, and grey for other parts of speech. The diagram is organized into four horizontal sections, each representing a different level of syntactic analysis, from the overall sentence structure down to the individual word dependencies.

The image displays two syntactic tree diagrams for the French sentence: "Celui-là, le corps et la tête et l'âme dans l'espace, tout ce qui dure encore et traîne sur le soir." The words are categorized by grammatical function: PRON (pronoun), PUNCT (punctuation), DET (determiner), NOUN (noun), CCONJ (coordinating conjunction), ADV (adverb), VERB (verb), ADP (preposition), and ADJ (adjective).

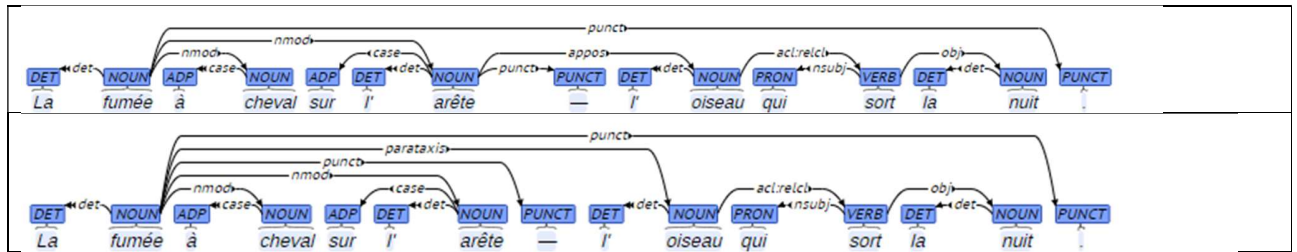
The top diagram shows the full sentence with all words and their grammatical categories. The bottom diagram shows the same sentence with some words highlighted in blue (Celui, -là, le, corps, et, la, tête, et, l', âme, dans, l', espace, tout, ce, qui, dure, encore, et, traîne, sur, le, soir) and their grammatical categories. Arrows indicate the hierarchical structure of the sentence, showing how words are grouped into phrases and clauses.

The diagram illustrates the syntactic structure of the sentence "Les mots qu'on dit au fond — le bruit confus qui monte — on entend ceux qui parlent à travers les rayons" using the Noun Phrase (NP) and Verb Phrase (VP) approach. The sentence is divided into three main parts, each enclosed in a box:

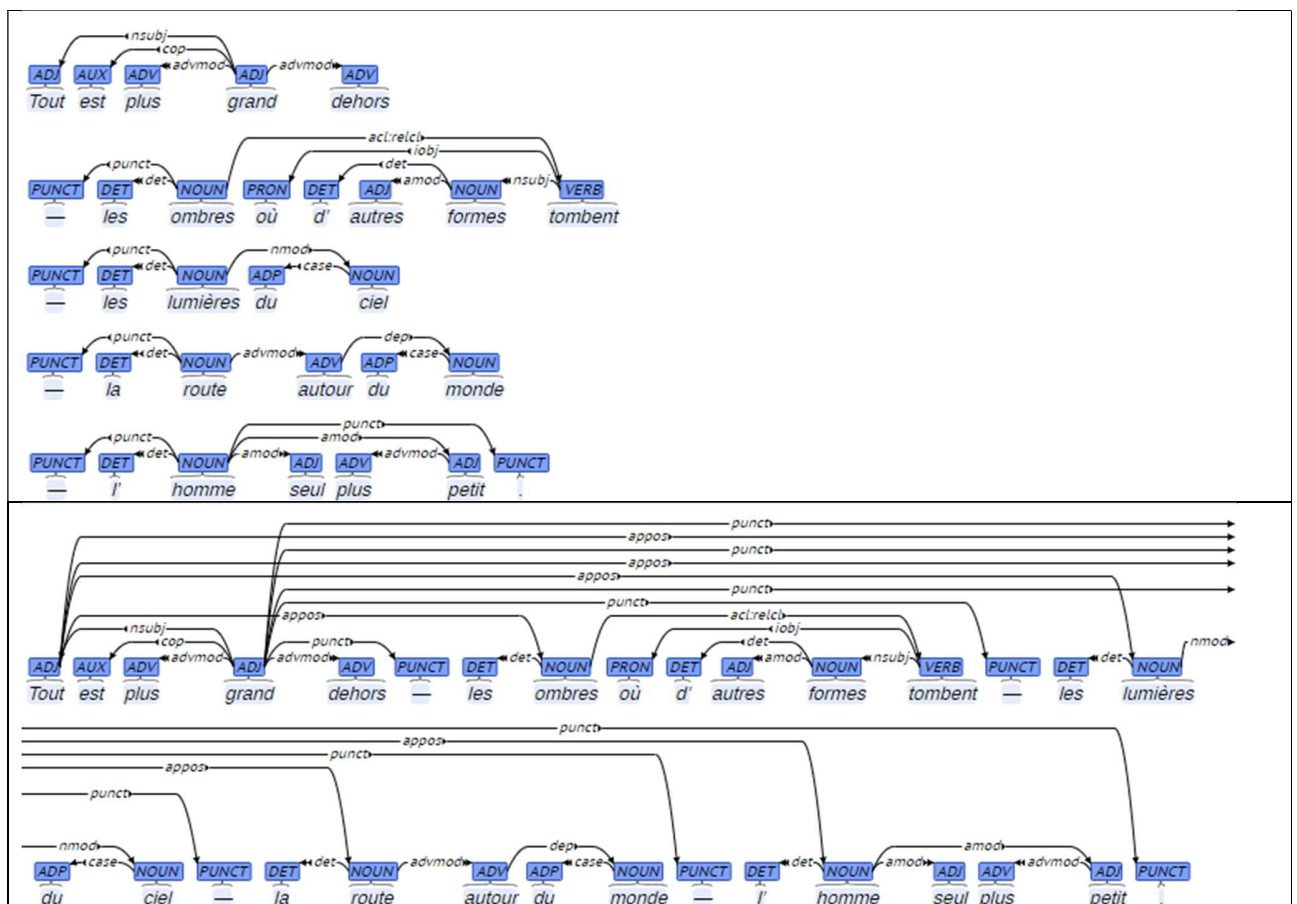
- Top Box (NP):** Contains the first part of the sentence: "Les mots qu'on dit au fond — le bruit confus qui monte — on". The words are labeled with their grammatical functions: *Les* (DET), *mots* (NOUN), *qu'* (PRON), *on* (PRON), *dit* (VERB), *au* (ADP), *fond* (NOUN), *—* (PUNCT), *le* (DET), *bruit* (NOUN), *confus* (ADJ), *qui* (PRON), *monte* (VERB), *—* (PUNCT), *on* (PRON). Arrows indicate the hierarchical structure, showing how the main NP is composed of a determiner, a noun, a relative clause, a modifier, another noun, a punctuation mark, another determiner, another noun, an adjective, another relative clause, another punctuation mark, and another noun.
- Middle Box (VP):** Contains the second part of the sentence: "entend ceux qui parlent à travers les rayons". The words are labeled: *entend* (VERB), *ceux* (PRON), *qui* (PRON), *parlent* (VERB), *à* (ADP), *travers* (NOUN), *les* (DET), *rayons* (NOUN), *!* (PUNCT). Arrows show the structure of the verb phrase, including the main verb, its object, a relative clause, a preposition, and a noun phrase.
- Bottom Box (NP):** Contains the third part of the sentence: "entend ceux qui parlent à travers les rayons". The words are labeled: *entend* (VERB), *ceux* (PRON), *qui* (PRON), *parlent* (VERB), *à* (ADP), *travers* (NOUN), *les* (DET), *rayons* (NOUN), *!* (PUNCT). Arrows show the structure of the noun phrase, including the main noun, a relative clause, a preposition, and a noun phrase.

The diagram uses various labels to indicate grammatical functions: *det* (determiner), *nmod* (noun modifier), *punct* (punctuation), *acls* (adpositional clause), *obj* (object), *nsbj* (nominal subject), *obl* (oblique), *case* (case), *fixed* (fixed), *amod* (adpositional modifier), *parataxis* (parataxis), *appos* (apposition), *oblmod* (oblique modifier), and *case* (case).

