Gradualness and pace in grammaticalization: the case of adversative connectives

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1. Introduction

Following the invitation of the editors of the present issue, we intend to illustrate some cases in which, after exhibiting similar origins in that they go back to the same Latin lexical sources, Romance languages, have gone in different directions in the course of time, with French being (often) ahead in the grammaticalization path, or even totally innovative, i.e. renovating the inherited forms. In particular, we will examine the case of interclausal adversative connectives, namely markers encoding a relation of contrast between clauses (cf. Mauri 2008: 119-126).

Our claim is that the development of adversative connectives is gradual and can be described through successive stages. However, even though all the paths that will be examined are characterized by gradualness, this does not mean that they proceed at the same pace. Actually, we will discuss several cases of parallel diachronic change in which Romance languages develop roughly the same function from the same lexical source through similar paths, *but* at different times. In other words, some languages appear 'faster' than others in the process at issue.

Therefore we will begin with some key preliminary questions in order to illustrate our theoretical framework and to discuss the notion of diachronic gradualness (section 2.1), then we will address some methodological questions concerning data selection (2.2). In section 3 we will explore the parallel diachronic paths that the contrastive markers at issue underwent over time, analyzing data from French, Italian, Spanish and Portuguese. Finally, in section 4 we will compare the pace of the paths described and look for possible explanations underlying the staggered chronology of certain parallel phenomena.

2. Preliminary questions and methodology

2.1 Gradualness in change and synchronic gradience

Although Grammaticalization is usually thought of as a diachronic phenomenon, it is highly desirable to give the synchronic perspective more consideration. As Lehmann (2005) points out, "synchrony and diachrony are two perspectives on the same thing. There are no purely synchronic and no purely diachronic phenomena; there is only a synchronic and a diachronic side to a language phenomenon". In a synchronic perspective variation is the actual realization of diachronic change and manifests itself through gradience (cf. Aarts 2007, Traugott and Trousdale 2010: 24-26).

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As shown by extensive evidence, grammaticalizing elements do not necessarily change at the same rate: not only are varying degrees of rapidity observed, but some items may even be declining at some point, as is the case of the indefinite pronoun derived from the noun for "man" in the history of English and in the history of Italian and Ibero-Romance languages as well (Giacalone Ramat and Sansò 2007), or of the French connective *dementres* "while". The fact that some items or meanings are emerging while others are being dismissed is not captured by a purely synchronic perspective (cf. also Traugott and Trousdale 2010). It is indeed frequently the case that different variants reflect different stages of development, since, typically, innovative forms coexist for a period of time with declining forms, as we will widely discuss throughout the paper.

Synchronic gradience may thus be conceived as concerning the synchronic alternation between innovative and old forms or meanings. Synchronic variation may be dependent on several factors that will not be dealt with in this paper, such as differences in generations of speakers, in registers, etc. as sociolinguistic research has shown. Followers of the prototype theory may identify various degrees of prototypicality, in that some members of a given category are "better" than others or are affected by change earlier than others (Traugott and Trousdale 2010: 22). In the phenomena under examination in our study, synchronic gradience is reflected in the relative frequency of the relevant contexts for the development of the connectives at issue and is observable at every stage of change.

Let us now come to diachronic gradualness, as opposed to abrupt change and catastrophic change, according to the common assumptions of formal generative linguistics (Lightfoot 1979 and later Roberts 2007). Essentially, diachronic gradualness means that any change occurs in small, discrete steps (Hopper & Traugott 2003: 232, Traugott and Trousdale 2010: 25-26). Changes are abrupt for individual speakers in specific contexts, but their actualization through the community is not abrupt and is associated with usage change. This is true both of syntactic change and of semantic change, as confirmed by the cases examined in the present study, in which the coexistence of old and new meanings may last for a considerable period of time. As pointed out by Lichtenberk (1991: 38), "categorial reanalysis is of necessity abrupt, however when a form is in the process of being reassigned to a different category, some of its tokens may exhibit the old properties, while others may exhibit the new ones". An exemplary case is tuttavia in our corpus of Old Italian, which gradually acquired adversative functions while preserving for some centuries the value of temporal adverb "always". The two meanings may coexist in the same author and the same text, as is the case in the following excerpts from Dante's Vita Nuova: 1

(1) Dante, Vita nuova, ca. 1292-93 [chap. 23, 1-16]

e avvegna che io vergognasse molto, tuttavia per alcuno and although I be.ashamed:SUBJ.1SG very.much tuttavia for certain ammonimento d' Amore mi rivolsi a loro.

warning of Love CLIT.1SG turn:PST.PFV.1SG to them

¹ Our data show that languages, or rather their speakers, can tolerate a great amount of variation between *new and old forms* (Lichtenberk 1991:76): in Modern Italian the temporal and the adversative reading of *mentre* co-exist, their interpretation in discourse being normally unambiguous.

