

Central vs Peripheral Adverbial Clauses in Romance Languages

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Abstract: *The present paper aims to provide empirical evidence from four different languages that the contrast between central and peripheral adverbial clauses confirmed in other languages (see Haegeman 2003, 2006, among others) can be extended cross-linguistically. The central question I am concerned with is whether Romanian, Italian, French, and Spanish, i.e., four languages that are genealogically related, exhibit similar or different typological features regarding the syntax of complex sentences. In the end, the results of the analysis lead to the conclusion that these four Romance languages share many features as far as the syntax of adverbial clauses is concerned, and certain peripheral adverbial clauses can be interpreted as “switch contexts” (Heine & Kuteva 2002: 85) for the temporal connector ‘while’ (from central adverbial clauses), involved in the grammaticalization process.*

Keywords: *Romance languages; adverbial clauses; internal and external syntax; grammaticalization*

1. Introduction

The starting point of this paper is Haegeman’s distinction between central adverbial clauses (CeAdCls) and peripheral adverbial clauses (PeAdCls), and the idea that “while many conjunctions seem to be specialized to introduce either central adverbial clauses (*before, after*) or peripheral adverbial clauses (*whereas, although*), other subordinating conjunctions, in fact, may serve to introduce both types of clauses” (Endo and Haegeman 2019: 1). The investigated Romance languages have many sentence connectors functioning in this way, but, for the present paper only the connectors corresponding to the English ‘while’ were selected. Based on Haegeman’s extensive work on this subject (2003, 2006a, 2006b, 2010, 2012), and using a corpus of print press media communication (the ROAMED corpus), I will first present the data, giving a significant number of examples from all four languages, especially from Romanian which has been usually left aside from many comparative studies. Then, I will provide a sketch of the most important diagnostics used by the researchers to distinguish between central and peripheral adverbial clauses (such as the ‘coordination’ test or the ‘argument fronting’ – Haegeman 2012), and, hence, to support an asymmetry between the two types of adverbial clauses. Methodologically, the paper combines corpus analysis with comparative analysis, qualitative and quantitative observations, and the grammaticalization theory (Kuteva *et al.* 2019) “which offers a useful framework for an understanding of the development of syntactic structures” (Hoffmann 2005: 2).

2. Complex sentences with adverbial clauses

Basically, complex sentences (CSs) are made of a main/matrix clause and one or more subordinate clauses that might function as complements or adverbials. The investigation from this article is focused on the adverbial clauses introduced by the conjunction ‘while’ (Rom. ‘în timp ce’/‘în vreme ce’/‘pe când’, Fr. ‘tandis que’/‘lorsque’/‘alors que’, It. ‘mentre’, Sp. ‘mientras’) and the hypothesis is that external syntax of these clauses is strongly influenced by their internal syntax, but also by the complex grammaticalization process of the sentence connector. The situation seems to be quite simple for Italian and Spanish, as they have only one

subordinator corresponding to the Eng. ‘while’, with a similar form: It. ‘mentre’, Sp. ‘mientras’, while Romanian and French are more complicated. I identified at least three complex subordinators for both languages in the corpus: Rom. ‘în timp ce’/‘în vreme ce’/‘pe când’, and Fr. ‘tandis que’/‘lorsque’/‘alors que’. Despite this fact, as we shall see in Fig.1, Italian is very productive, having a considerable number of CSs using the connector ‘mentre’.

In order to compare the structures, as well as other aspects involved in the central-peripheral distinction, I conducted an empirical study in a parallel text corpus and I extracted, by hand, all the ‘while’ adverbial clauses. At the end of the investigation, 323 contexts were selected, having the following distribution:

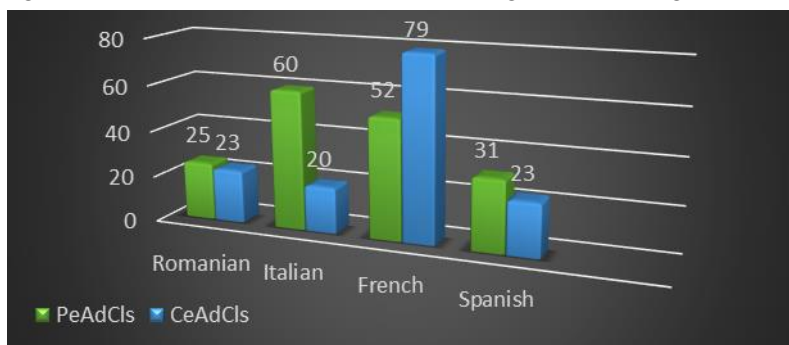


Fig 1: The distribution of PeAdCl and CeAdCl in the ROAMED corpus

According to Fig. 1, French has the highest number of ‘while’ complex sentences: 52 PeAdCl and 79 CeAdCl. In the second place, there is Italian, with 60 PeAdCl and only 20 CeAdCl, while Romanian and Spanish share a similar number of sentences: 23 CeAdCl, respectively, 25 and 31 PeAdCl.

