

Aspectual adverbs and stylistic inversion in temporals

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The subject of this paper is French stylistic inversion in temporal subordinates. In line with Cinque (1999), it is shown that, while non-inverted verbs surface in T°, inverted verbs in temporals occupy the head position of a functional projection lower than T°, with the aspectual adverbs *soudain*, *tout à coup*, *brusquement* and *peu à peu* in the specifier position. This is taken as evidence in favor of the claim that Kayne and Pollock's (2001) phrasal movement analysis of stylistic inversion cannot be extended to stylistic inversion in temporal subordinates.

1. Introduction

The subject of this paper is French verb-subject inversion or 'stylistic' inversion (SI) in temporal subordinates, a type of inversion that has not been studied very often (1).

- (1) a. Quand vint le tour d'Arnold, il prit un réel bonheur à (Fr)¹
when came the turn of Arnold, he took a real pleasure in
'When it was Arnold's turn, he really took pleasure in...'
b. Quand retombera la poussière du bombardement (LM)
when will fall down the dust of the bombardment
'When the dust of the bombardment will fall down...'
c. Pendant que se préparait la campagne des anges violets (Fr)
while REFL prepared the campaign of the angels purple
'While the campaign of the purple angels was being prepared...'

Stylistic inversion is normally analyzed as involving either phrasal or head movement of the verb to the left of the subject. However, I will show that the inverted verb in temporal subordinates, contrary to the non-inverted verb,

¹ The majority of the examples are (simplifications of) corpus examples. Literary examples from Frantext are indicated by *Fr* and journalistic examples from *Le Monde* (1998) and the internet (mostly yahoo) are marked by *LM* and *ya* respectively.

remains in a position immediately to the right of a class of aspectual adverbs containing *soudain*, *tout à coup*, *brusquement* ‘suddenly’ and *peu à peu* ‘little by little’. In accordance with Cinque (1999), I take this to indicate that the inverted verb in temporal subordinates is in the head position of the functional projection with these adverbs in its specifier. The fact that this position is a *head* position entails that an analysis of stylistic inversion like that of Kayne and Pollock (2001), which involves *phrasal* movement, cannot be applied to stylistic inversion in temporal subordinates.

In this paper, I first survey some current analyses of SI, involving either head or phrasal movement (2.1). Next, I briefly present the theory of Cinque (1999) and his hierarchy of French adverbial classes (2.2). In the third section, I demonstrate that the French aspectual adverbs *soudain*, *tout à coup*, *brusquement* ‘brusquely’ and *peu à peu* ‘little by little’² form an adverbial class and, consequently, can be used as a tool to derive the position of the verb (3). In the fourth section I show that non-inverted verbs are in a position to the left whereas inverted verbs in temporal subordinates are in a head position to the right of the aspectual adverbs STBP (4). Finally, I conclude that my observations constitute an argument against an analysis of stylistic inversion that is based on phrasal movement (5).

2. (Stylistic) inversion and the verbal movement

2.1. Head movement versus phrasal movement

In early analyses of (stylistic) inversion (e.g. Kayne 1972, Kayne and Pollock 1978), the inverted word order was derived by rightward movement of the subject to a position adjoined to VP. However, since Kayne (1994), it is generally accepted that rightward movement, rightward adjunction and rightward specifiers are not allowed. Consequently, the verb-subject word order in stylistic inversion must be analyzed as involving (at least) some kind of verbal movement to the left of the subject.