"although I was very ashamed, *however* through Love's counsel I turned my face towards them."

(2) Dante, Vita nuova, ca. 1292-93 [chap. 36, 1-3]:

vista pietosa e d' una d' un colore palido REFL do.PST.IPFV.3SG of INDEF look pitiful and of INDEFcolor pale come d' amore; onde molte fiate mi auasi ricordaya de la of love times CLIT.1SG remind.PST.IPFV of DEF.F almost as many mia nobilissima donna, che di simile colore si mostrava my noble.SUPERL.F.SG woman who of similar colour REFL show.PST.IPFV.3SG

tuttavia.

tuttavia

"[It so happened afterwards that whenever this lady saw me,] she appeared with a pitiful face and pallid colour as if from love: so reminding me often of my most noble lady, who *always* showed herself with a similar colour. (translated by A. S. Kline © 2001)

A useful perspective in the exam of diachronic gradualness is provided by constructional approaches (Croft 2007, Bergs and Diewald 2008). As data discussed in this paper will show, adopting constructions as the unit of analysis allows for a deeper understanding of gradualness in the successive stages of change, and makes it possible to capture the trigger of the diachronic change. Great attention has been paid to the role of context in grammaticalization studies (cf. Hopper and Traugott 2003), but a new important issue raised by constructional approaches, which we will follow in this study, is that constructions are where crucial phenomena such as pragmatic inferences and formfunction reanalysis are to be looked for: without a view to the construction, it would have been hard to see how items from different sources and with different categorial status could acquire the value of adversative connective.

Furthermore, as suggested by Bergs and Diewald (2008: 10), a constructional approach to language change combines insights from usage and frequency; this supports some promising suggestions about the nature of reanalysis and provides further backing for the identification of the causes of change, which have not been fully explored yet (such as syntactic priming).

To summarise, in the following paper the rise of adversative connectives in four Romance languages (French, Italian, Spanish and Portuguese) will be examined with specific focus (i) on the micro-changes underlying their gradual development, (ii) on the relation between synchronic and diachronic variation, and (iii) on the semantic and morphosyntactic features characterizing the constructions where the changes are triggered. The interesting point in comparing different paths originating from the same lexical sources is that a further diachronic dimension can be monitored, namely pace. Therefore, in the next sections we will analyze how gradual changes, such as the ones under examination, may develop at different rates and we will try to address some possible motivations.

2.2. An analytic model for adversative connectives: overview and methodology

By adversative connectives we mean connectives encoding a contrast between two clauses, including both forms that are traditionally labeled conjunctions and connective adverbs. The notion of contrast is characterized by the speaker's evaluation of similarities and dissimilarities with respect to some previous expectations. It cannot be exclusively based on objective circumstances of the world independently of the speaker's attitude, but it rather depends on the speaker's inferential ability (cf. Rudolph 1996: 20). This is mirrored in the patterns of grammaticalization and semantic change that characterize the coding of contrast relations. Such patterns may start from concrete meanings, such as temporal relations, and move toward more abstract meanings (cf. *subjectification*, Traugott 1995: 32). In this paper we will mainly discuss cases of contrast established between coordinate clauses; however, when dealing with oppositive contrast (Section 3.2), since no significant semantic difference was found between coordinating and subordinating constructions, we will take them both into consideration (see Mauri and Giacalone, submitted, for a detailed discussion of coordinating and subordinating oppositive constructions).

As observed by Rosén (2009: 393), "it is noteworthy that none of the Latin adversative and conclusive connectors lived into Romance as they were". As a matter of fact, the connectors we will examine have a Latin origin, but had no connective function in Latin and no contrastive value, except for some items like the adverb *magis* "more", which appear in Late Latin prose and even in Early Latin with the function of adversative connector (Rosén 2009: 396).