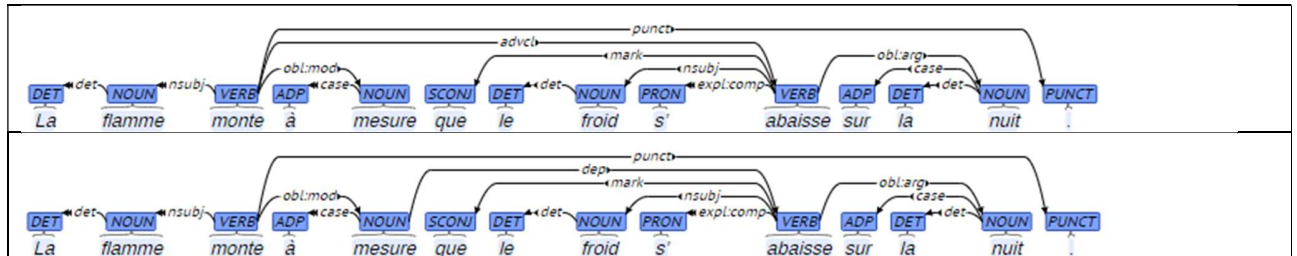
TN4



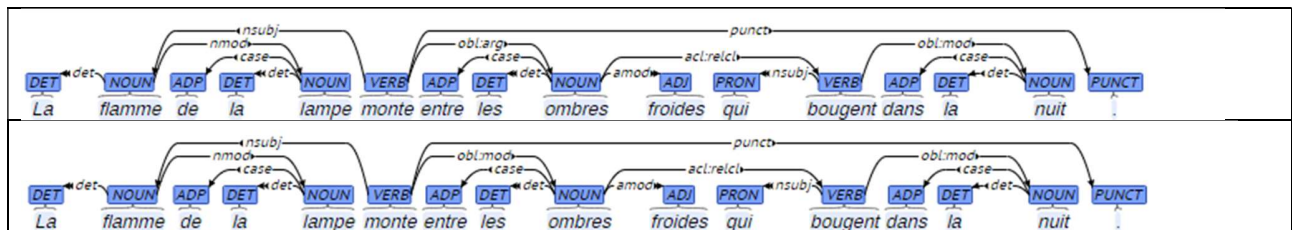
TN5



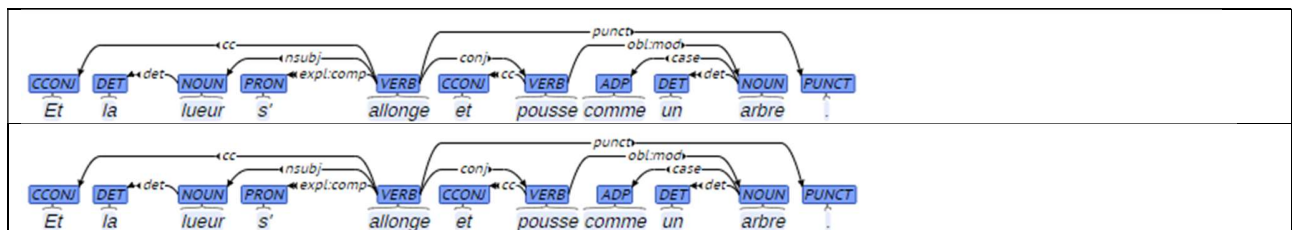
AA1



AA2

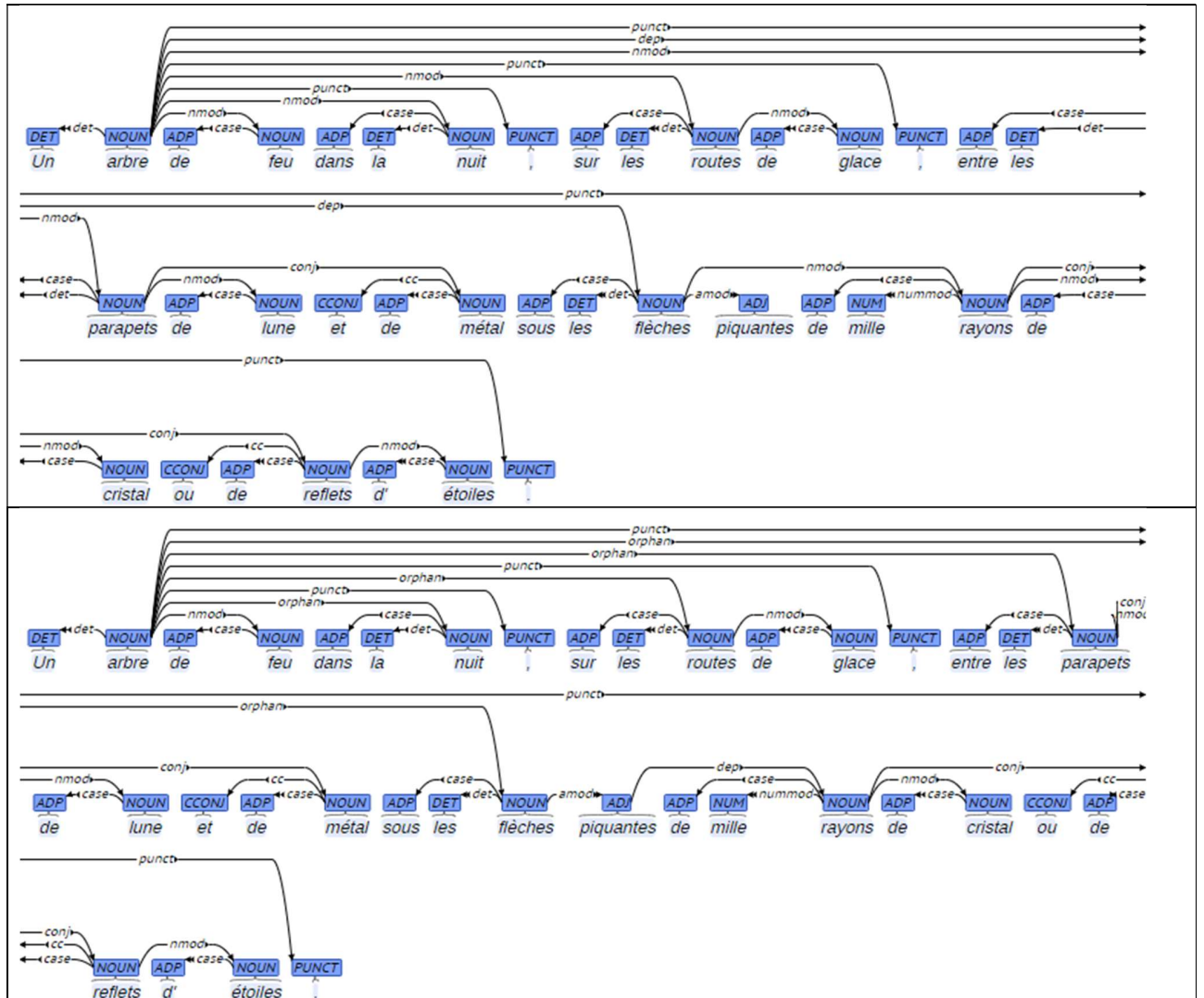


AA3

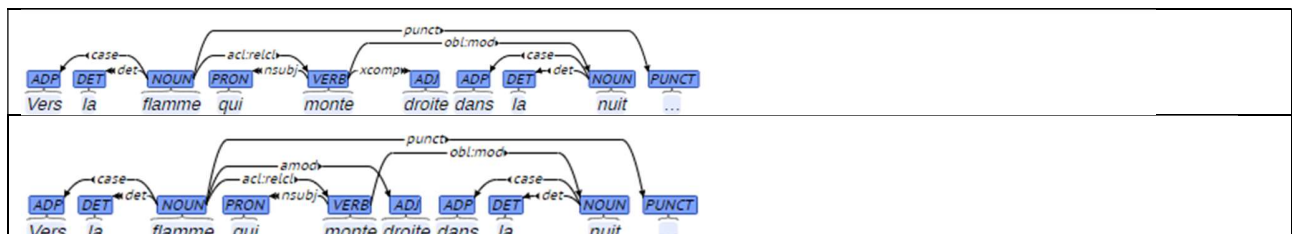




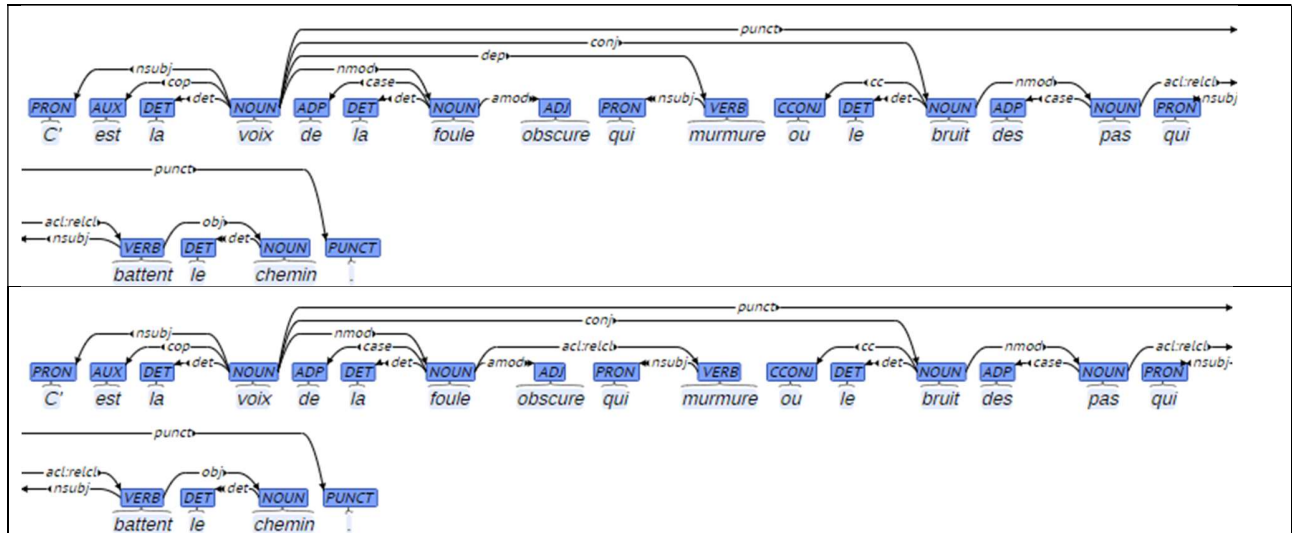
AA4



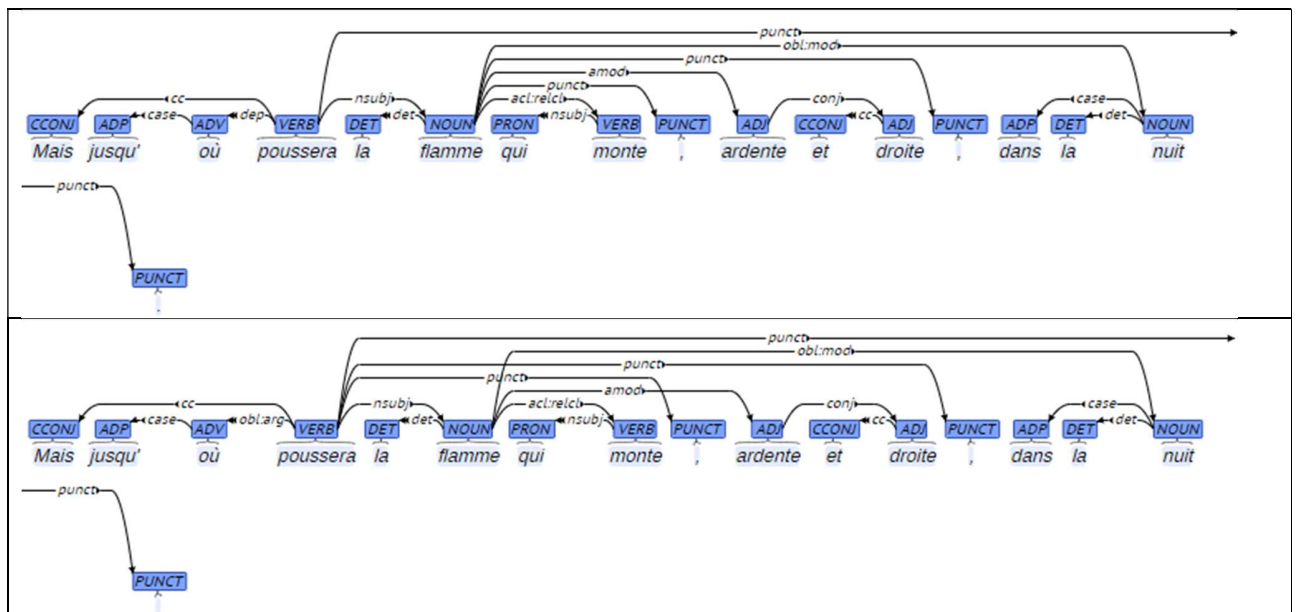
AA5



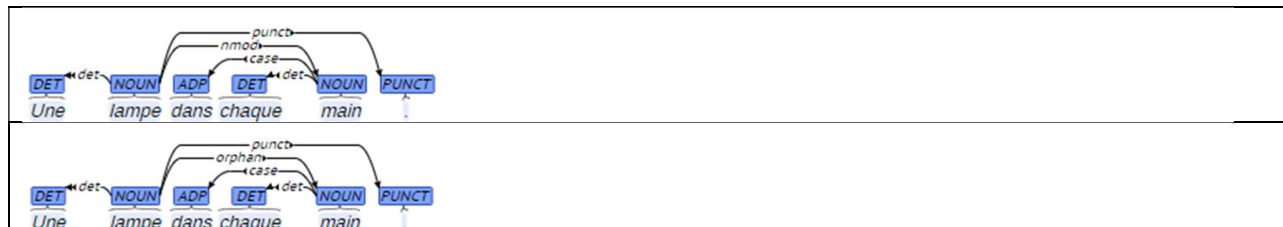
AA6



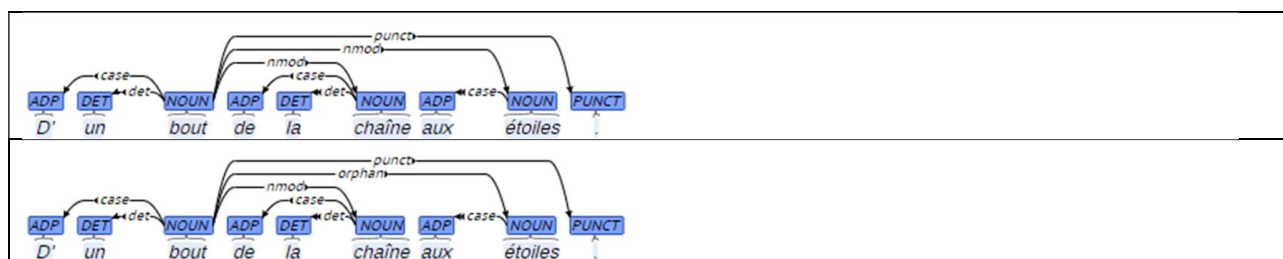
AA7



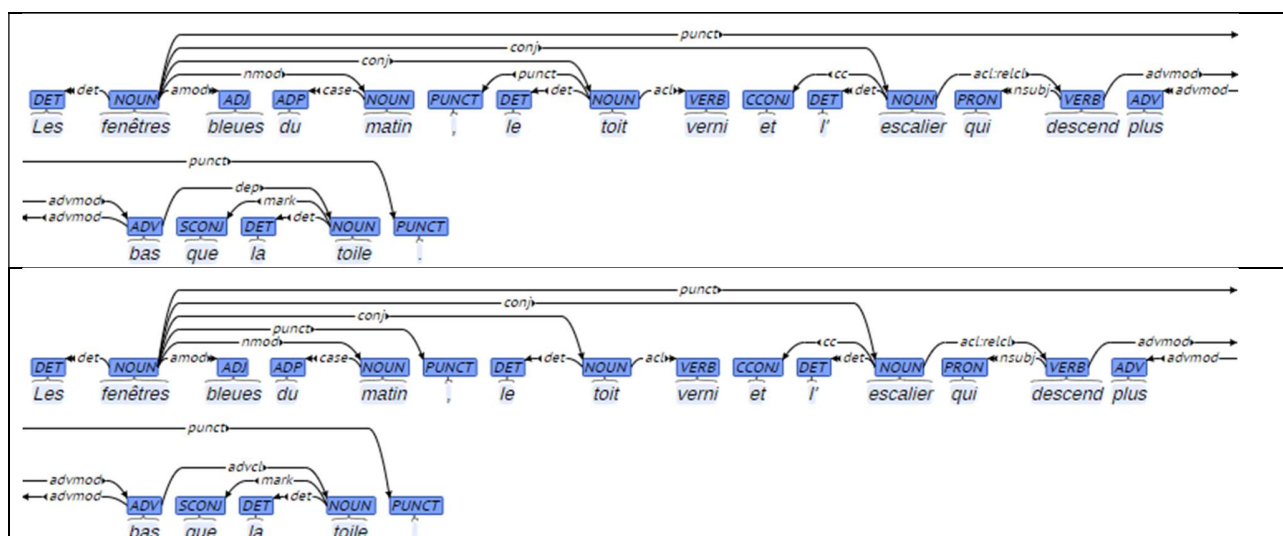
HE1



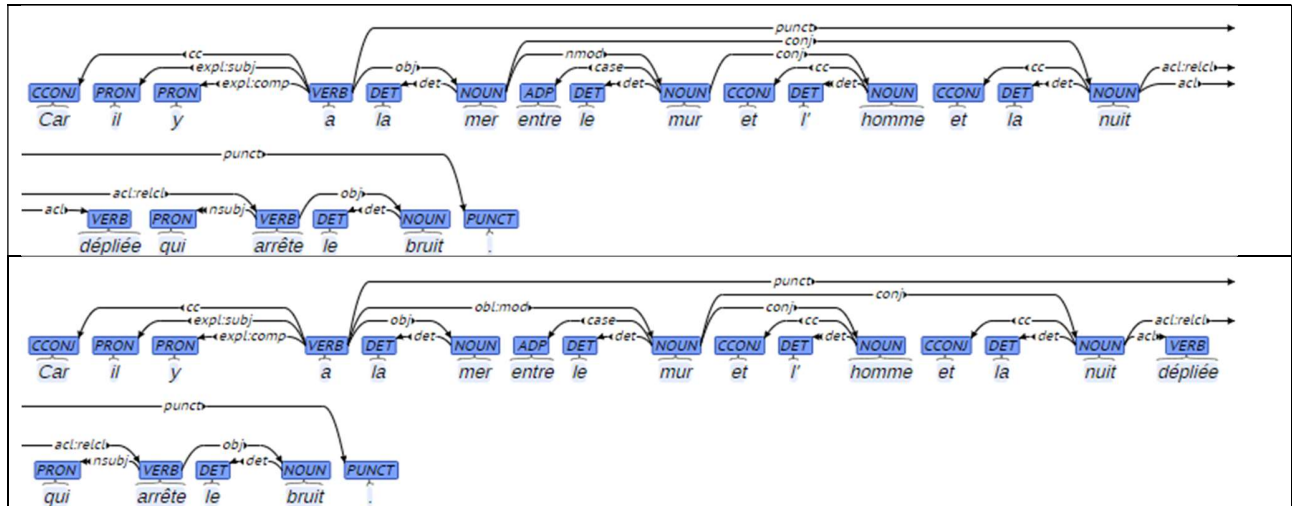
HE2



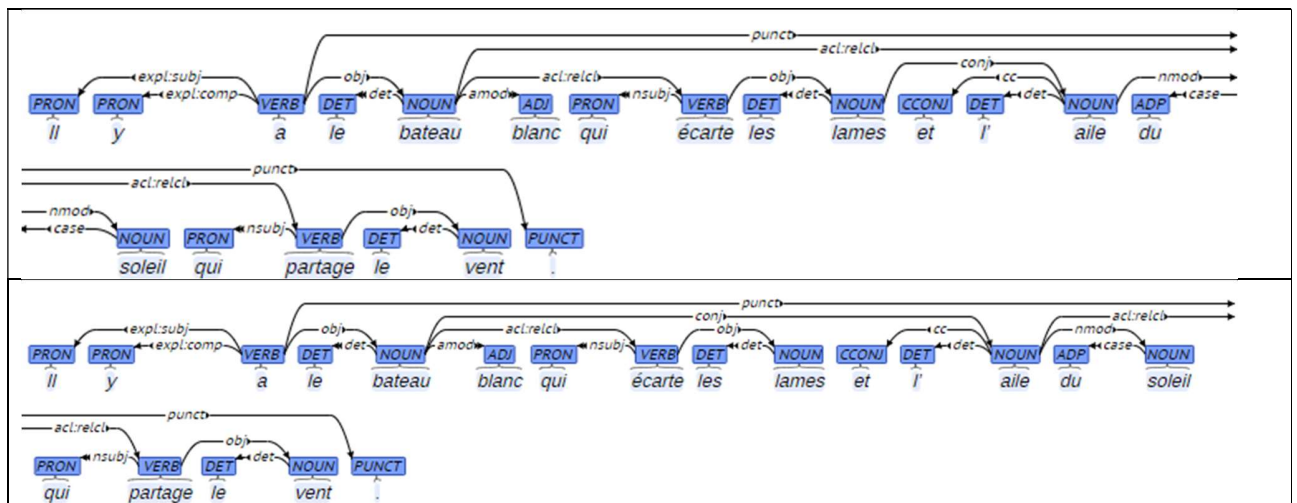
HE3



HE4



HE5

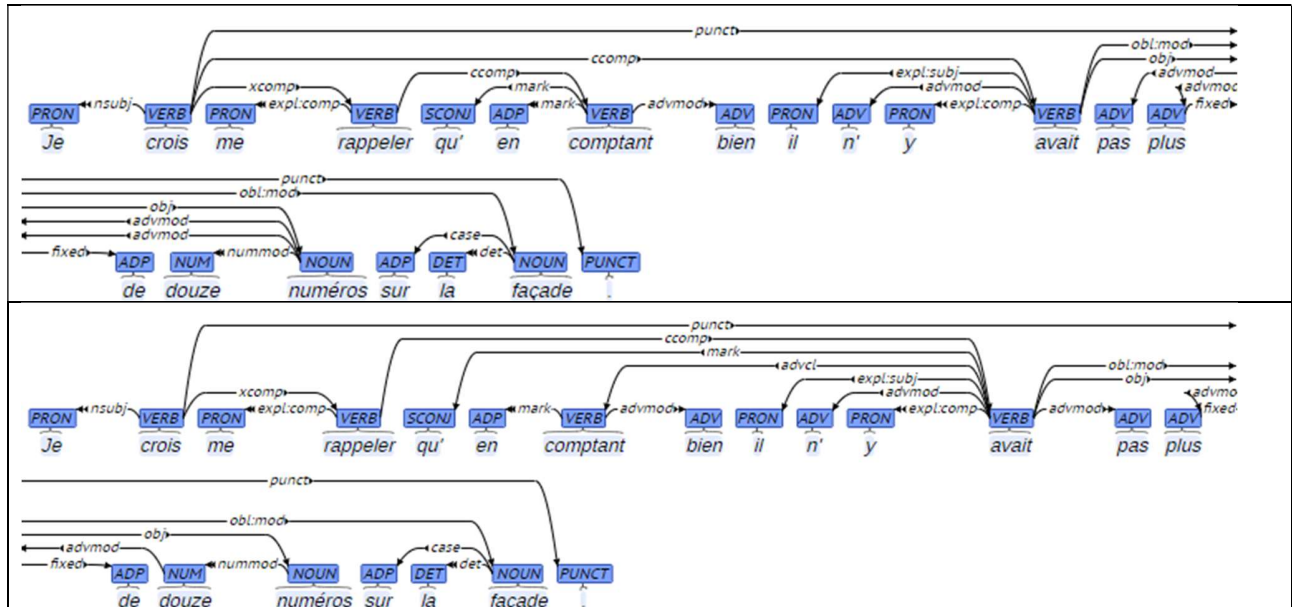




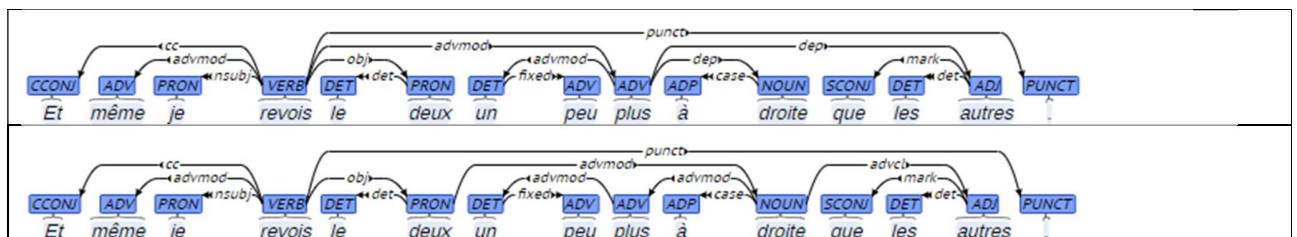




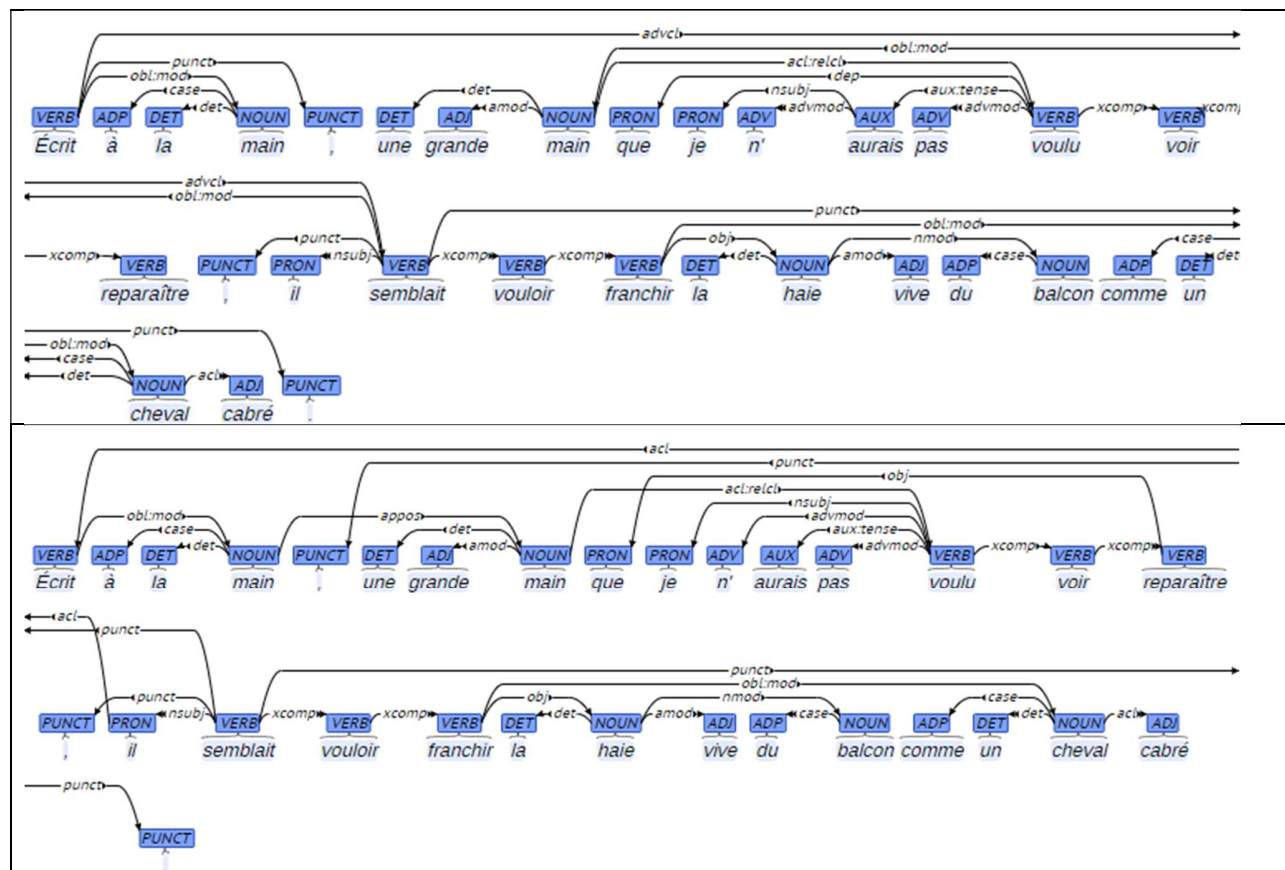
NV1



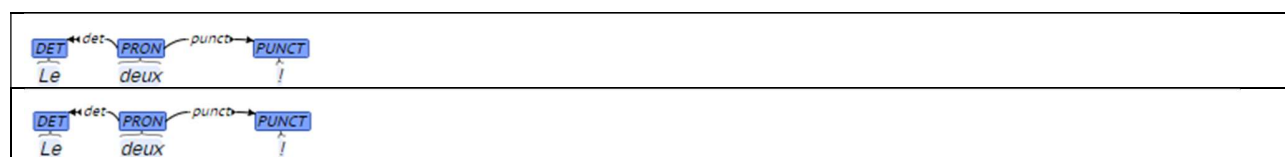
NV2



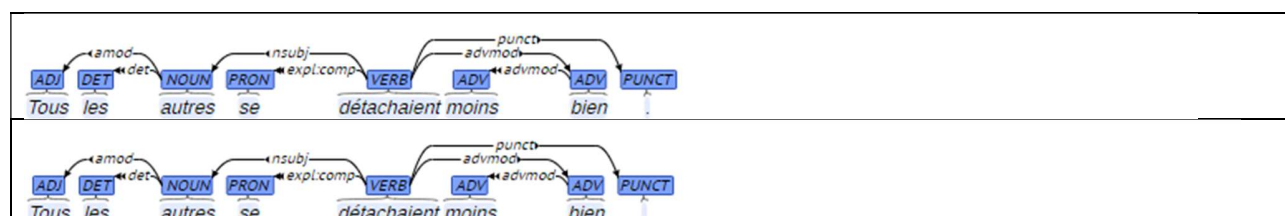
### NV3



### NV4



### NV5



The image displays two identical syntactic tree diagrams for the sentence: "Mais il y avait encore le visage immobile derrière le volet et la prune bleue qui restait indécise." The words are color-coded: blue for conjunctions (CCONJ), pronouns (PRON), verbs (VERB), adverbs (ADV), determiners (DET), adjectives (ADJ), prepositions (ADP), and punctuation (PUNCT). The diagrams illustrate the hierarchical structure of the sentence, showing how words are grouped into phrases and clauses. Key syntactic relations labeled include: *cc* (conjunction), *expl:subj* (explanatory subject), *expl:comp* (explanatory complement), *advmod* (adverbial modifier), *obj* (object), *amod* (adjectival modifier), *nmod* (nominal modifier), *case* (case), *act:relc* (active relative clause), *act:rel* (active relative), *amod* (adjectival modifier), *nsbj* (nominal subject), *xcomp* (adpositional complement), and *punct* (punctuation).

Diagram illustrating the syntactic structure of the sentence "Tout à coup une clarté nouvelle détournait l'attention des passants". The diagram shows the hierarchical organization of the sentence into phrases and clauses, with labels indicating the grammatical function of each word or group of words.

The sentence is analyzed as follows:

- ADV** (Adverb): Tout
- ADP** (Preposition): à
- NOUN** (Noun): coup
- DET** (Determiner): une
- NOUN** (Noun): clarté
- ADJ** (Adjective): nouvelle
- VERB** (Verb): détournait
- DET** (Determiner): l'
- NOUN** (Noun): attention
- ADP** (Preposition): des
- NOUN** (Noun): passants
- PUNCT** (Punctuation): .

The diagram shows the following hierarchical structure:

- ADV** (Tout) is connected to **ADP** (à) via a **fixed** relation.
- ADP** (à) is connected to **NOUN** (coup) via a **fixed** relation.
- ADP** (à) is connected to **DET** (une) via a **fixed** relation.
- DET** (une) is connected to **NOUN** (clarté) via a **det** relation.
- NOUN** (clarté) is connected to **ADJ** (nouvelle) via an **amod** relation.
- ADJ** (nouvelle) is connected to **VERB** (détournait) via an **nsbj** relation.
- VERB** (détournait) is connected to **DET** (l') via an **obj** relation.
- DET** (l') is connected to **NOUN** (attention) via a **det** relation.
- NOUN** (attention) is connected to **ADP** (des) via a **punct** relation.
- ADP** (des) is connected to **NOUN** (passants) via an **nmod** relation.
- NOUN** (passants) is connected to **PUNCT** (.) via a **punct** relation.

The image displays three syntactic tree diagrams for the French sentence: "Une porte s'ouvrait au fond de l'avenue le ciel se détendait et le vent qui venait de l'autre côté du sol faisait flotter les franges des tentures".

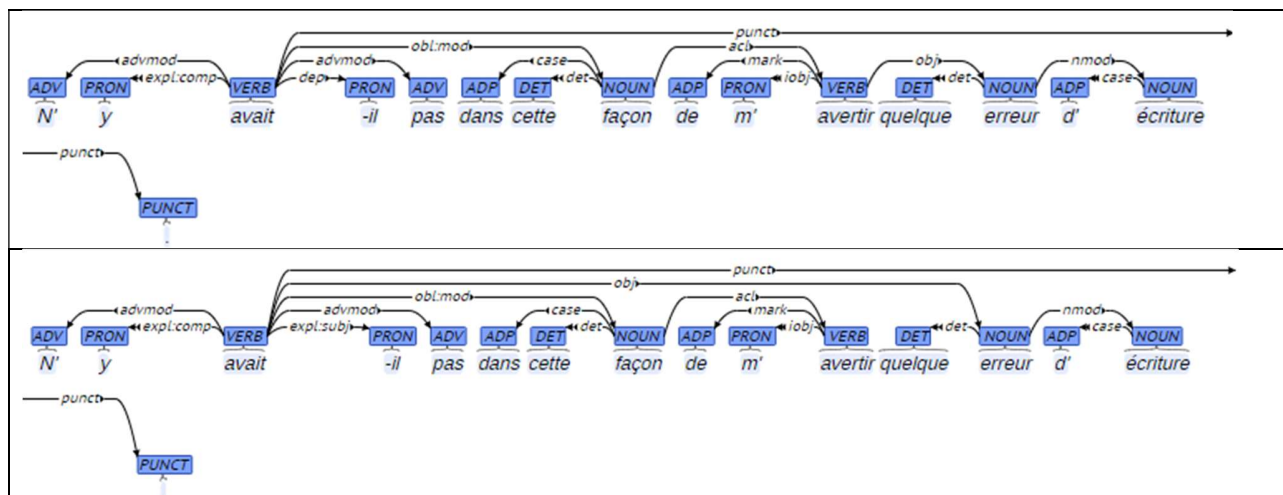