- (1) Fr. - *Virée en raison d'un ricanement **alors qu'elle assistait à l'éviction conjugale de son patron**, Juliette somme Mathias de l'embaucher.*
‘Fired because of a sneer while she attended the conjugal eviction of her boss, Juliette summons Mathias to hire her’
- (2) Fr. - ***Alors que plusieurs poids lourds du parti n'ont pas encore fait part de leurs intentions**, K.H. a pris les devants.*
‘While several party heavyweights have yet to announce their intentions, K.H. has taken the lead’
- (3) It. - *Il latte crema idratante concentrato di Embryolisse nutre la pelle **mentre esalta la sua naturale luminosità**.*
‘Embryolisse concentrated moisturizing milk cream nourishes the skin while enhancing its natural radiance’
- (4) It. - *E **mentre gli altri sono finiti su Maxim**, l'Ermini è un sopravvissuto.*
‘And while the others ended up on Maxim, Ermini is a survivor’
- (5) Ro. - ***În timp ce savurezi cafeaua de dimineață**, vino cu mine într-o călătorie.*
‘While enjoying your morning coffee, come with me on a journey that will enrich your senses’
- (6) Ro. - ***În timp ce medicamentele au efecte secundare**, iaurtul contribuie la tratarea multor afecțiuni, fără niciun risc.*
‘While medicines have side effects, yogurt helps to treat many ailments without any risk’
- (7) Sp. - *Ese día, la feria cerrará a las 22.30, **mientras músicos y pasacalles animarán el Paseo de Coches**.*
‘That day, the fair will close at 10:30 p.m., while musicians and parades will animate the Car Ride’
- (8) Sp. - *Madrid sigue siendo la comunidad líder en programación cultural, **mientras Cataluña experimenta un fuerte descenso**.*
‘Madrid continues to be the leading community in cultural programming, while Catalonia experiences a sharp decline’

As it results of the examples above, the sentence connectors have multiple uses. They can introduce “a temporal clause, modifying the temporal coordinates of the event expressed in the associated matrix clause, or

they can introduce a contextually salient proposition which contrasts with the associated proposition” (Endo and Haegeman 2019: 1). This is the clearest evidence that the distinction between central and adverbial clauses is also available in Romance languages, and, in what follows, I will support this idea by checking the diagnostics.

3. Central vs peripheral adverbial clauses

Based on their internal and external syntax, Haegeman (2004) distinguishes two types of adverbial clauses. CeAdClS like conditional, temporal, or causal clauses “modify the proposition expressed in the clause with which they are related” and thus “structure the event”, whereas peripheral adverbials like concessive and contrastive clauses “provide background propositions that are to be processed as the privileged discourse context for the proposition expressed in the associated clause” and thus “structure the discourse” (Haegeman 2004: 61). Furthermore, the distinction also relates to the level of syntactic integration, the former type being considered more integrated than the latter (Haegeman 2003; 2006; 2012). For instance, PeAdClS introduced by ‘while’ are not temporally subordinated to the matrix domain, as CeAdClS are.

This is one of the reasons why researchers have often interpreted these sentence connectors (such as the Eng. ‘while’) as elements of coordination rather than subordinators. They are similar to *and* or *but* in the CSs with PeAdClS and determine Hornstein to talk about “a secondary conjunctive interpretation” (Hornstein 1990: 206, note 19), corresponding to Haegeman’s “discourse-related interpretation” (2012: 161). Although for English Haegeman (2012: 167) proved that “it would not be correct to treat discourse-related adverbial clauses simply in terms of co-ordination” giving as arguments “the ellipsis of the subject” and “gapping” (which are possible only in CeAdClS), I noticed that these linguistic phenomena are not banned in some Romance PeAdClS. As a native speaker of Romanian, I can accept subject ellipsis and gapping both in coordinated and peripheral adverbial clauses. Let’s consider first the contrastive ‘while’ clauses discussed by Haegeman (2012: 168) for English. Ellipsis of the subject of the second co-ordinated clause is possible but in an adverbial clause introduced by contrastive ‘while’ the subject cannot be elliptic:

- (9) a *John does a Ph.D. in Oxford **but** did his first degree in Cambridge.*
 b **John does a Ph.D. in Oxford **while** did his first degree in Cambridge.*

Gapping is possible with coordinated clauses but not in constructions with a contrastive *while* clause:

- (10) a *John reads the Guardian **and** Mary the Times.*
 b **?John reads the Guardian **while** Mary the Times.*

Now, let’s see some similar examples for Romanian:

- (11) a *John face un doctorat în Oxford, **dar** și-a dat primul grad în Cambridge.*
 b *John face un doctorat în Oxford, **în timp ce/pe când** primul grad și l-a dat în Cambridge.*
 (12) a *John citește the Guardian **și** Mary, the Times.*
 b *John citește the Guardian, **în timp ce/pe când** Mary, the Times.*

As Romanian is a ‘pro-drop’ language, the ellipsis of the subject is easily accepted, while gapping is intonationally marked by a comma. We also notice the topicalization of the direct object in the contrastive PeAdCl which is not mandatory but recommended for the correct understanding of the sentence. The conclusion is that, at least for Romanian, the contrastive sentence connectors ‘în timp ce’/‘pe când’ are semantically and functionally close to the coordinating conjunctions ‘și’ (‘and’)/‘dar’/‘iar’ (‘but’), as if the two clauses of the CS were two independent predictions of the speaker (“two illocutionary speech acts” – Declerck & Reed 2001: 131). As concerns the Italian language, there are linguists who talk about two different conjunctions ‘mentre’: “It should not be confused the conjunction ‘mentre’ having an adversative value (13) with the temporal conjunction ‘mentre’ (14)” (Cârstea-Romașcanu 1980: 169).

- (13) It. - *Le preposizioni introducono i complementi, **mentre** le congiunzioni introducono le proposizioni.*
 ‘Prepositions introduce complements, while conjunctions introduce clauses’

- (14) It. - *Lui e arrivato **mentre** gli altri dormivano già.* (apud Cârstea-Romaşcanu 1980: 169)

‘He arrived while the others were already asleep’

Obviously, further investigation is necessary in order to conclude that these phenomena are possible in all Romance languages, and this is beyond the aim of this paper, but it is a very interesting theme for future research.

3.1. Diagnostics of peripheral vs central adverbial clauses

In order to highlight the differences between central and peripheral adverbial clauses, and, hence, to support the asymmetry between adverbial clauses, researchers provided a number of diagnostics. In what follows, I will select some of the most important diagnostics, and check their viability for the investigated Romance languages.

a. Argument fronting

The first diagnostic given by Haegeman (2003, 2010, and 2012) for the dichotomy of central and peripheral adverbial clauses is “argument fronting”: this phenomenon is said to be possible in matrix clauses or in peripheral adverbial clauses but prohibited in central adverbial clauses. But, if we take a closer look at the following examples, we shall see that, although it might be possible for English, Haegeman’s prediction is not available for Romance languages. We can have argument fronting in PeAdCls (15, 16) but we can also find CeAdCls (17, 18) accepting this syntactic and pragma-semantic phenomenon (called ‘Main Clause Phenomenon’ – Haegeman 2012: 213). So, it can be drawn the conclusion that fronting is not a proper or a clear diagnostic test for the discrepancy between the two types of Romance adverbial clauses.

- (15) Fr. - ***Alors que** L'on pouvait prévoir une convergence entre les deux tours de tous les libéraux, autrefois on aurait sans doute parlé de tous les modérés.*

‘While one could predict a convergence between the two rounds of all liberals, in the past we would no doubt have spoken of all moderates’

- (16) It. - *Una foto recente mostra che i fratelli maschi un po' i capelli li hanno accorciati, **mentre** la sorella bionda li ha oltre le spalle.*

‘A recent photo shows that the male brothers have shortened their hair a little, while the blonde sister has it over her shoulders’

- (17) Ro. - *Observăm cât de mult păr ne cade **în timp ce** îl spălăm.*

‘We notice how much hair we lose while washing it’