In recent literature, there are in general two types of analyses for subject inversion. In the first one (e.g. De Wind 1995, Deprez 1988, 1990, Valois and Dupuis 1992), the subject stays in its canonical position in vP (2a) or VP (2b) and the verb moves to one of the functional projections of the Split-Infl layer:

- (2) a. [... V_i + Infl° [... t_i ... [_{vP} DP [t_i (DP)]]]]
 b. [... V_i + Infl° [... t_i ... [_{VP} t_i DP]]]]

The second approach takes the information structure into account and the subject and the verb are both said to surface in the left periphery. A recent example of such an analysis is that of Kayne and Pollock (2001). According to Kayne and Pollock, in French SI, the DP subject starts out as the specifier of a silent subject clitic that heads a larger DP (3a). Then, the DP subject moves out

² In what follows, I use *STBP* to refer to these four adverbs.

of its canonical SpecIP position to the specifier of a higher functional projection FP, leaving a silent subject clitic as in (3b). Finally, the whole IP is moved leftward past the subject (remnant movement) to the specifier position of another functional projection GP (3c):

- (3) a. [_{IP} DP_{subject} SCL [_{I'} verb]]
 → movement of the DP subject to SpecFP
 b. [_{FP} DP_{subject} [_{IP} SCL t_{subj} [_{I'} verb]]]
 → remnant IP movement to SpecGP
 c. [_{GP} [_{IP} SCL t_{subj} [_{I'} verb]]] [_{FP} DP_{subject} [_{IP} t_{IP}]]]

Although the analyses differ, they have one thing in common: they all focus on SI in interrogatives as (4).

- (4) Quand partira ce garçon? (Kayne 1972)
 when will leave this boy
 'When will this boy leave?'

and (explicitly or implicitly) assume that the same analysis can be extended to inversion in other types of syntactic environments.

Since the two analyses X and XP movement are incompatible in one and the same syntactic environment, I will try to determine which one accounts best for inversion in temporal subordinates. More precisely, I will try to determine (a) whether verbal movement in stylistic inversion in temporal subordinates is head movement or phrasal movement, and (b) to which position the verb exactly moves. In order to do so, I will, along the lines of Cinque (1999), use the position of the inverted verb with respect to adverbs as a tool for deriving the verbal position.

2.2. Cinque (1999) and adverbs as tools to derive the position of verbs

Since Emonds (1978), and especially since Cinque (1999), adverbs have been used as a tool to derive the target positions of verbal movement. On the basis of the relative position of adverbial classes with respect to each other, Cinque (1999:106) establishes the following universal hierarchy of adverbial classes.³

- (5) ... [*once* T(Past)] [*then* T(Future)] [*perhaps* Mood_{irrealis}] [*necessarily* Mod_{necessity}] [*possibly* Mod_{possibility}] [*usually* Asp_{habitual}] [*again* Asp_{repetitive(I)}] [*often* Asp_{frequentative(I)}] [*intentionally* Mod_{volitional}] [*quickly* Asp_{celerative(I)}] [*already* T(Anterior)] [*no longer* Asp_{terminative}] [*still* Asp_{continuative}] [*always* Asp_{perfect(?)}] [...]

³ Here, as well as in the following sections, I concentrate on 'lower' adverbs, since only these adverbs are relevant to my purpose.

Each adverbial class is argued to be in the specifier position of a functional projection through the head of which the verb passes on its way to T°. As such, the precise position of these adverbial classes can be used as a tool for deriving the precise position of the verb.

For French in particular, Cinque establishes the following relative ordering of adverbs:

- (6) *généralement* ‘generally’ > *(ne) pas* ‘not’ > *déjà* ‘already’ > *(ne) plus* ‘no longer’ / *encore* ‘still’ > *jamais* ‘never’ / *toujours* ‘always’ > *complètement* ‘completely’ / *partially* ‘partiellement’ > *tout* ‘everything’ / *rien* ‘nothing’

In the following section, I demonstrate that the French adverbs *soudain*, *tout à coup*, *brusquement* ‘suddenly’ and *peu à peu* ‘little by little’ also form an adverbial class (3.) and have a fixed position in the hierarchy (6).

3. ‘Soudain’, ‘tout à coup’, ‘brusquement’ and ‘peu à peu’: one aspectual class

The four aspectual French adverbs *soudain*, *tout à coup*, *brusquement* ‘suddenly’ and *peu à peu* ‘little by little’ do not occur in the hierarchy established by Cinque (1999), but it can be shown that they form an adverbial class. Three observations confirm this claim: they cannot co-occur (3.1.), they share a semantic feature (3.2.) and they have a fixed position with respect to other adverbs (3.3.).