**Tree 1 (Top):** This tree represents the first clause, "Une porte s'ouvrait au fond de l'avenue le ciel se détendait". It shows a main clause structure where "Une porte" (DET NOUN) is the subject of "s'ouvrait" (VERB, expl:pass). The location is indicated by "au fond de l'avenue" (ADP NOUN ADP DET NOUN DET NOUN) and "le ciel" (DET NOUN). "se détendait" (VERB, expl:pass) is the main verb of the second clause, with "le ciel" as its subject.

**Tree 2 (Middle):** This tree represents the second clause, "se détendait et le vent qui venait de l'autre côté du sol". It shows a coordinate structure where "se détendait" (VERB, expl:pass) is coordinated with "et le vent" (CCONJ DET NOUN). "le vent" is the subject of "venait" (VERB, expl:pass), which is further modified by "qui" (PRON) and "de l'autre côté du sol" (ADP DET ADJ amod NOUN ADP case NOUN).

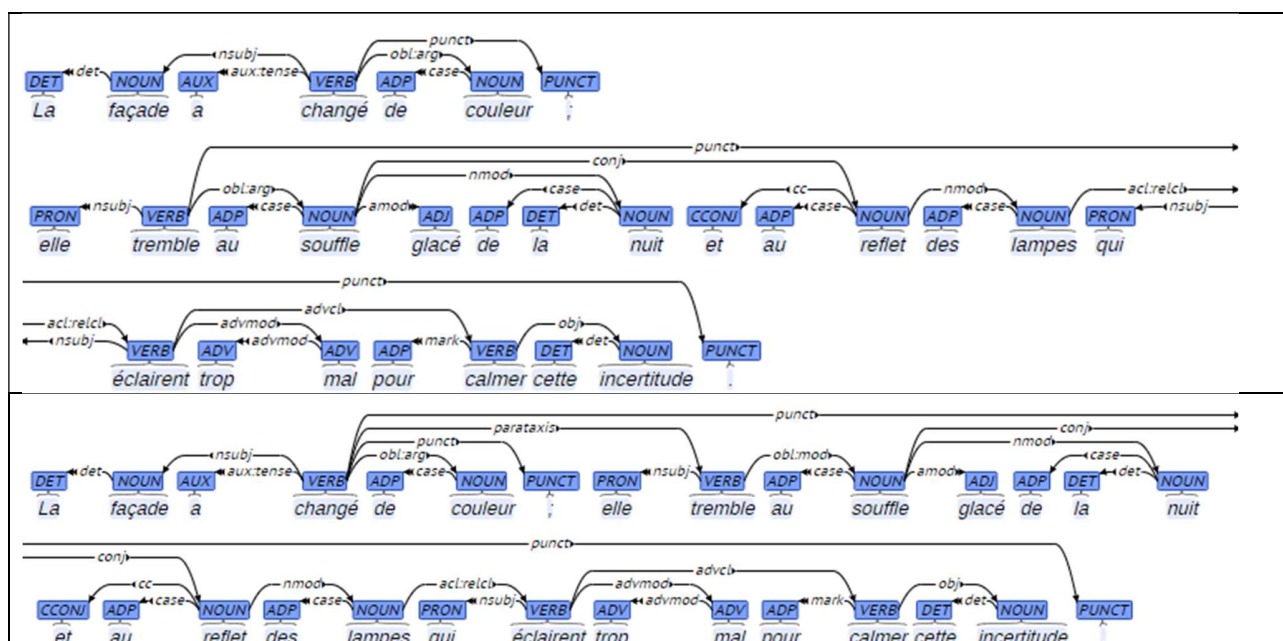
**Tree 3 (Bottom):** This tree represents the third clause, "faisait flotter les franges des tentures". It shows a main clause structure where "faisait" (AUX) is the auxiliary verb and "flotter" (VERB) is the main verb. The object is "les franges des tentures" (DET NOUN ADP case NOUN).



NV10



NV11



The image displays two syntactic tree diagrams for the French sentence: "Douze signes que je ne comprends pas dansent sur le plus large côté du balcon avec les lampes serrées dans les replis mouvants de la voilure." The words are color-coded: NUM (blue), NOUN (light blue), PRON (light blue), ADV (light blue), VERB (light blue), ADP (light blue), DET (light blue), and PUNCT (light blue). Arrows indicate grammatical relations such as nsubj, obj, advmod, and case.

**Top Diagram:** This diagram shows a main clause structure. The main clause is "Douze signes que je ne comprends pas dansent sur le plus large côté du balcon avec les lampes serrées dans les replis mouvants de la voilure." The relative clause "que je ne comprends pas" is integrated into the main clause structure. The main clause structure is: NUM (Douze) - NOUN (signes) - PRON (que) - PRON (je) - ADV (ne) - VERB (comprends) - ADV (pas) - VERB (dansent) - ADP (sur) - DET (le) - ADV (plus) - ADJ (large) - NOUN (côté) - ADP (du) - NOUN (balcon) - ADP (avec) - DET (les) - NOUN (lampes) - VERB (serrées) - ADP (dans) - DET (les) - NOUN (replis) - ADJ (mouvants) - ADP (de) - DET (la) - NOUN (voilure) - PUNCT (.)

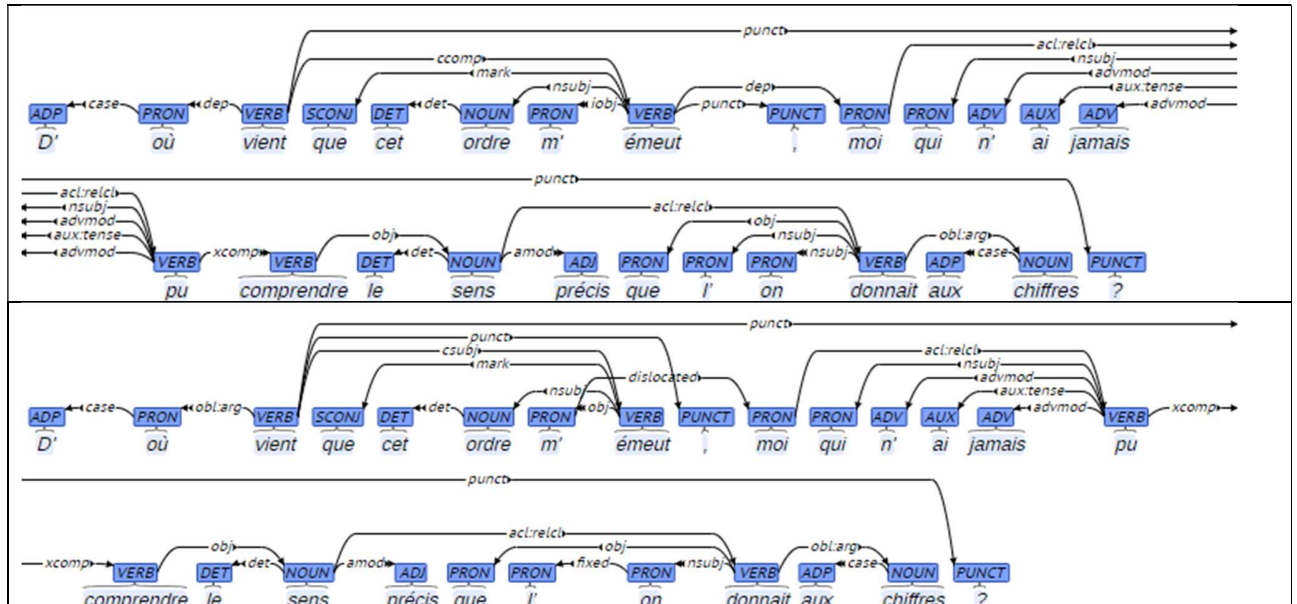
**Bottom Diagram:** This diagram shows an alternative structure for the same sentence. The main clause is "Douze signes que je ne comprends pas dansent sur le plus large côté du balcon avec les lampes serrées dans les replis mouvants de la voilure." The relative clause "que je ne comprends pas" is integrated into the main clause structure. The main clause structure is: NUM (Douze) - NOUN (signes) - PRON (que) - PRON (je) - ADV (ne) - VERB (comprends) - ADV (pas) - VERB (dansent) - ADP (sur) - DET (le) - ADV (plus) - ADJ (large) - NOUN (côté) - ADP (du) - NOUN (balcon) - ADP (avec) - DET (les) - NOUN (lampes) - VERB (serrées) - ADP (dans) - DET (les) - NOUN (replis) - ADJ (mouvants) - ADP (de) - DET (la) - NOUN (voilure) - PUNCT (.)

The image displays two dependency parse trees for the sentence "Le sept le huit le neuf". The words are represented as tokens with their part-of-speech tags (DET, NUM, PUNCT, NOUN) and the words themselves (Le, sept, le, huit, le, neuf). The trees show the syntactic structure with dependency arcs labeled with grammatical relations like *det*, *conj*, and *punct*.