- (18) Fr. - *Une explication soutenue par l'auteure de la cartocrise **lorsque** nous L'avions interrogée.*

‘An explanation supported by the author of the cartocrisis when we interviewed her’

b. Event vs. discourse readings

A very important diagnostic for the Romance languages as far as the dichotomy is concerned is their semantic interpretation based on the relationship between the two events (the one expressed by the adverbial clause and the one expressed by the matrix). The investigation revealed that the main semantic function of CeAdCls is to structure the event from the matrix clause (event time: ‘during the time that’), while PeAdCls are semantically used to structure the discourse (background assumption: ‘whereas’). “Peripheral adverbial clauses express propositions which are processed as part of the discourse background about the proposition which is expressed in the associated main clause” (Alshammari 2008: 26). Consider the following examples:

- (19) Ro. - *În 1975, un britanic chiar a murit râzând **în timp ce** se uita la serialul *The Goodies.**

‘In 1975, a British man even died laughing while watching The Goodies’

- (20) Sp. - ***Mientras** este hecho puede tener muchos usos benignos, Rogers advierte que los dispositivos y las aplicaciones también pueden hacer que los padres se preocupen más por el desarrollo de sus hijos.*

‘While this fact can have many benign uses, Rogers warns that devices and apps can also make parents more concerned about their children's development’

In (19), the adverbial clause introduced by ‘în timp ce’ specifies the moment in which the British died, being a temporal specification of the event, whereas in the example under (20) the adverbial clause “provides a background-information proposition that will yield contextual implications when it is combined with the proposition of the associated main clause” (Alshammari 2008: 27).

c. Coordination (of likes)

The next argument for the distinction between PeAdClIs and CeAdClIs is often called the ‘coordination of likes’, and it can be stated as follows: central adverbials coordinate only with central adverbials, and peripheral adverbials coordinate only with peripheral adverbials (Haegeman 2012: 164–165). “This follows from the fact the two clauses are different with respect to their structural position relative to the associated main clause, leading to the situation that the two ‘while’ clauses cannot be co-ordinated. Central adverbial clauses adjoin to TP/VP of the main clause, whereas peripheral adverbial clauses adjoin to the CP of the main clause (Alshammari 2008: 30-31). The corpus investigation of the Romance languages proved this point and also the fact that coordination between central ‘while’ clauses and peripheral ‘while’ clauses is not possible.

- (21) Fr. - *Celle-ci peut être externe lorsqu'on est confronté à un virus ou à une bactérie, lorsqu'on se brûle, lorsqu'on se coupe, après une intervention chirurgicale....*

‘This can be external when you are confronted with a virus or bacteria, when you burn yourself, when you cut yourself, after surgery...’

Due to this condition, there are sentences in which the subordinator is not written again, although it can be easily recovered from the context:

- (22) Ro. - *În timp ce medicamentele au efecte secundare și e bine să le luăm numai la indicația medicului, iaurtul contribuie la tratarea multor afecțiuni, fără niciun risc.*

‘While medicines have side effects and it is good to take them only on the doctor's prescription, yogurt helps to treat many ailments without any risk’

- (23) Fr. - *Lorsque les ongles deviennent mous, se dédoublent et perdent de leur éclat naturel, c'est le signe qu'il est temps de leur accorder un peu de repos et d'attention.*

‘When nails become soft, split, and lose their natural shine, it's a sign that it's time to give them some rest and attention’

Sometimes, the ‘while’ CeAdCl is coordinated with another temporal subordinate clause introduced by a different sentence connector:

- (24) Ro. - *Când eram tineri, în timp ce încă locuiam în România, Ken comenta adesea.*

‘When we were young, while still living in Romania, Ken often commented’

The semantic interpretation is also important in this case. From this point of view, we can conclude only adverbial clauses with similar semantic interpretations can be coordinated: in (?), both temporal clauses can be read as event-related central adverbials, and in (?) both can be read as discourse-related peripheral temporal clauses.