3.1. These adverbs do not co-occur in the clause

In the literature, it is generally admitted (Cinque 1999, Steinitz 1969, Jackendoff 1972, Quirk et al. 1985) that two adverbs of one class cannot co-occur in a clause. The following examples show that this is true as well for the aspectual adverbs *soudain*, *tout à coup*, *brusquement* and *peu à peu*.⁴

- (7) a. **Tout à coup*, les gens arrivent **peu à peu**_{adv}
suddenly the people arrive little by little
‘Suddenly the people arrive little by little’
- b. * Jean surgit **tout à coup**_{adv} **soudain**_{adv}
John appears suddenly suddenly
‘John appears all of a sudden suddenly’
- c. * Les enfants sont **soudain**_{adv} **peu à peu**_{adv} apparus
the children have suddenly little by little appeared
‘The kids have all of a sudden little by little appeared’

⁴ For reasons of brevity, I will not always mention examples of all the adverbs, but the reader will easily verify that the four adverbs display exactly the same behavior.

Note that these adverbs can also be used as adverbs of manner⁵ and, as such, are compatible with an aspectual adverb.

- (8) Soudain, il l' a brusquement embrassée.
 suddenly he her has brusquely/in a brusque way embraced
 'Suddenly, he embraced her brusquely'

3.2. These adverbs indicate the boundedness of the verb

Since there is a semantic relation between each adverbial class and the head of the functional projection it is attached to (Cinque 1999), all adverbs belonging to the same adverbial class should share (at least) one specific semantic feature. In fact, the question is as follows: if these adverbs form one class, and if, as Cinque (1999) argues, they occupy the specifier position of the same functional projection, what kind of projection is this? First, it is clear that this projection is not a temporal one, given that the adverbs can combine with verbs in future (9a), past (9b) and present tenses (9c).

- (9) a. Les clients arriveront peu à peu / soudain, tout à coup
 the clients will arrive little by little / suddenly
 'The clients will arrive little by little / suddenly'
 b. Les clients arrivaient_{passésimple}/arrivèrent_{imparfait} peu à peu / soudain
 the clients arrived little by little / suddenly
 'The clients arrived little by little / suddenly'
 c. Les clients arrivent peu à peu / soudain, tout à coup
 les clients arrive peu à peu / soudain, tout à coup
 'The clients arrive little by little / suddenly'

Moreover, since the four adverbs co-occur with both perfective and imperfective verbs (9b)⁶, the relevant feature has nothing to do with grammatical aspect, but with lexical aspect⁷. In particular, as the following examples show, *soudain*, *tout à coup*, *brusquement* and *peu à peu* are compatible only with predicates expressing an achievement (10c) or an

⁵ This is made clear by the fact that these adverbs, when used as adverbs of manner, can be modified by an adverb of degree: *si soudain* 'so suddenly', *très brusquement* 'very brusquely'.

⁶ The 'grammatical' aspect (Dahl 1985, Cinque 1999), or 'viewpoint' aspect (Smith 1991) is the aspect that is marked on the verb by specific morphemes. In French, the two past tenses *passé simple* and *imparfait* are realized by different morphemes on the verb and mark the perfective and imperfective grammatical aspect, respectively.

⁷ The 'lexical' aspect is also called 'situation' aspect (Alexiadou 1997) or 'Aktionsart'. Remark that Cinque (1999) only takes into consideration adverbs that denote grammatical aspect, and this is perhaps the reason why he does not take into account *soudain*, *tout à coup*, *peu à peu* and *brusquement*.

accomplishment (10d), but not with predicates expressing a state (10a) or an activity (10b)⁸.