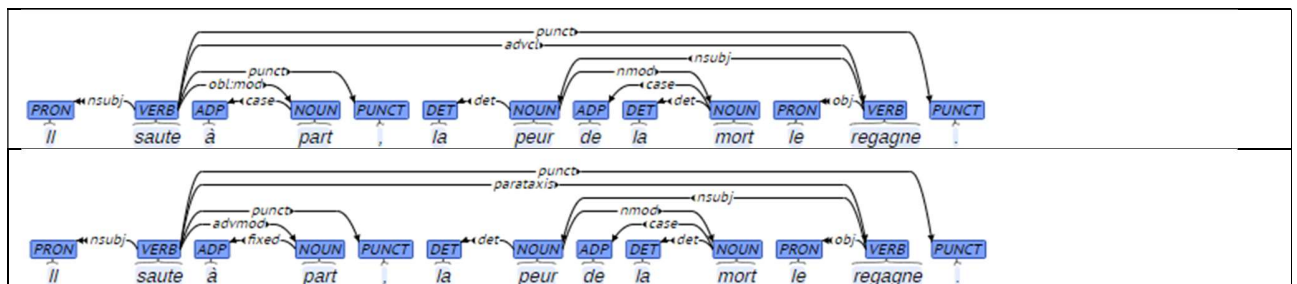
**Top Tree (Left):** This tree shows a structure where "Le" (DET) is the root. It has a *det* arc to "sept" (NUM). "sept" has a *conj* arc to "le" (DET). "le" has a *det* arc to "huit" (NUM). "huit" has a *conj* arc to "le" (DET). "le" has a *det* arc to "neuf" (NOUN). "neuf" has a *punct* arc to "PUNCT".

**Bottom Tree (Right):** This tree shows a different structure. "Le" (DET) is the root. It has a *det* arc to "sept" (NUM). "sept" has a *punct* arc to "PUNCT". "PUNCT" has a *conj* arc to "le" (DET). "le" has a *det* arc to "huit" (NUM). "huit" has a *conj* arc to "le" (DET). "le" has a *det* arc to "neuf" (NOUN). "neuf" has a *punct* arc to "PUNCT".