3.2. Further Qualitative Observations

Besides the diagnostics provided by the literature and previously checked, the investigation of the ROAMED corpus revealed other ‘clues’ for the asymmetry between the PeAdClIs and the CeAdClIs.

a. The use of ‘contrastive’ words

All four languages have some elements that we can consider specific for the two types of adverbial sentences. For example, the contrast value of PeAdClIs is reinforced by lexical units such as ‘now – then’, and ‘one-other/another’ used as *correlatives*: one in the matrix clause, and the other one in the subordinate clause:

- (25) It. - *Mentre alcuni alimenti danno un rapido impulso di energia, altri alimenti forniscono le riserve più durature.*

‘While some foods give you a quick energy boost, other foods provide the longest-lasting reserves, ready to use throughout the day’

- (26) Sp. - *Algunos creen que son innecesarias, **mientras otros** argumentos que son la única manera de lograr la equiparación efectiva.*

‘Some believe they are unnecessary, while others argue that they are the only way to achieve effective matching’

The adversative value can also be highlighted by a specific adverb or adverbial phrase (‘instead’) in the main clause. Sometimes, the adverbial phrase helps us disambiguate the meaning of the sentence:

- (27) Fr. - *En revanche, **lorsqu’on demande à la fille** si elle est au courant que sa mère, en son temps, passait pour la plus chère de toutes les supermodèles, Nine s’assombrit.*

‘On the other hand, when the girl is asked if she is aware that her mother, in her time, passed for the most expensive of all supermodels, Nine became gloomily’

b. Prosody & orthography

It is a well-known fact that adverbial clauses are prototypically placed after the matrix clause. From this point of view, CeAdCls follow the rule and appear in the final position of the CS.

- (28) It. - *Il tutto è stato detto **mentre** A. M. riaprive l’audio con la Palapa.*

‘Everything was said while A. M. reopened the audio with the Palapa’

- (29) Sp. - *En las elecciones de 2016 se enteró de que se quedaba sin escaño **mientras** estaba en la tele.*

‘In the 2016 elections, he found out that he was running out of a seat while he was on TV’

The breaking of the rule is determined by pragmatic reasons and, as such, the initial position of the temporal clause is prosodically marked by intonation, usually signaled by a comma in writing:

- (30) It. - ***Mentre** a Genova si scavava tra le macerie, loro bevevano champagne.*

‘While in Genoa they dug in the rubble, they drank champagne’

- (31) Ro. - ***În timp ce** un deputat al USR citea moțiunea, Toader posta pe Facebook fotografii cu fiul său.*

‘While a USR MP was reading the motion, Toader posted photos of his son on Facebook’

As concerns the PeAdCls, I noticed that the intonation break is mandatory, regardless of their position in the CS, and this is another argument to support the asymmetry of the two types of clauses:

- (32) Sp. - *Ese día, la feria cerrará a las 22.30, **mientras** músicos y pasacalles animarán el Paseo de Coches.*

‘That day, the fair will close at 10:30 p.m., while musicians and parades will animate the Paseo de Coches’

- (33) Sp. - ***Mientras** la capital bulle de actividad cultural, lejos del centro ese brillo se difunde.*

‘While the capital bustles with cultural activity, far from the center that brilliance spreads’

3.3. The grammaticalization of sentence connectors

I noticed that there are many contexts in which the temporal inherent semantic value of the sentence connector is affected by the appearance of another temporal constituent (“semantic bleaching” - Kuteva *et al.* 2019: 3). Such sentences could be considered “switch contexts” (Heine 2002: 85), i.e., those that favor the transition from temporal to oppositional/contrastive value.

- (34) It. - *Il rapporto conta 129 cause di diffamazione “ingiustificate” contro i cronisti nei primi 10 mesi del 2014, **mentre nel 2013** il dato si era fermato a 84.*

‘The report includes 129 “unjustified” defamation cases against reporters in the first 10 months of 2014, while in 2013 the figure had stopped at 84’

In these cases, the temporal value is *attenuated* and consequently replaced by a contrastive or a concessive one. This was clearly the case in Romanian in which the original temporal value of the sentence connectors ‘în timp ce’ and ‘în vreme ce’ was, in time, canceled. “Such different morphosyntactic and semantic uses of one and the same form can be accounted for on the basis of principles of grammaticalization” (Kuteva *et al.* 2019: 2).

- (35) Ro. - *Rata anuală a inflației în UE a scăzut în luna noiembrie 2018 până la 2%, în timp ce, în zona euro, inflația a scăzut până la 1,9%.*

‘The annual inflation rate in the EU fell to 2% in November 2018, while in the euro area inflation fell to 1.9%’

If we accept the connectors’ use from the central adverbial clauses as the primary use (expressing the simultaneity of the events), then the other values (contrastive, concessive) were developed in time, as a natural consequence of the language evolution process. We could therefore assume that the source of change, i.e., the “switch context” (Heine 2002: 85), is represented by those sentences in which actions begin to move away from each other in time, no longer being in a relationship of simultaneity.