- (10) a. ??? Mon oncle connaît soudain / peu à peu Pierre
 my uncle knows suddenly / little by little Peter
 'My uncle suddenly / little by little knows Peter'
 b. ??? Jean dort soudain / tout à coup / peu à peu⁹
 John sleeps suddenly / suddenly / little by little
 'John suddenly / little by little sleeps'
 c. Les enfants arrivent soudain / peu à peu
 the children arrive suddenly / little by little
 'The children suddenly arrive / little by little'
 d. Jean mange peu à peu les bonbons
 John eats little by little the chocolates
 'John eats the chocolates little by little'

Since achievements and accomplishments are [+bounded] and states and activities are [-bounded], the four aspectual adverbs STBP can be said to be in the specifier position of a functional projection expressing the boundedness of the verb.

- (11) [_{AspboundedP} *soudain, tout à coup, brusquement, peu à peu* [_{Aspbounded} °]]

3.3. The position of these adverbs with respect to other adverbs

The adverbs *soudain*, *tout à coup* and *peu à peu* occupy a position between the negative adverbs *pas* 'not' and *plus* 'no longer': the ungrammaticality of the prime sentences in (12) shows that these three adverbs are positioned after *pas* and cannot occur in front of *pas*.

- (12) a. Je ne me suis **pas tout à coup** senti plus libre (Ya)
 I NEG REFL have not suddenly felt more free
 'I did not suddenly feel more free'
 a'. * je ne me suis **tout à coup pas** senti plus libre
 b. ceux qui irritent le Seigneur ne sont **pas soudain** recherchés (Ya)
 those who irritate the Lord NEG are not suddenly searched-for
 'Those who irritate the Lord are not suddenly sought for'
 b'. * ceux qui irritent le Seigneur ne sont **soudain pas** echerchés
 c. le légal ne devienne **pas peu à peu** le critère...(Ya)
 the legal NEG becomes not little by little the criterion... 'The legal does not **little by little** become the **criterion** of the moral'

⁸ I use the 'traditional' classification of lexical aspect by Vendler (1967).

⁹ Note that this example is correct iff the event denoted by the verb gets the inchoative meaning 'fall asleep'. However, in this case, the verb does no longer denote an activity.

c'. * le légal ne devienne **peu à peu pas** le critère

The contrasts in (13) show that these adverbs are positioned in front of *plus*, and cannot occur behind *plus*.

- (13) a. comme s'il ne comprenait **soudain plus** ce qui se passe
 like if he NEG understood suddenly no longer what happens (ya)
 'like if, suddenly, he did no longer understand what was happening'
 a'. * comme s'il ne comprenait **plus soudain** ce qui se passe
 b. Les hirondelles ne sont **peu à peu plus** venues (ya)
 the swallows NEG have little by little no longer come
 'Little by little, the swallows ceased to come'
 b'. * les hirondelles ne sont **plus peu à peu** venues
 c. je ne pouvais **tout à coup plus** parler avec personne (Ya)
 I NEG could suddenly no longer to-talk with anyone
 'I could suddenly no longer talk with anyone'
 c'. * je ne pouvais **plus tout à coup** parler avec personne

Moreover, these adverbs occur behind *déjà* ('already') as the contrasts (14) indicate.

- (14) a. il a **déjà soudain** abandonné ses études, et...
 he has already suddenly abandoned his studies, and...
 'He has already all of a sudden abandoned his studies, and...'
 a'. ?* il a **soudain déjà** abandonné ses études
 b. il a **déjà tout à coup** abandonné ses études, et...
 he has already suddenly abandoned his studies, and...
 'He has already all of a sudden abandoned his studies, and...'
 b'. ?* il a **tout à coup déjà** abandonné ses études
 c. elle s'était **déjà peu à peu** accoutumée à (ya)
 she REFL had already little by little accustomed to
 'she had already little by little become accustomed to...'
 c'. ?* elle s'était **peu à peu déjà** accoutumée à

So, the examples (12-14) suggest that the precise position of *soudain*, *tout à coup*, *brusquement* and *peu à peu* in the hierarchy of Cinque (6) is the following:

(15) *pas* < *déjà* < *soudain/tout à coup/peu à peu* < *plus*

In accordance with Cinque (1999), the position of this class of aspectual adverbs indicates the existence of an aspectual functional projection between *déjà* and *plus*. In the following section, I use this conclusion to derive the precise position of the inverted verb in temporal subordinates.