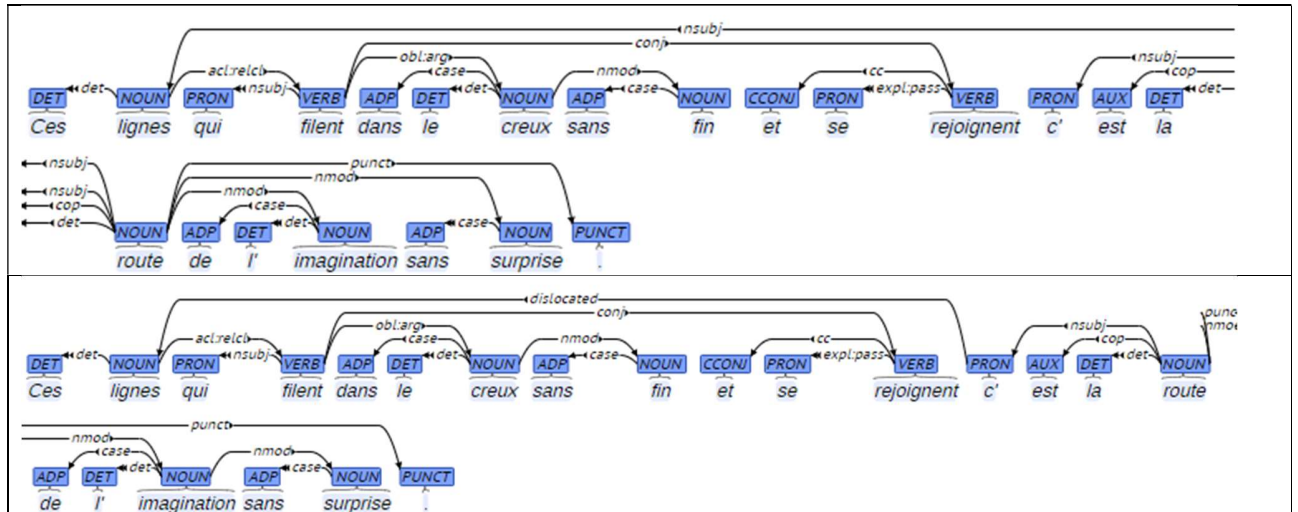
NV14



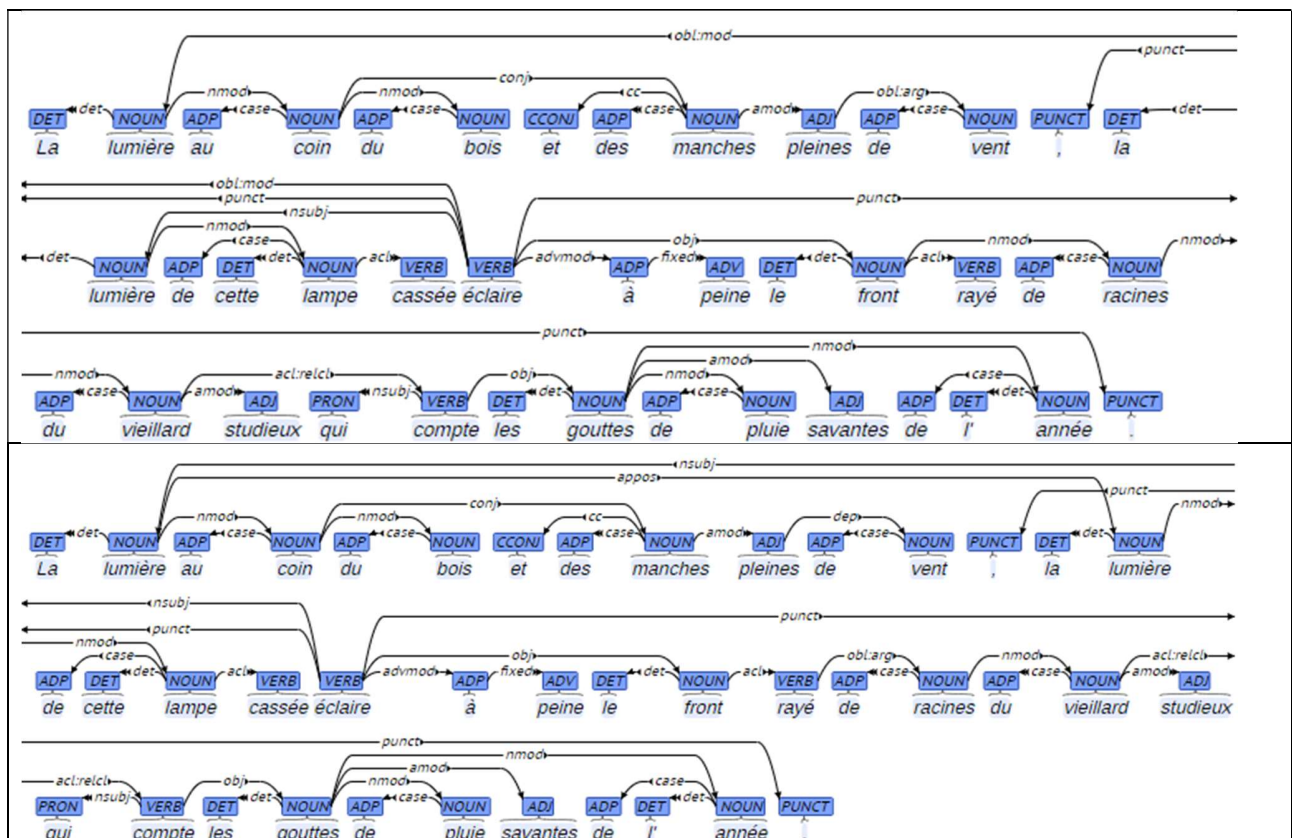
AP1



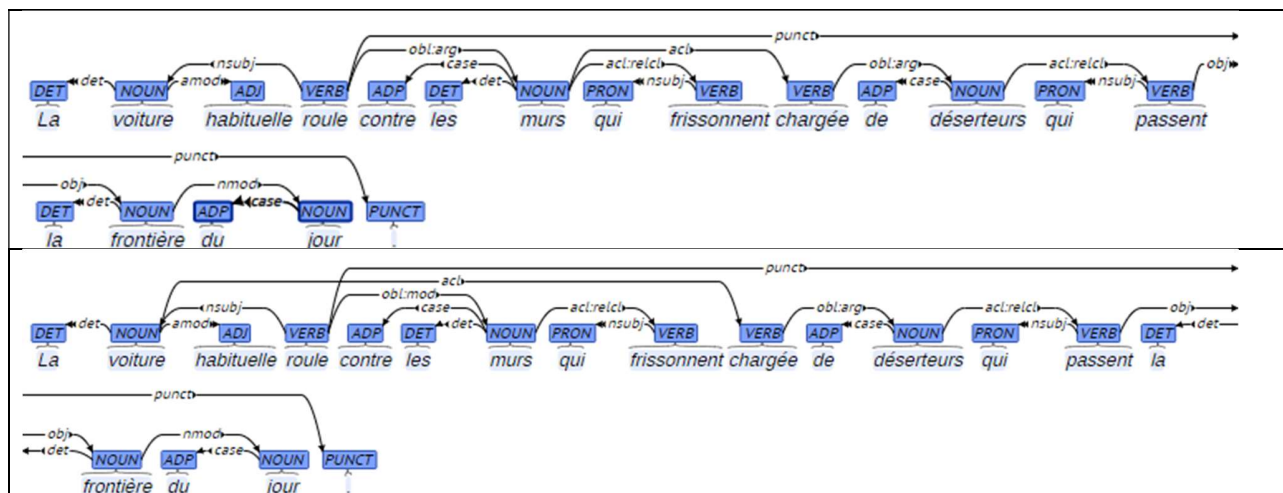
## AP2



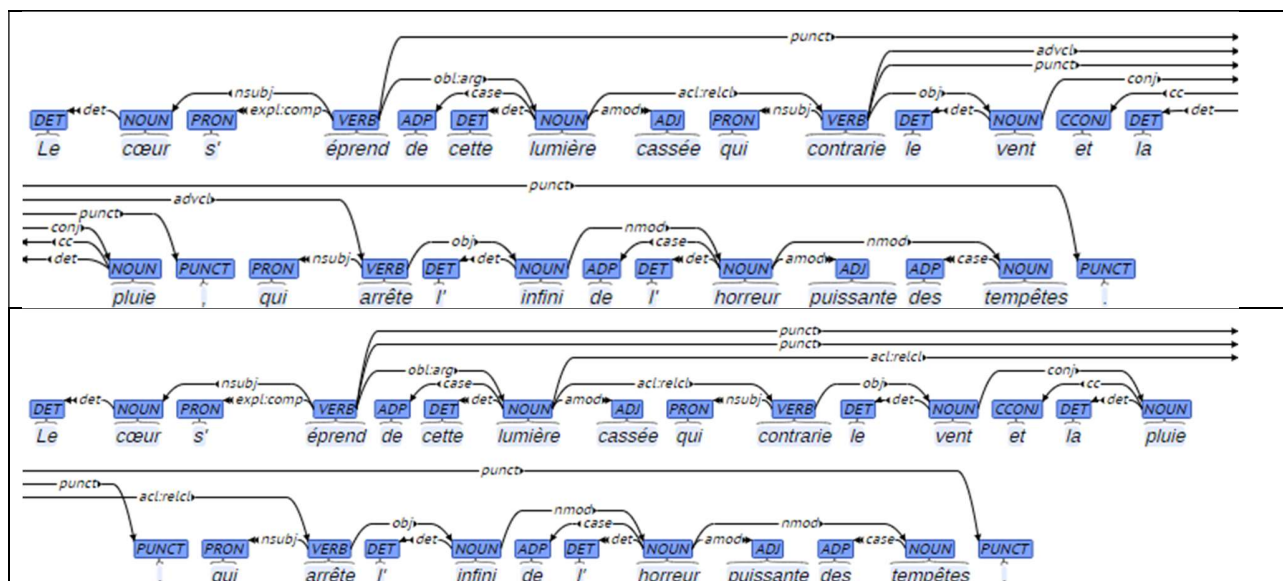
## AP3



AP4

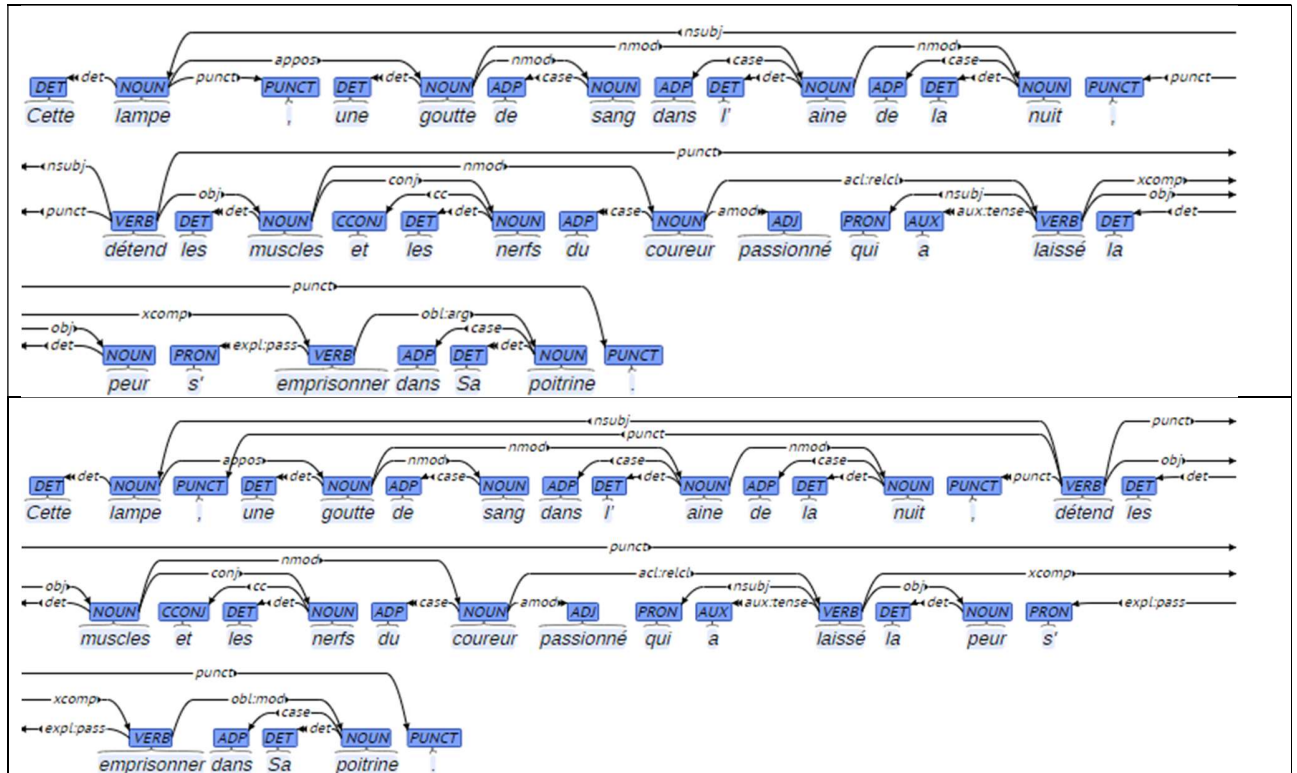


AP5

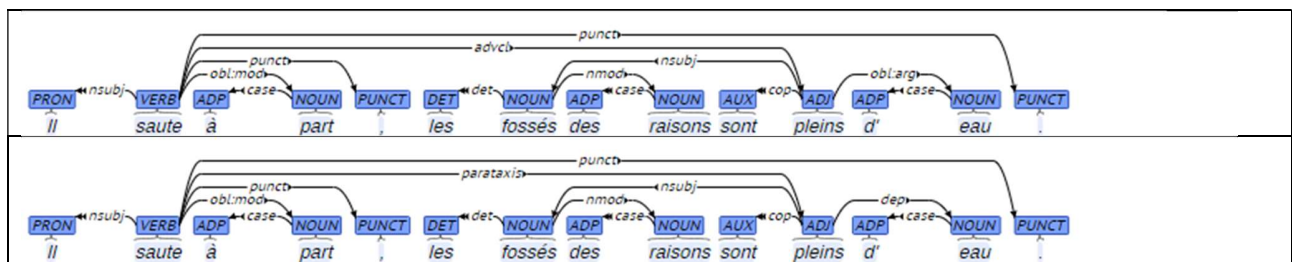




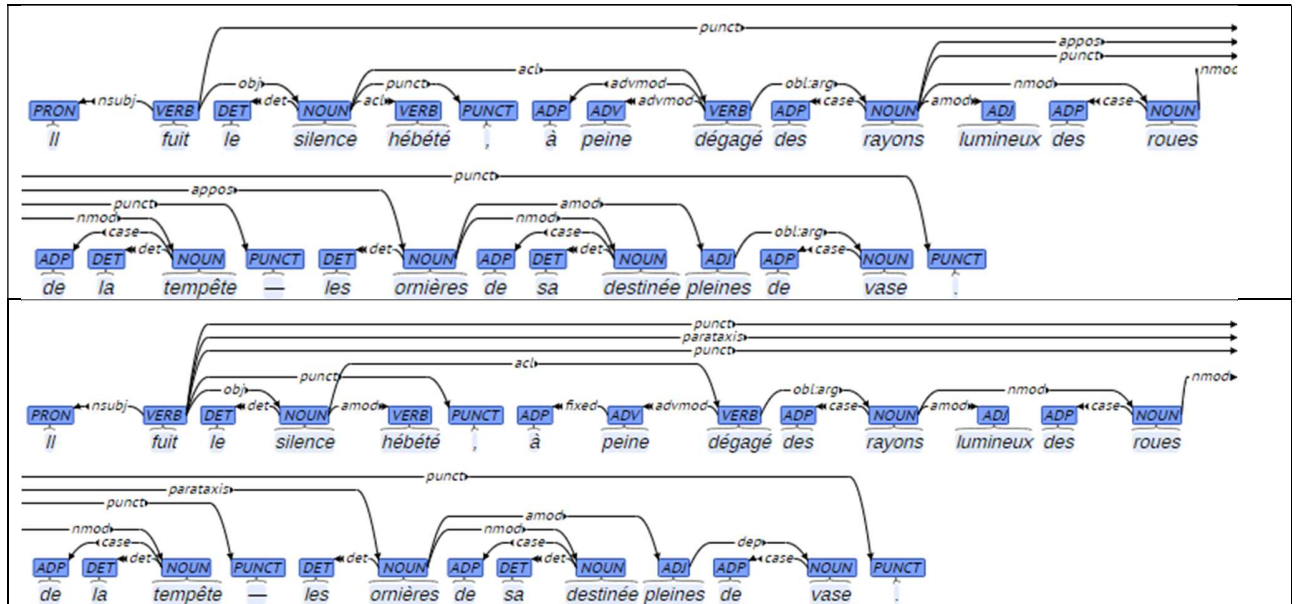
AP6



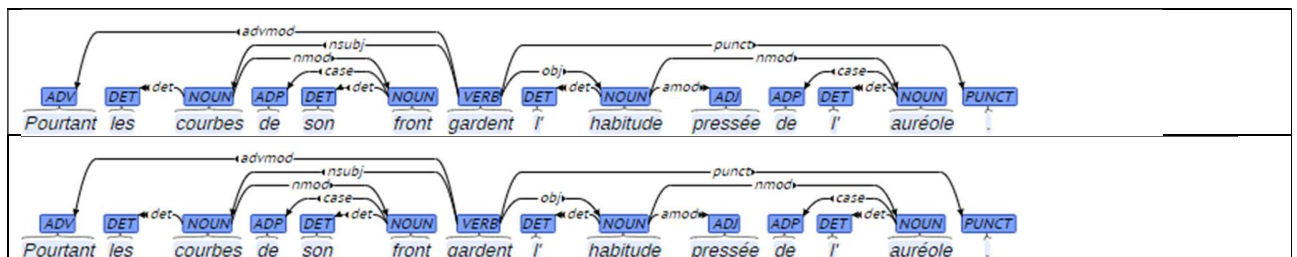
AP7



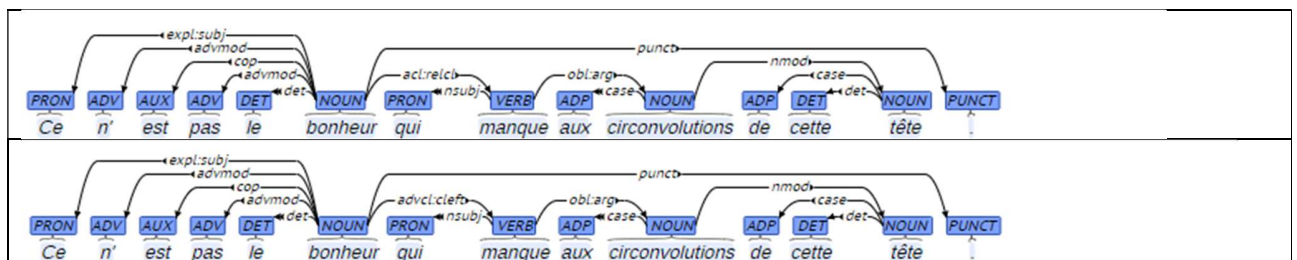
AP8



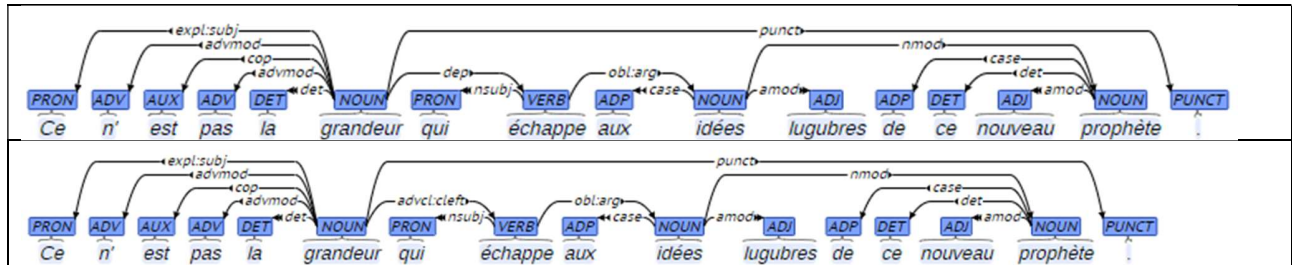
AP9



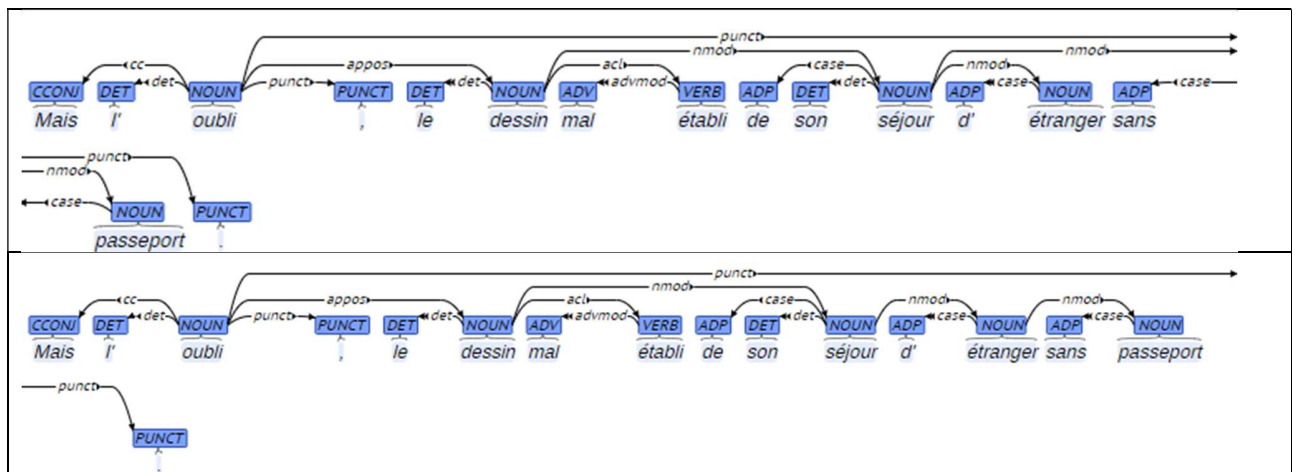
AP10



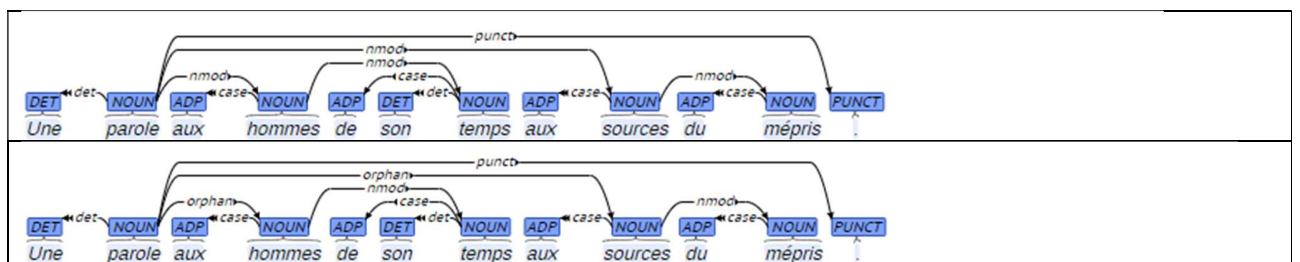
AP11



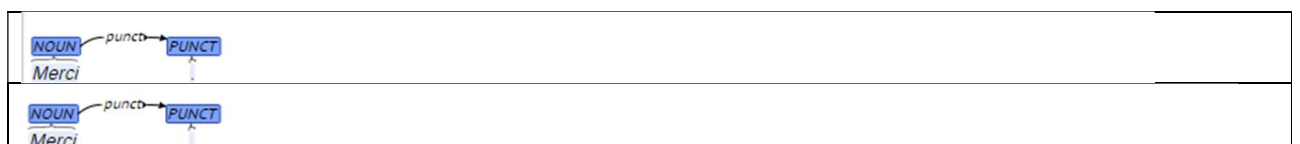
AP12



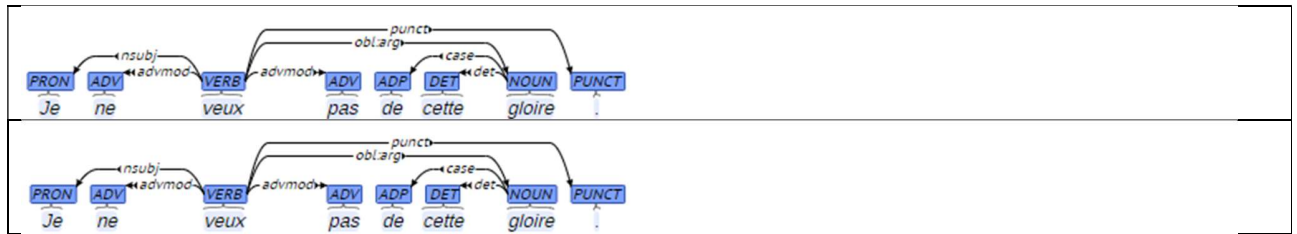
AP13



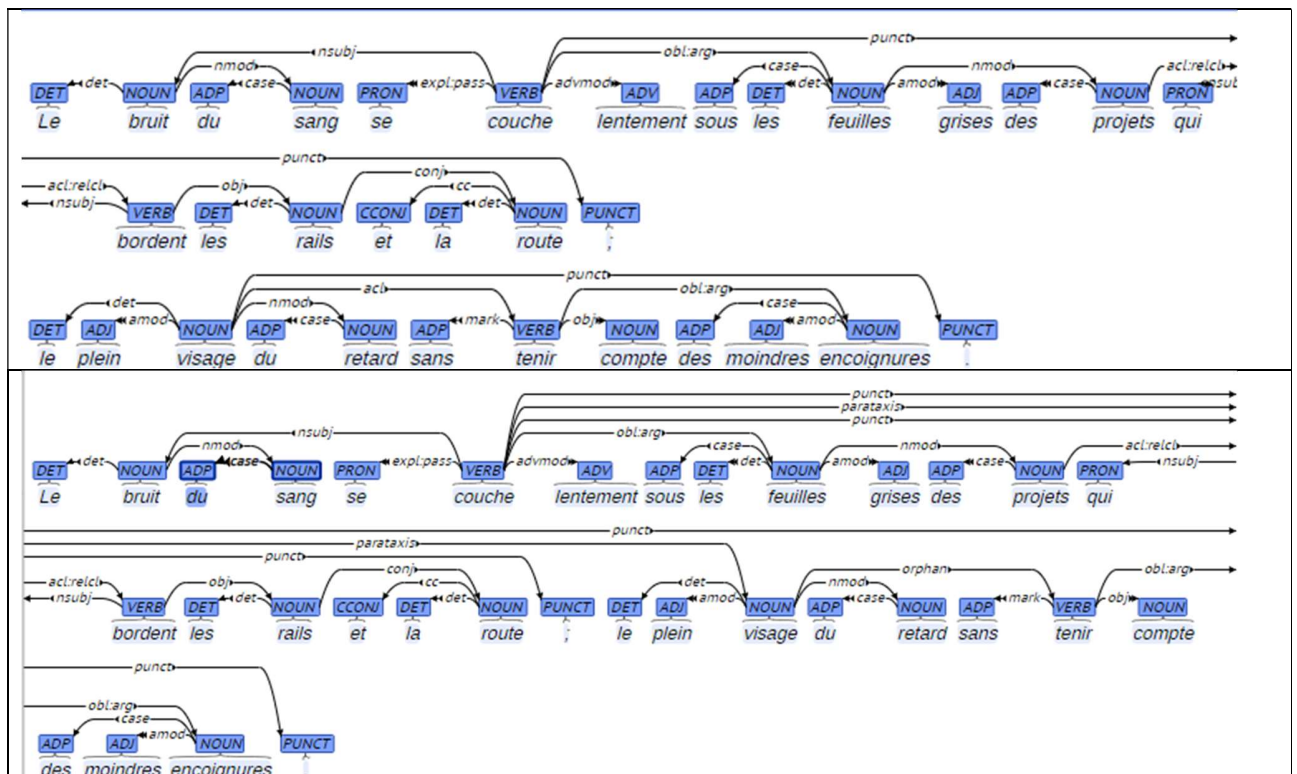
AP14



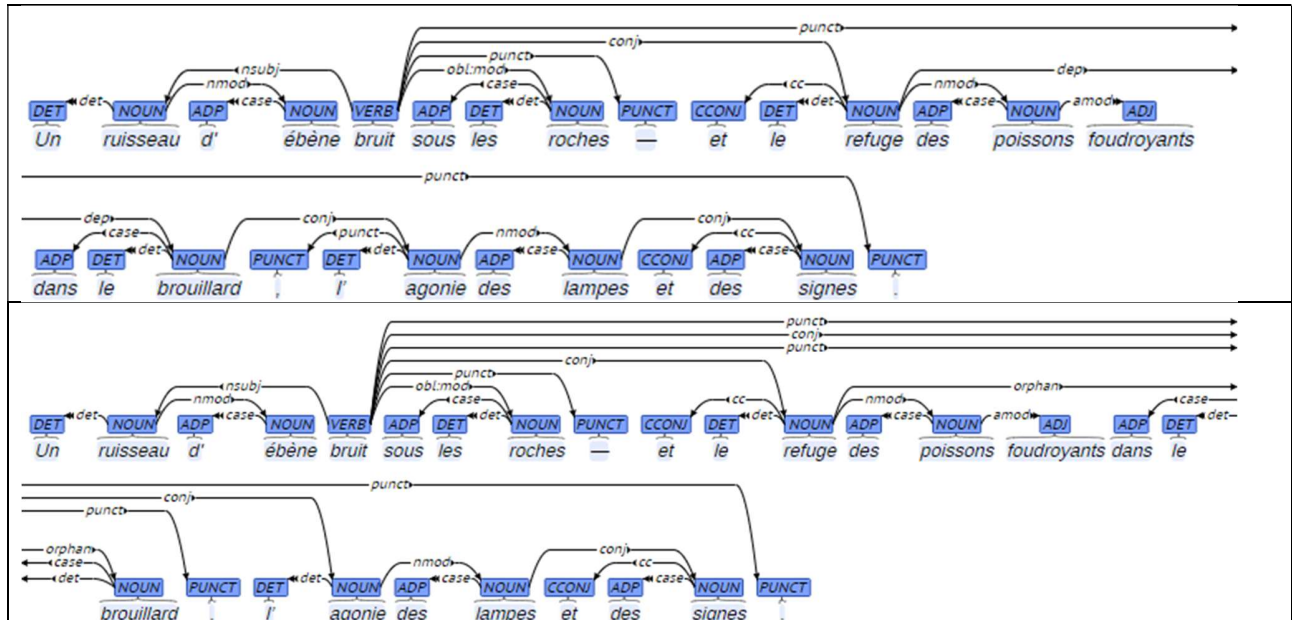
AP15



GL1

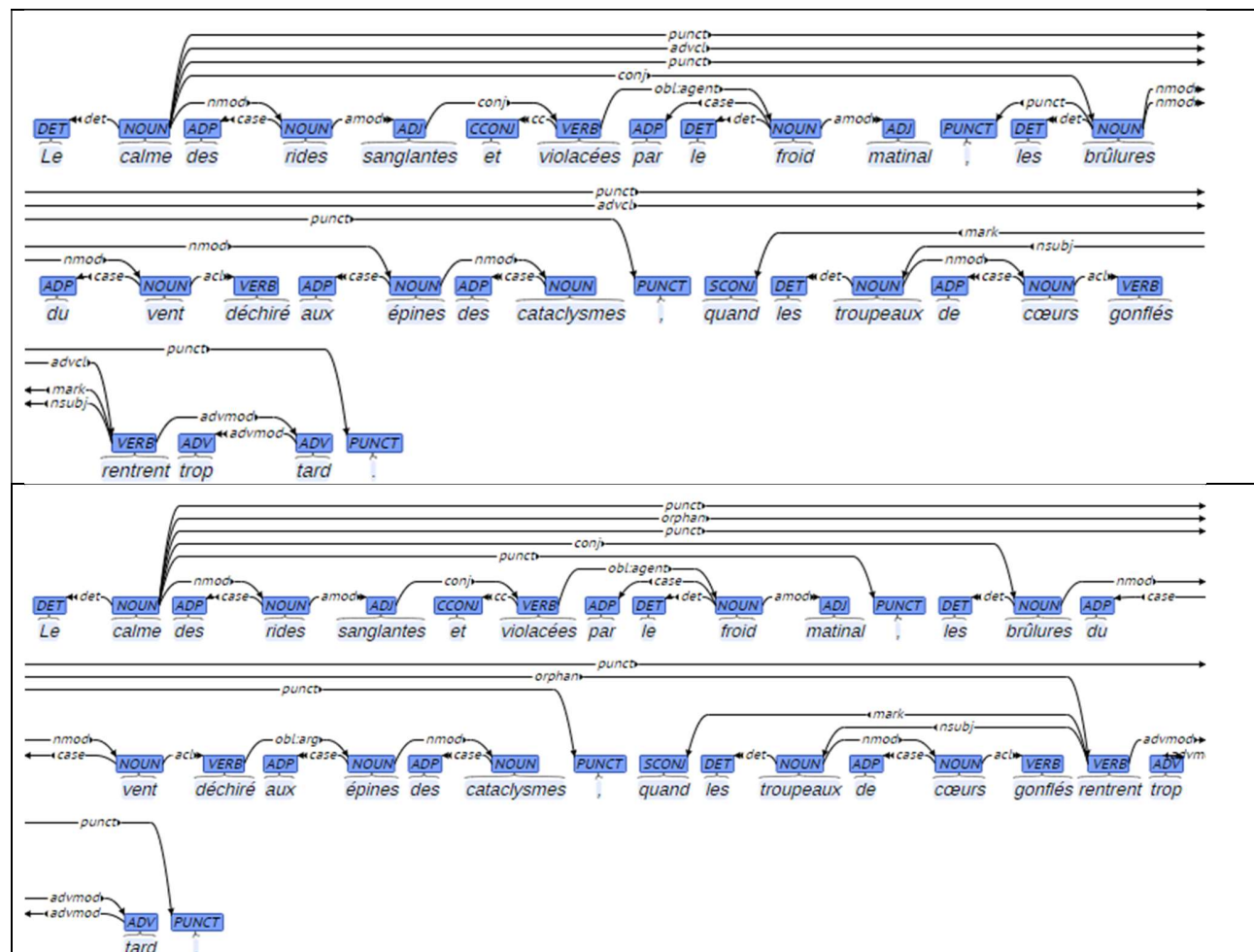


GL2

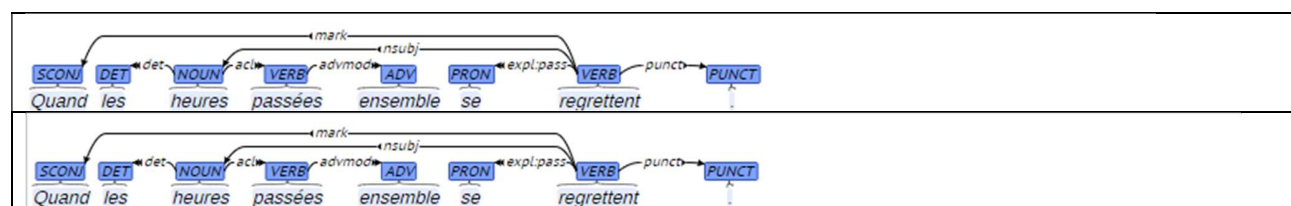




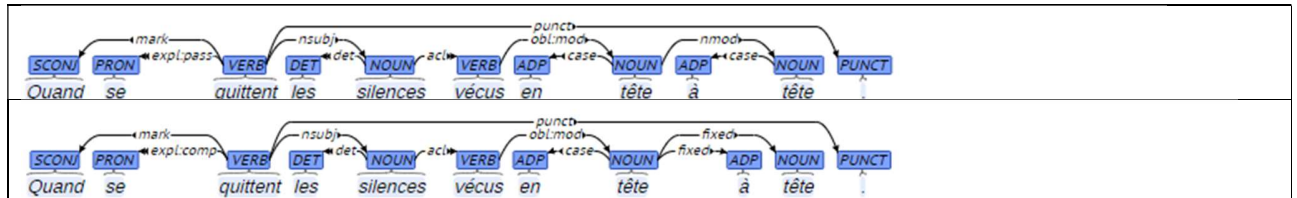
GL3



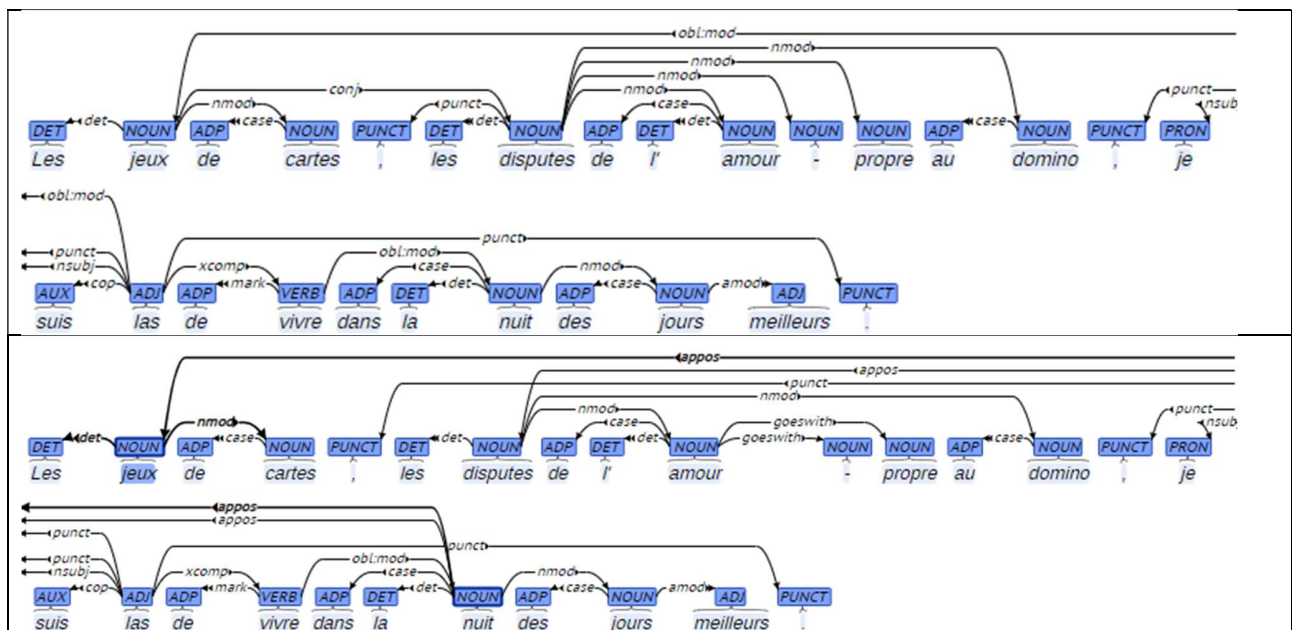
GL4

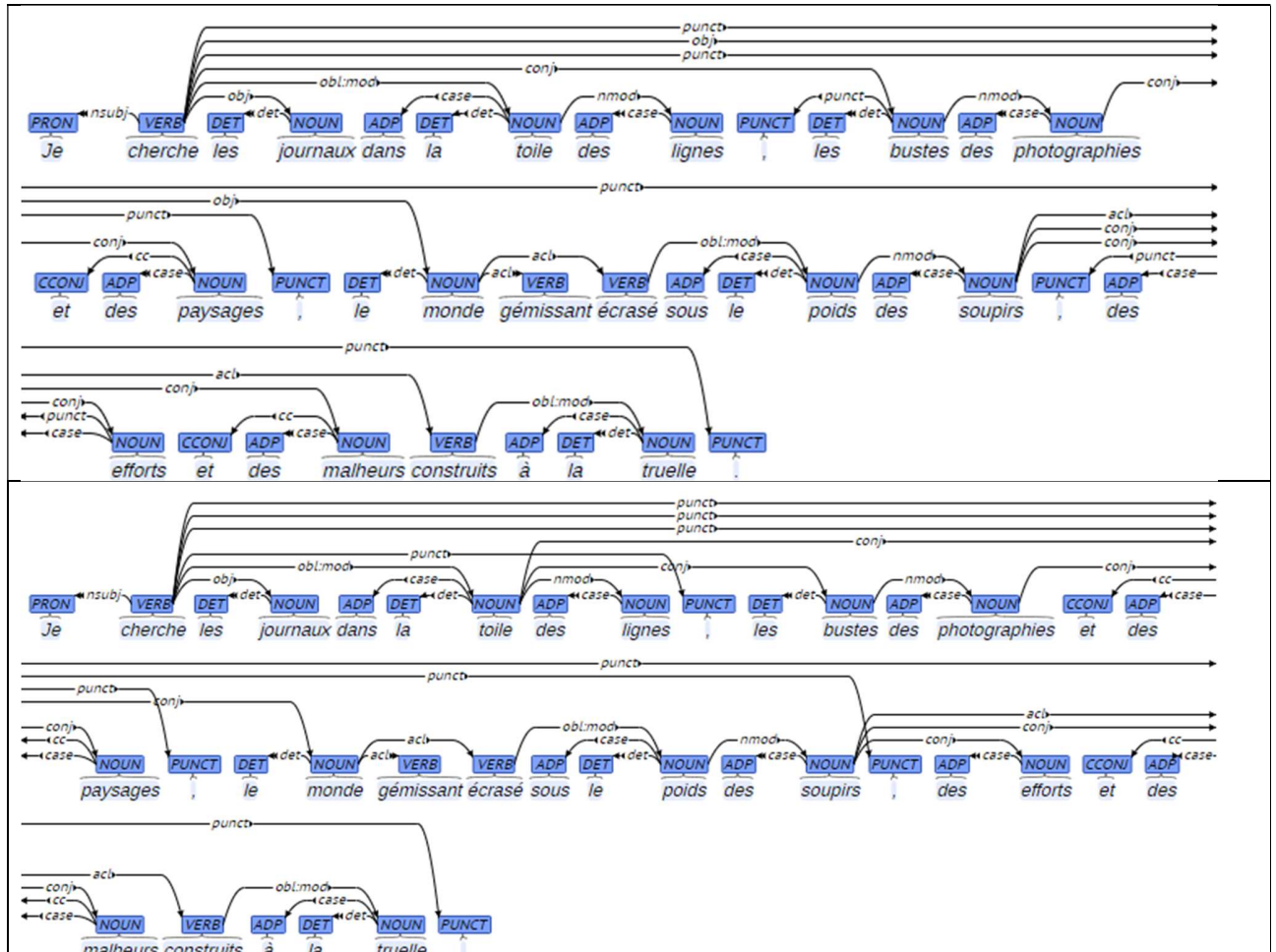


GL5



GL6

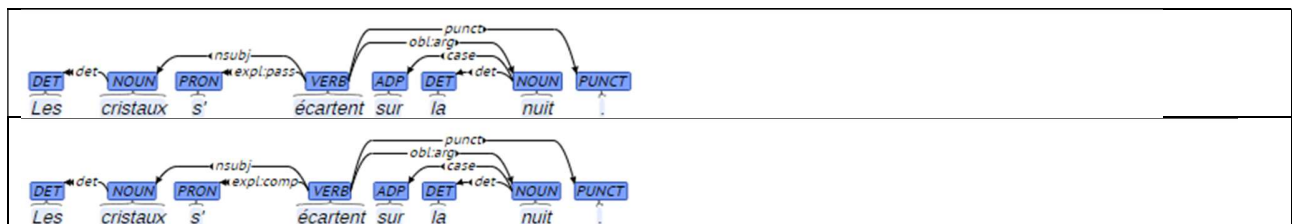




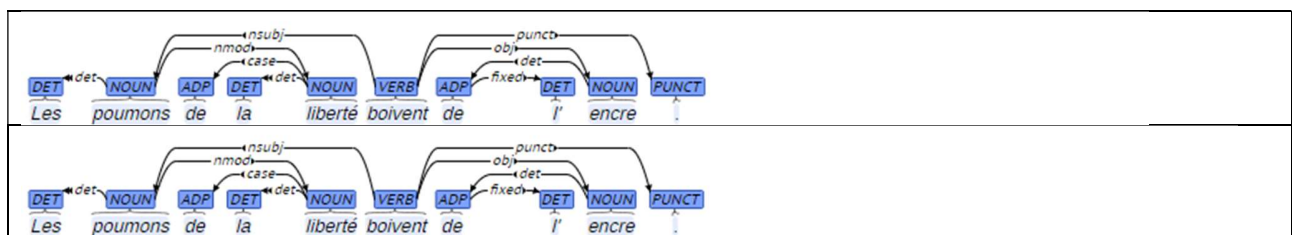