Defined as “the development from lexical to grammatical forms and from grammatical to even more grammatical forms” (Kuteva *et al.* 2019: 3), grammaticalization is a very complex process that implies at least four mechanisms: “extension (or context generalization) – use in new contexts; desemantization (or “semantic bleaching”) – loss in meaning content; decategorialization – loss in morphosyntactic properties characteristic of lexical or other less grammaticalized forms, and erosion (or “phonetic reduction”) – loss in phonetic substance” (Kuteva *et al.* 2019: 3). According to the quantitative analysis, it results that ‘în timp ce’ registered a similar number of occurrences both in CeAdCls (19 contexts) and in PeAdCls (16 contexts). The high frequency of the CSs with contrastive value proves that this connector has gone through the first stage of grammaticalization, the extension, being used in new contexts. The second stage, desemantization, is only partially completed, as there isn’t a total loss of the original meaning. By contrast, ‘în vreme ce’ was found only in six CSs, introducing PeAdCls, and having exclusive contrastive use, which might support the idea that the first two stages of the grammaticalization process were finalized.

- (36) Ro. - *Peste 53% dintre săteni au preferat PSD, în vreme ce PNL și USR au strâns mai puțin de jumătate din scorul social-democraților.*

‘Over 53% of the villagers preferred PSD, while PNL and USR collected less than half of the Social Democrats’ score’

A similar situation was discovered in French, which has a significant number of complex sentences with the sentence connectors ‘lorsque’/‘alors que’, and in which I noticed the tendency of the subordinator ‘lorsque’ to become specialized for the CeAdCls.

- (37) Fr. - *Lorsqu'on veut un peu de changement mais qu'on n'ose pas se faire couper les cheveux ou se faire une coloration, rien de mieux que d'essayer de nouvelles coiffures.*

‘When you want a little change but don't dare to get a haircut or color, nothing better than trying new hairstyles’

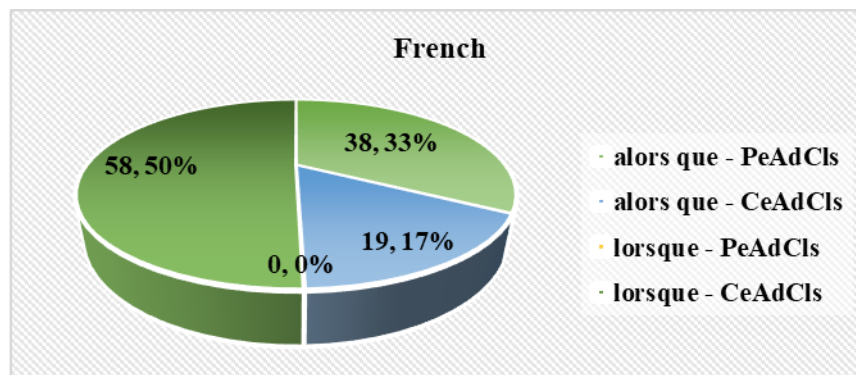


Fig. 2: The distribution and frequency of French sentence connectors in the ROAMED corpus

4. Conclusions

This article has offered a short, yet comprehensive overview of the central vs periphic adverbial clauses in four related languages, bringing empirical evidence that such clauses maintain the dichotomy which has been attested in some other languages. Although not all the diagnostics from the literature were available in the Romance languages (such as the ‘argument fronting’), I gave enough arguments to support the asymmetry (the

semantic reading, the coordination of likes, etc.). In addition, I discovered new elements and I advanced the hypothesis that some of the PeAdCls can be interpreted as ‘switch contexts’ for the sentence connectors that are involved in a complex grammaticalization process. The qualitative and quantitative analyses showed that Romanian, Italian, French, and Spanish behave very similarly as concerns the CSs with adverbial clauses, and, in conclusion, I believe that the ‘cross-examinations’ guarantee the validity of my results.

5. Acknowledgement

This work was supported by a grant of the Romanian Ministry of Education and Research, CNCS - UEFISCDI, project number PN-III-P1-1.1-PD-2019-0052, within PNCDI III.

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