4. *Soudain, tout à coup, brusquement, peu à peu and verbal positions*

In this section, I first determine the position of the non-inverted verbs with respect to the four adverbs that are at stake, and, secondly, I show that the position of the inverted verb is not the same as that of the non-inverted verb.

4.1. *The position of non-inverted verbs with respect to these adverbs*

4.1.1. *The non-inverted main verb*

The adverbs *soudain*, *tout à coup*, *peu à peu* and *brusquement* do not occur in front of the main verb¹⁰, and have to appear between the main verb and its complements (16):

- (16) a. *? Jean **tout à coup**_{adv} **répond**_v à la question.
 John suddenly answers to the question
 'John suddenly answers the question'
 a'. Jean **répond**_v **tout à coup**_{adv} à la question.
 b. *? L'enfant **soudain**_{adv} **surgit**_v chez nous.
 the child suddenly emerges with us
 'The child suddenly emerges at our place'.
 b'. L'enfant **surgit**_v **soudain**_{adv} chez nous.
 c. *? Les gens **peu à peu**_{adv} **se rendent**_v **compte** des horreurs...
 the people little by little become aware of the atrocities...
 'The people become little by little aware of the atrocities'
 c'. Les gens **se rendent**_v **peu à peu**_{adv} **compte** des horreurs...

This suggests that the main verb has moved leftwards past these adverbs.

4.1.2. *The non-inverted auxiliary*

Since, in French, auxiliaries are taken to be in the same position as main verbs, they should also appear to the left of the aspectual adverbs STBP. The examples (17) show that this is the case: like the non-inverted main verb, the inverted auxiliary occurs to the left of these adverbs, and the past participle precedes these adverbs.

- (17) a. le CAC 40 **a**_{aux} **peu à peu**_{adv} **réduit**_{part} ses gains (Ya)
 the CAC 40 has little by little reduced its gains
 'The CAC 40 has little by little reduced its gains'
 a'. *? le CAC 40 **peu à peu**_{adv} **a**_{aux} **réduit**_{part} ses gains

¹⁰ Remark, however, that these adverbs can occur in front of the main verb if they are dislocated, i.e. if they have a "parenthetical use".

- b. l'arrière **m'a_{aux}** **soudain_{adv}** **échappé_{part}** (Ya)
 the back me has suddenly escaped
 'I suddenly lost the back'
- b'. *? l'arrière **soudain_{adv}** **m'a_{aux}** **échappé_{part}**
- c. le climat **s'est_{aux}** **tout à coup_{adv}** **assombri_{part}** (Ya)
 the climate REFL has suddenly darkened
 'The climate suddenly became worse'
- c'. ?*le climat **tout à coup_{adv}** **s'est_{aux}** **assombri_{part}**

4.1.3. Conclusion

The examples (16) and (17) show that both the non-inverted auxiliary and the main verb surface in a position to the left of the adverbs *soudain*, *tout à coup*, *brusquement* and *peu à peu* (and, in line with Cinque 1999, pass through the head position immediately to the right of these adverbs) and surface in a higher position (T°, as it is generally assumed that inflected verbs in French move to T°, cf. Pollock 1989).

- (18) [_{TP} DP_{subject} [_{T°} non-inverted V_{finite/aux} [_{AspP} *peu à peu/tout à coup/soudain* [_{Asp°} t_{verb} [V_{participle} [...]]]]]]]

4.2. The position of the inverted verb in temporal subordinates with respect to these adverbs

In the preceding section, it has become clear that non-inverted inflected verbs surface in a position higher than STBP. I will now check whether inverted main verbs (4.2.1.) and inverted auxiliaries (4.2.2.) also occur in the same position.

4.2.1. The inverted main verb

The clearest evidence for the position of the inverted verb probably is the fact that the inverted verb cannot be combined with the negative adverb *ne...pas* ('not') (19), but can be combined with *ne...plus* ('no longer') (20).