GL8



GL9

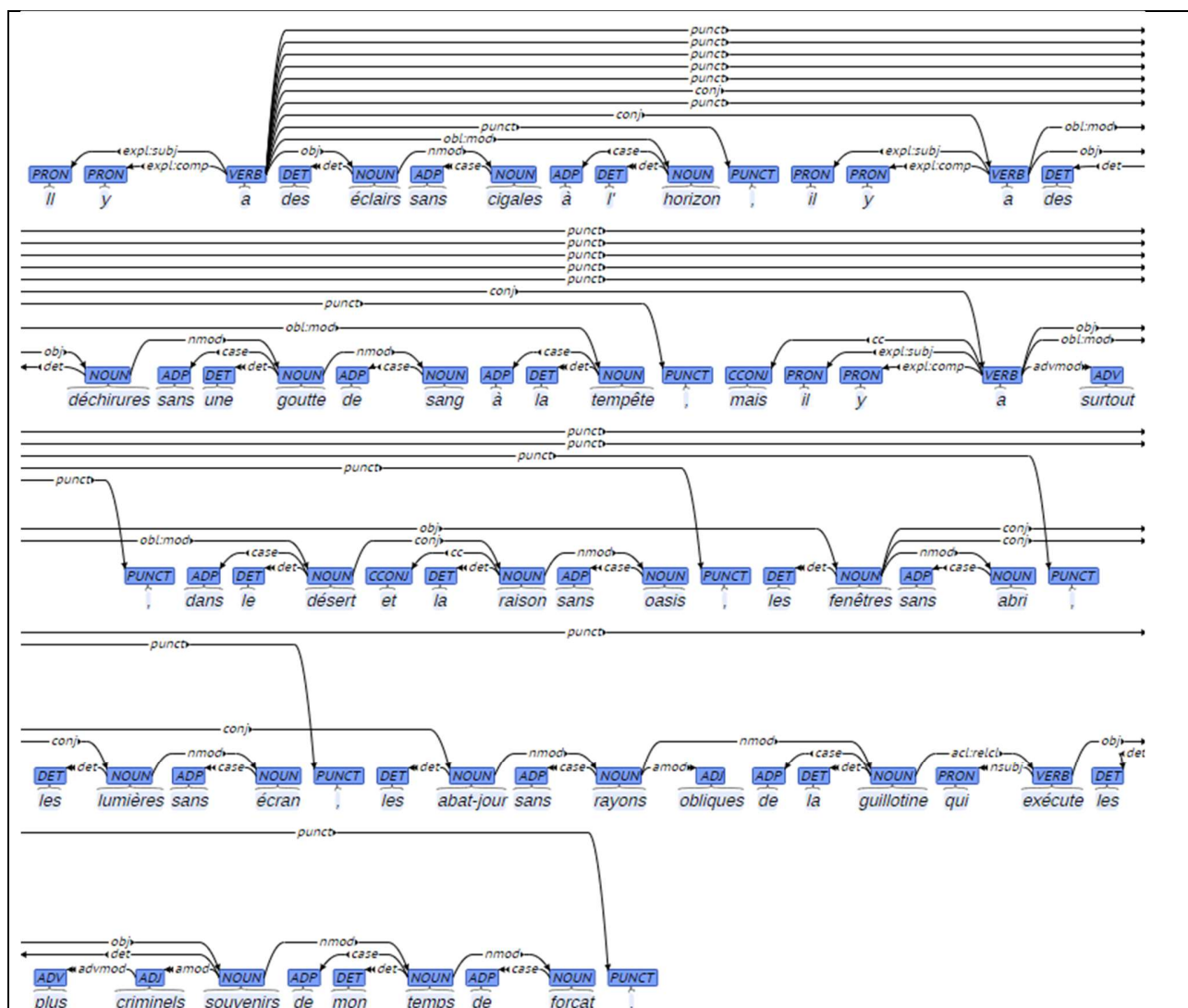


GL10

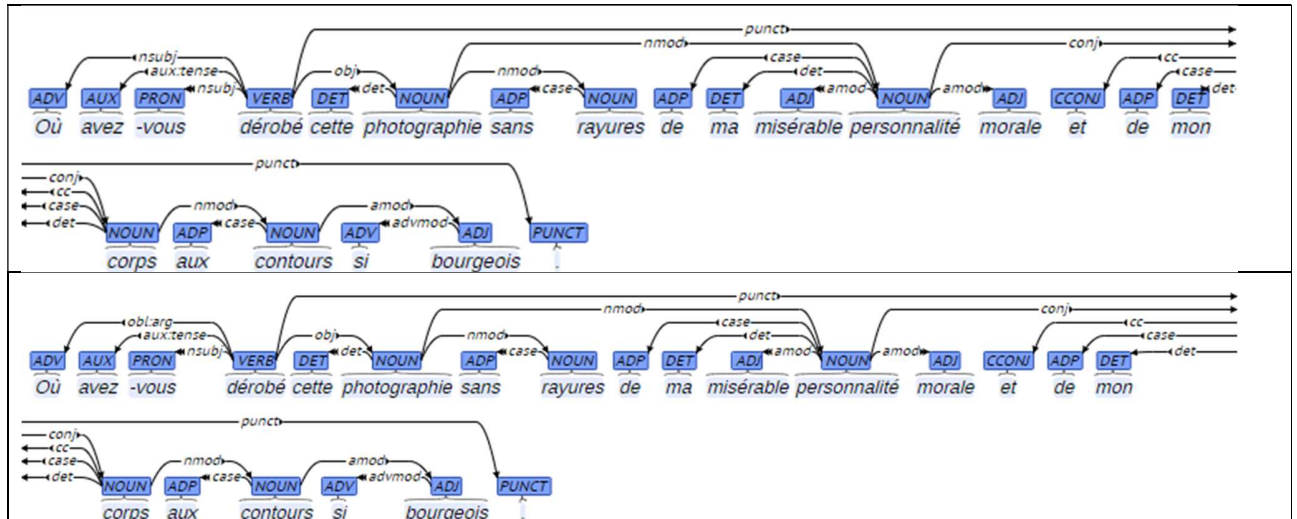


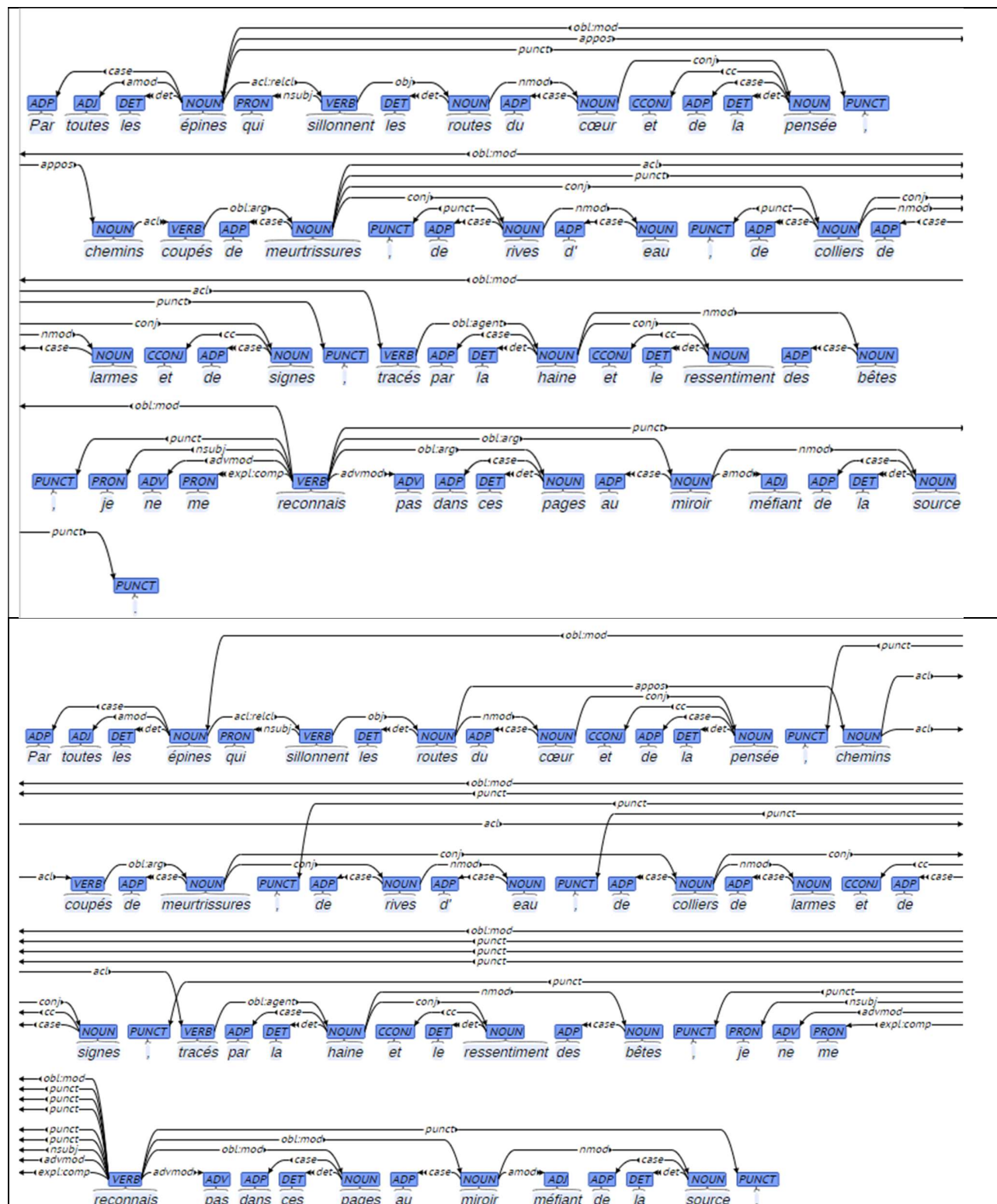






EF2





The image displays three syntactic tree diagrams for the sentence: "Dans cette flaque d'eau où tremble le péril où le temps s'accumule au goutte à goutte défiant les menaces du ciel".

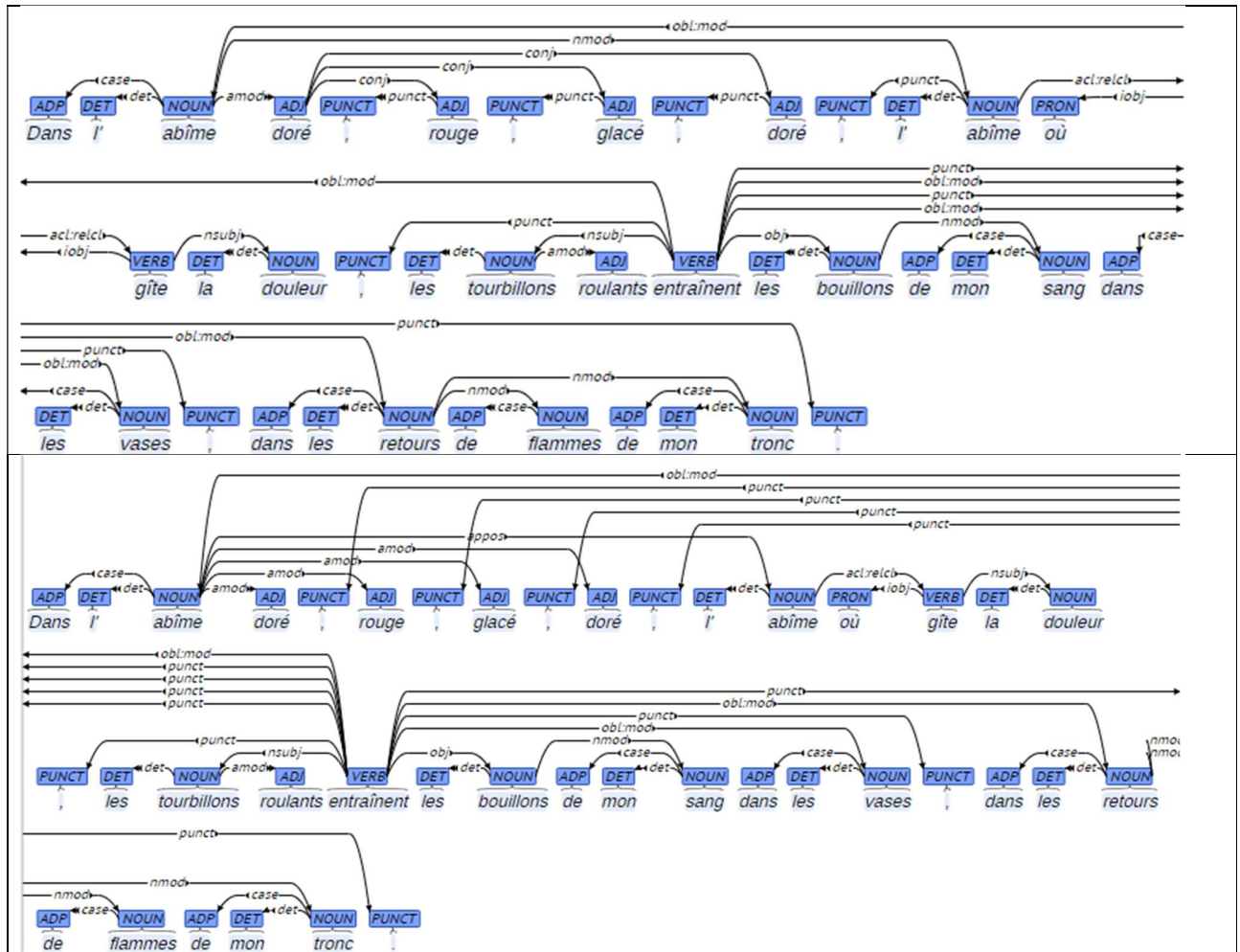
**Tree 1 (Top):** This tree represents the main clause structure. The root node is **S** (Sentence), which branches into **ADP** (Dans), **DET** (cette), **NOUN** (flaque), **ADP** (d'), **NOUN** (eau), **PRON** (où), **VERB** (tremble), **DET** (le), **NOUN** (péril), **PUNCT** (,), **PRON** (où), **DET** (le), **NOUN** (temps), **PRON** (s'), and **VERB** (accumule). The **VERB** (accumule) node further branches into **ADP** (au), **NOUN** (goutte), **ADP** (à), **NOUN** (goutte), **PUNCT** (;), **VERB** (défiant), **DET** (les), **NOUN** (menaces), **ADP** (du), and **NOUN** (ciel).