- (19) a. * Quand n' arrivaient pas les linguistes...
 when NEG arrive not the linguists
 'When the linguists did not arrive'
- b. * Quand ne s'arrangeront pas les choses...
 when NEG REFL arrangeFUT not the things
 'When the things will not be arranged'

- (20) a. le rassemblement se défait quand n'existent plus
 the connection REFL loosens when NEG exist no longer
 la coalition politique et la conjoncture
 the coalition political and the conjuncture
 'The collective loosens when the political coalition and the conjuncture
 no longer exist'
- b. Quand ne retentirent plus les cliquetis de vaisselle
 when NEG resounded no longer the clashing of the crockery,
 un silence se fit.
 a silence REFL made
 'When the clashing of the crockery no longer resounded, a silence fell'.

This suggests that the inverted verb moves leftward past *plus* 'no longer', but not past *pas* 'not'. This conclusion also correctly predicts that the inverted verb must move leftward past the temporal adverb *encore* 'still', which, following Cinque, occupies a position immediately to the right of the negative adverb *plus* 'no longer'.

- (21) a. Quand lui parvenait encore l'écho de son cri (Fr)
 when to-him reached still the echo of her cry
 'when the echo of her cry still reached him'
- b. Quand (*encore) lui parvenait l'écho de son cri

Moreover, with respect to *déjà* 'already', which immediately precedes the adverbs STBP, (22a) shows that the inverted verb stays behind it, unlike the non-inverted verb (22b).

- (22) a. quand déjà s'apprête l'éclosion de l'art roman (Fr)
 when already REFLprepares the expansion of Romanesque art
 'When the expansion of Romanesque art is already being prepared'
- b. quand la future éclosion (??*déjà*) s'apprête

The intermediate conclusion is that the inverted main verb moves leftward past the temporal adverb *encore* 'still' and the negative adverb *plus* 'no longer' but does not move past the temporal adverb *déjà* 'already' and the negative adverb *pas* 'not'.

- (23) *pas* 'not' > *déjà* 'already' > V_{finite/inverted} > *plus* 'no longer' > *encore* 'still'

Remember from (15) that the adverbs *soudain*, *peu à peu*, *brusquement* and *tout à coup* are in a position between *déjà* 'already' and *plus* 'no longer', just like the inverted finite verb is. If the inverted verb were in the head position of the functional projection marked by these adverbs, it should stay in a position immediately to the right of these adverbs. And indeed, several attested examples prove this.

- (24) a. lorsque tout à coup_{adv} surgit_v l'image
 when suddenly emerges the image...(Fr)
 'When suddenly the image emerges...'
- b. Lorsque soudain_{adv} survient_v le drame, (Fr)
 when suddenly comes the drama
 'When suddenly the drama arrives...'
- c. quand peu à peu_{adv} vinrent_v s'en ajouter d'autres (Fr)
 when little by little come REFL EN to add others
 'When, little by little, others come and join'

The examples in (24), in which the inverted verb stays in a position immediately to the right of the adverbs *tout à coup*, *soudain* and *peu à peu* sharply contrast with the examples (16) and (17) where the non-inverted finite verb and the non-inverted auxiliary are to the left of these adverbs.

On the basis of these data, I conclude that the inverted verb is in a position lower than that of the non-inverted verb (T°), and, more precisely, in the head position of the functional projection with the adverbs *soudain*, *tout à coup*, *peu à peu* and *brusquement* in the specifier position.

- (25) [T° non-inverted V_{finite}] > *pas* 'not' > *déjà* 'already' > [SpecAspP *soudain/tout à coup/peu à peu/ brusquement* [Asp° inverted V_{main}]] > *plus* 'no longer' > *encore* 'still'

4.2.2. The auxiliary in inversion

Given that auxiliaries and main verbs occur in the same position in French, and given that the inverted main verb in temporal subordinates stays in a position to the right of the adverbs I am considering (25), the inverted auxiliary should also be in the same position.