**Tree 2 (Middle):** This tree represents the relative clause structure. The root node is **S** (Sentence), which branches into **ADP** (Dans), **DET** (cette), **NOUN** (flaque), **ADP** (d'), **NOUN** (eau), **PRON** (où), **VERB** (tremble), **DET** (le), **NOUN** (péril), **PUNCT** (,), **PRON** (où), **DET** (le), **NOUN** (temps), **PRON** (s'), and **VERB** (accumule). The **VERB** (accumule) node further branches into **ADP** (au), **NOUN** (goutte), **ADP** (à), **NOUN** (goutte), **PUNCT** (;), **VERB** (défiant), **DET** (les), **NOUN** (menaces), **ADP** (du), and **NOUN** (ciel).

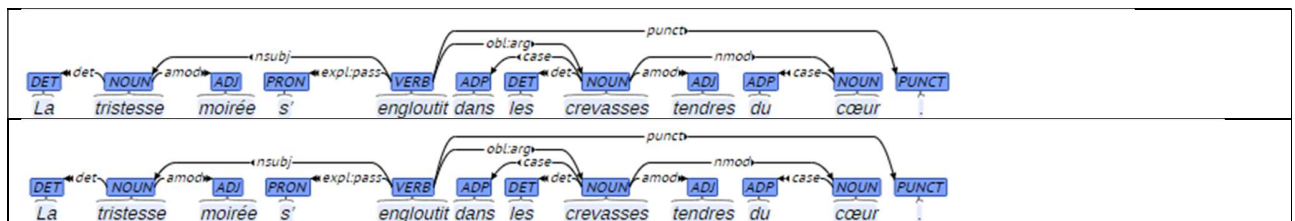
**Tree 3 (Bottom):** This tree represents the main clause structure. The root node is **S** (Sentence), which branches into **ADP** (Dans), **DET** (cette), **NOUN** (flaque), **ADP** (d'), **NOUN** (eau), **PRON** (où), **VERB** (tremble), **DET** (le), **NOUN** (péril), **PUNCT** (,), **PRON** (où), **DET** (le), **NOUN** (temps), **PRON** (s'), and **VERB** (accumule). The **VERB** (accumule) node further branches into **ADP** (au), **NOUN** (goutte), **ADP** (à), **NOUN** (goutte), **PUNCT** (;), **VERB** (défiant), **DET** (les), **NOUN** (menaces), **ADP** (du), and **NOUN** (ciel).

[illegible]