This turns out to be true, since in the following paradigm, the (a)-examples, with the inverted auxiliary to the right of the adverb, are perceived by natives to be much better than their ungrammatical counterparts (b) with the inverted auxiliary to the left of the adverb:

- (26) a. Quand soudain_{adv} a_{aux} éclaté la bombe
 when suddenly has exploded the bomb
 b.* Quand a_{aux} soudain_{adv} éclaté la bombe
 when has suddenly exploded the bomb
 c. Quand la bombe a_{aux} soudain_{adv} éclaté
 when the bomb has suddenly exploded
 'When the bomb has suddenly exploded'
- (27) a. Quand tout à coup_{adv} a_{aux} éclaté la bombe
 when suddenly has exploded the bomb

- b. * Quand a_{aux} tout à coup_{adv} éclaté la bombe
 when has suddenly exploded the bomb
- c. Quand la bombe a_{aux} tout à coup_{adv} éclaté
 when the bomb has suddenly exploded
 ‘When the bomb has suddenly exploded’
- (28) a. Quand peu à peu_{adv} sont_{aux} arrivés les clients
 when little by little have arrived the clients
- b. * Quand sont_{aux} peu à peu_{adv} arrivés les clients
 when have little by little arrived the clients
- c. Quand les clients sont_{aux} peu à peu_{adv} arrivés
 when the clients have little by little arrived
 ‘When the clients have little by little arrived’

The sharp contrast between the (a) examples and the (b) examples proves that the inverted auxiliary does not move to a position to the left of the adverbs *soudain*, *tout à coup*, *brusquement* and *peu à peu*, while the non-inverted auxiliary does, as the grammatical (c) examples show. In other words, while the non-inverted auxiliary moves to T°, the non-inverted auxiliary stays in a lower functional projection.

4.3. Conclusion

The evidence provided in this section leads to the conclusion that the position of inverted verbs in temporal subordinates is not the same as the position of non-inverted verbs. More precisely, the data concerning the relative position of the verbs and the aspectual adverbs *soudain*, *tout à coup* and *peu à peu* show that in inversion in temporal subordinates neither the auxiliary nor the finite verb raises to T°. On the contrary, both the auxiliary and the finite verb have been shown to stay in the head position of a functional projection with the aspectual adverbs *soudain*, *tout à coup*, *brusquement* and *peu à peu* in its specifier position.

- (29) [_{T°} non-inverted V_{finite}] > *pas* ‘not’ > *déjà* ‘already’ > [_{SpecAspP} *soudain/tout à coup/peu à peu/brusquement* [_{Asp°} inverted V_{finite}]] > *plus* ‘no longer’ > *encore* ‘still’

The fact that the position of the inverted verb is a *head* position also implies that the verb has undergone *head* movement to the left of the subject, rather than phrasal movement. As a consequence, an analysis of stylistic inversion like that of Kayne and Pollock (2001) cannot be applied to inversion in temporal subordinates.

5. General conclusion

In this article, I have shown that the French aspectual adverbs *soudain*, *tout à coup*, *brusquement* ‘suddenly’ and *peu à peu* ‘little by little’ form one adverbial class, given that they do not co-occur in the clause, they indicate the boundedness of the verb and have the same relative position with respect to other adverbial classes. Since, in accordance with Cinque (1999), adverbial classes can be used as a tool to derive the movement of the verb, I have used this class of bounded adverbs as a tool to derive the position of the inverted verb in temporal subordinates. I have demonstrated that, while non-inverted verbs occur to the left of these adverbs, inverted verbs in temporal subordinates occur to their right. More precisely, the inverted verb in temporal subordinates has been shown to immediately follow this adverbial class and, moreover, to immediately precede the adverbial classes that follow *soudain*, *tout à coup*, *brusquement* and *peu à peu*. This has led me to the conclusion that the inverted verb in temporals stays in the head position immediately to the right of the specifier position in which these adverbs surface. This observation entails that, of the two analyses for SI in French, only one can be applied to inversion in temporal subordinates, namely the account in which the inverted word order is explained in terms of head movement.

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