## TPB1

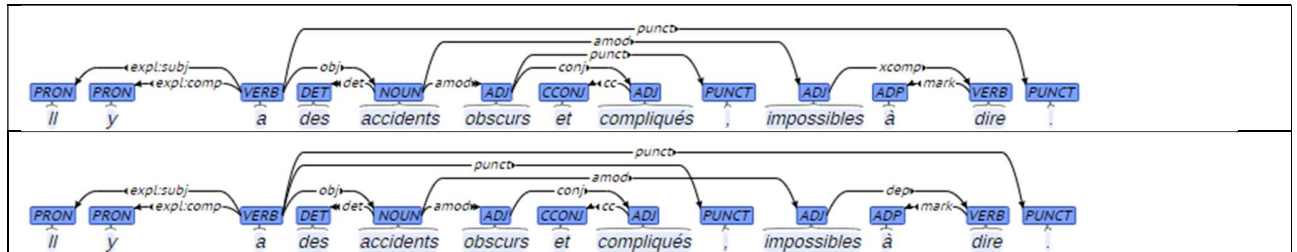


## TPB2

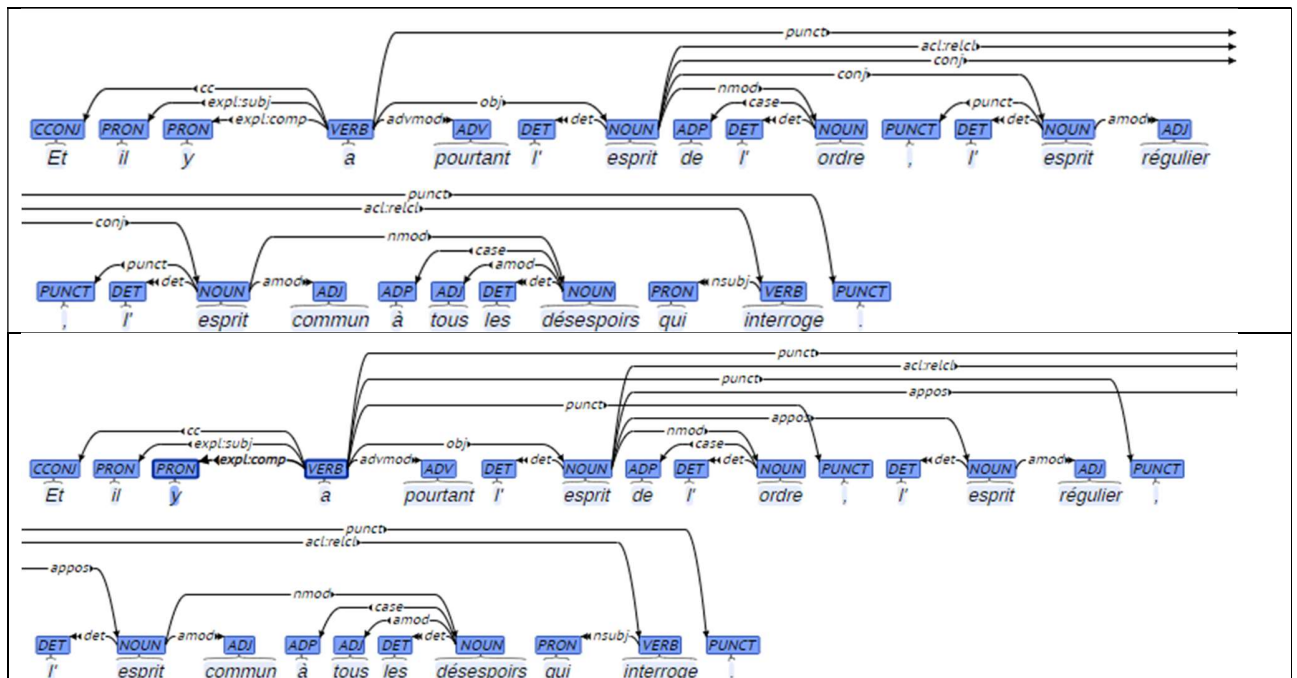


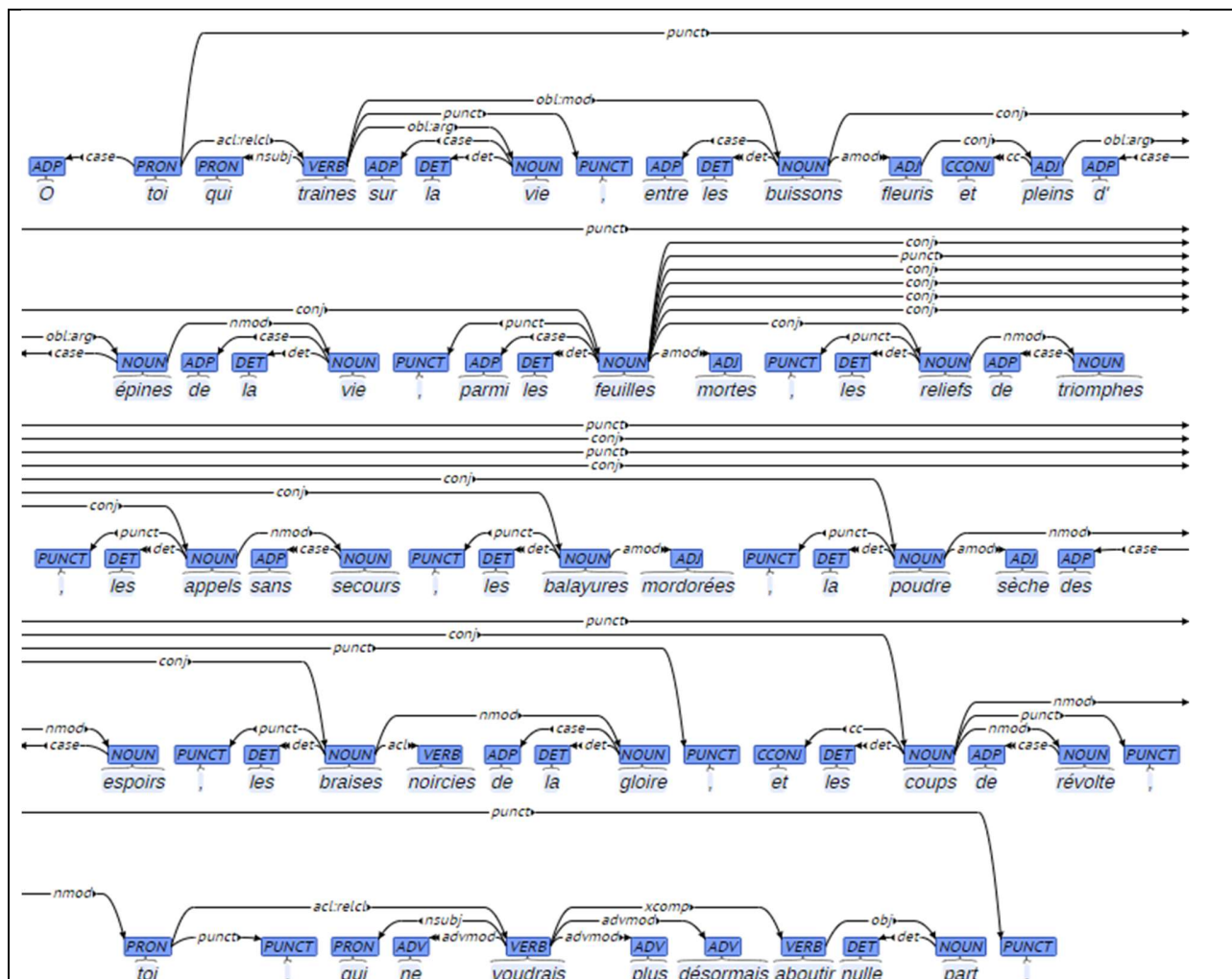


### TPB3



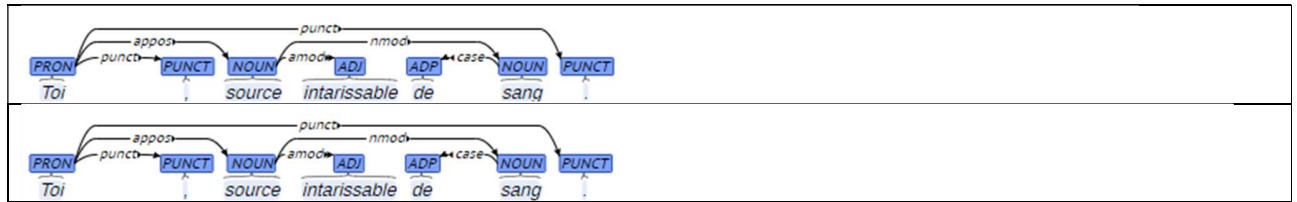
### TPB4



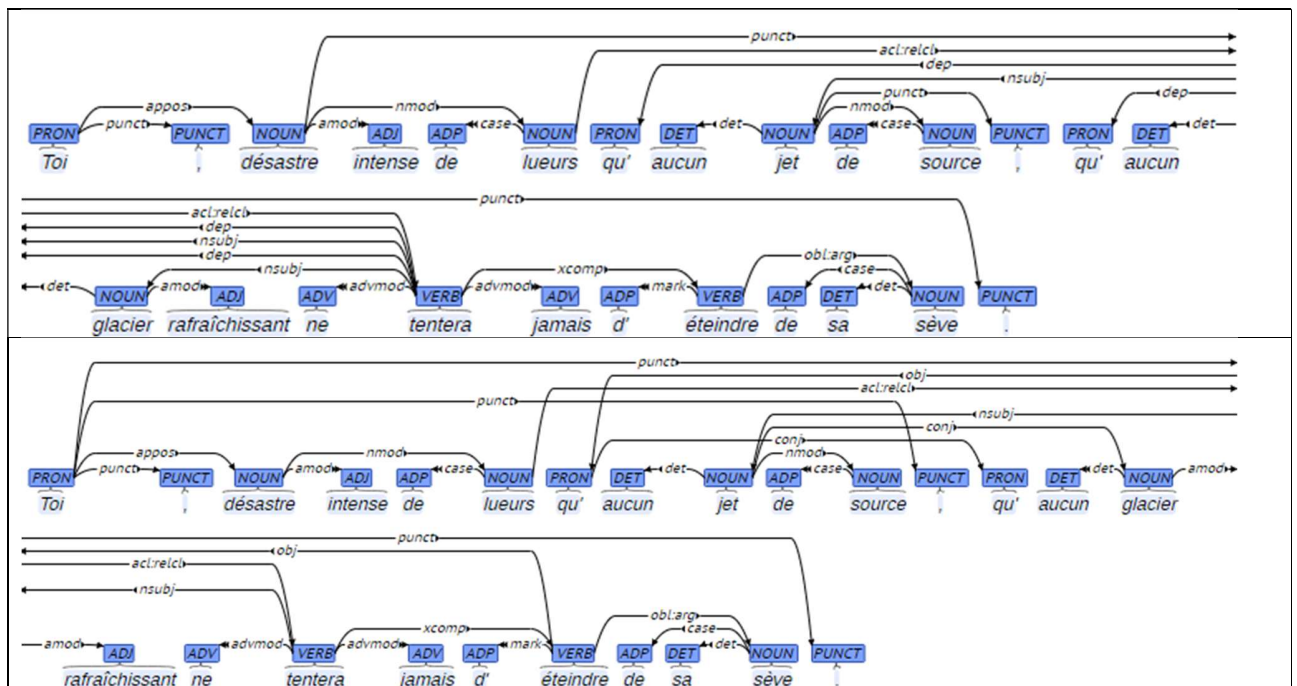




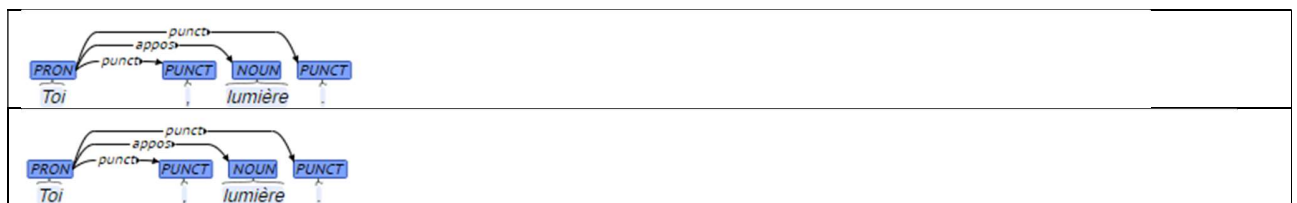
TPB6



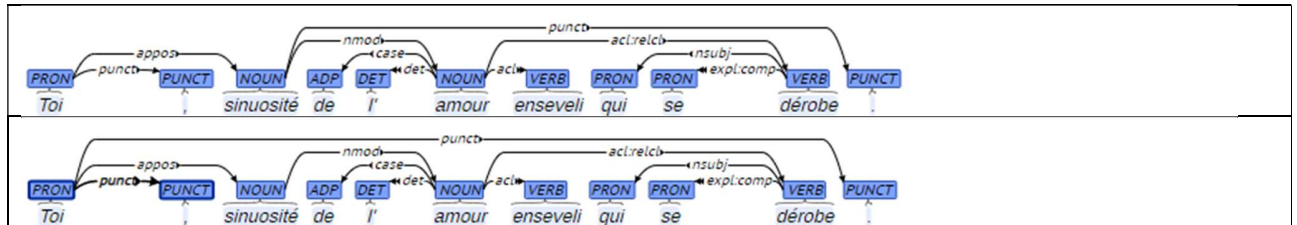
TPB7



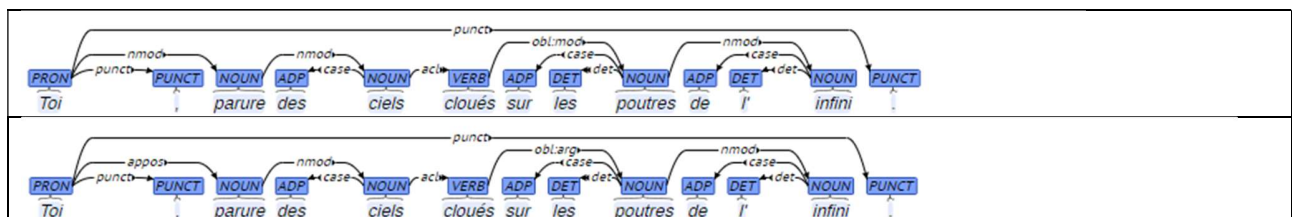
TPB8



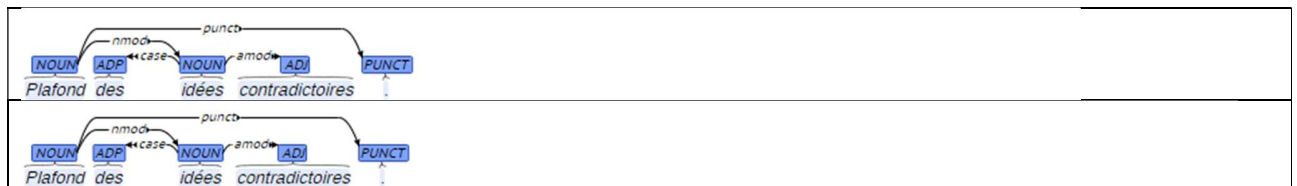
# TPB9



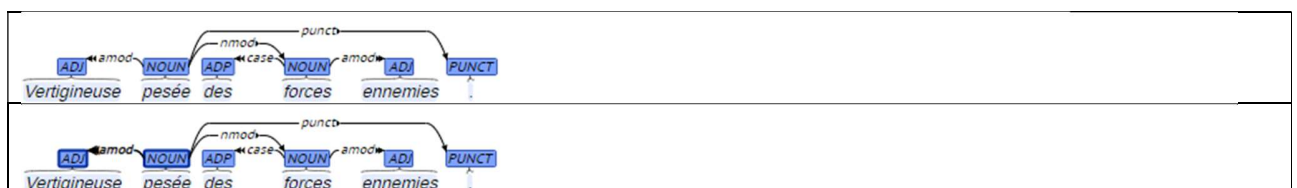
# TPB10



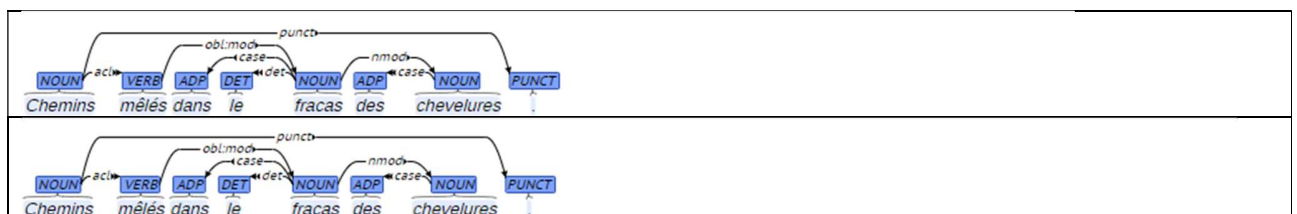
# TPB11



# TPB12

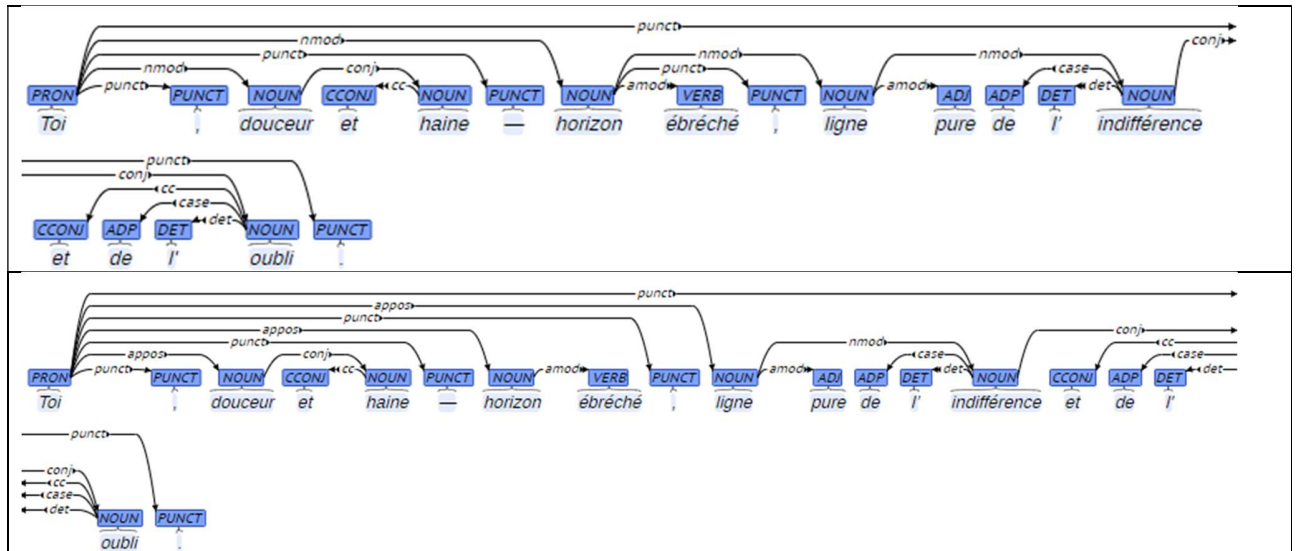


# TPB13

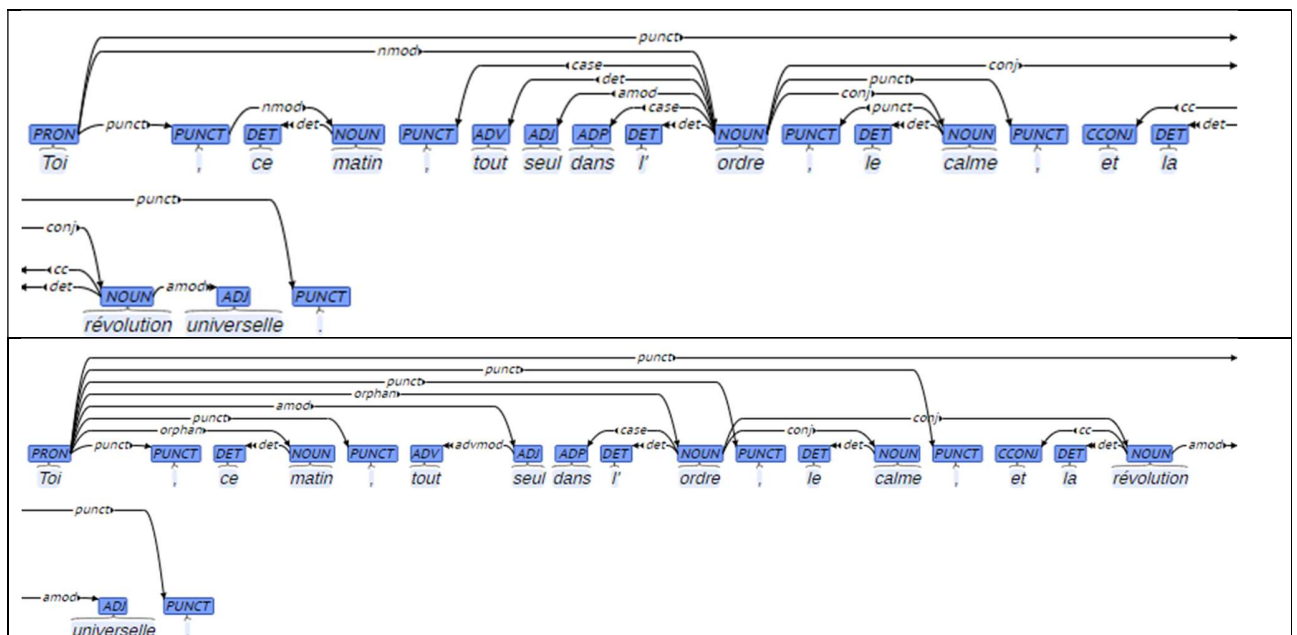




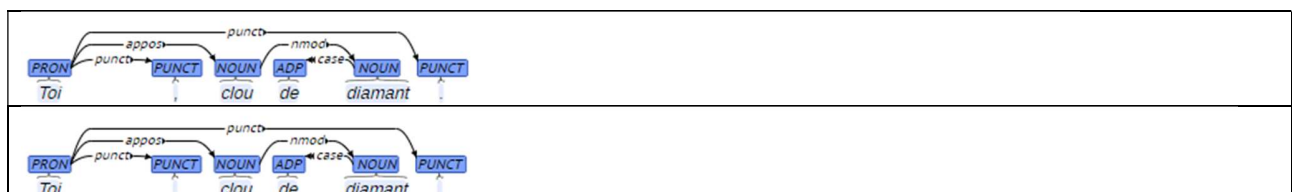
# TPB14



# TPB15



# TPB16



TPB17