One might wonder why adversative connectives in Romance languages were thoroughly renovated, while conjunctive and disjunctive connectives have been more conservative over time. Such renewal might be due, following a suggestion advanced by Matras for bilingual situations (Matras 1998) but extensible to other cases, to the desire to adopt new expressive means to maintain the authority of the speakers' point of view in argumentative texts (see discussion in Giacalone Ramat and Mauri, in press).

Table	l shows	an	overview	of the	markers	at issue:
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Latin		French	Italian	Spanish	Portuguese
tota via	>	toutefois	tuttavia	todavía	todavia
dum interim	>		mentre	mientras	
per tantum	>	pourtant	pertanto		portanto
per hoc	>		però	pero	

Table 1. Comparative view of the adversative connectives of Romance languages deriving from the same Latin source.

The chronology of the parallel developments listed in Table 1 runs differently. At first sight, we see that not all cases in the table are filled, either because in modern languages the item has been ousted, as is the case of the Old French correspondent of Italian *mentre*, or because it is not attested at all, as is the case of Italian *però* and Spanish *pero* which correspond in French to various items like *mais*, *pourtant*, *toutefois*.²

As far as the Italian data are concerned, the present study is based on a diachronic corpus. We adopted a balanced sample of about 500.000 words for each century, from the

² Modern Portuguese uses *porém*, from Latin *proinde* "for this", which already shows the adversative value from the 13th century.

first attestations of Italian after 1200 to 1950. The sample is representative of different genres: poetry, narrative texts, religious, legal, administrative texts, drama, correspondence, etc. All the occurrences of *tuttavia*, *mentre*, *pertanto* and *però* attested in each century have been electronically retrieved by means of Wordsmith Tools, stored in Excel sheets and then analyzed on the basis of both syntactic and semantic parameters. (see Mauri and Giacalone Ramat, submitted, for details). The discussion of Italian data is based on both qualitative and quantitative analysis of data, whereas the examination of the other Romance languages is more qualitative oriented.

The French data come from TLFi (*Trésor de la langue française informatisé*); for Spanish, we consulted the electronically available corpus <u>www.corpusdelespanol.org</u>, and for Portuguese we employed the electronic corpus <u>www.corpusdoportugues.org</u>. For the three languages, additional material was collected from historical grammars, dictionaries and monographic works.³

To deal with the grammaticalization of adversative connectives a *four-stage* model will be adopted (Giacalone Ramat and Mauri in press, and Mauri and Giacalone Ramat submitted), which aims at accounting for gradualness of change looking at specific changes in particular types of contexts (cf. Traugott 2003, Heine 2002 and Diewald 2002). First, three types of contexts are identified based on purely semantic grounds: contexts with the original value, contexts with the new value, and contexts compatible with both values (ambiguous contexts). Second, the morphosyntactic features associated to every type of context are examined and monitored across centuries, and finally the successive stages of change are identified.

The model proposed in Mauri and Giacalone Ramat (submitted) differs from the ones adopted in the (existing?) literature (Diewald 2002 and Heine 2002) in that it is based on the assumption that the mere identification of the type of context does not exhaust the characterization of each stage, because typically a given type of context may - and does occur at more than one stage. This is a consequence of the gradualness of change: although they are presented in temporal sequence, the stages do not follow one another as monolithic blocks, but are rather segments within a continuum. What crucially differentiates the four stages is the *relative frequency* of the various types of contexts. The diachronic paths examined will be thus described using a multiple-stage model, presented in Table 2, in which each stage is associated to a particular frequency rate of the contexts attested.

The initial stage is the one during which the source meaning emerges as the most frequent with respect to further possible meanings of the form under examination. In the second stage contexts that are compatible with both the source and target value increase significantly in frequency. In these types of contexts speakers are likely to operate a pragmatic inference and conceive the whole construction as characterized by some contrast. High frequency of contexts with dual compatibility favors a unified processing of the construction as having a contrastive meaning and triggers the form-function reanalysis of the form as adversative connective. In the third stage we observe a semantic and syntactic specialization of the two values, which coexist in complementary syntactic

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³ Rumanian was not considered in this study, because it seems to show a picture different from the other Romance languages: it has inherited an additive conjunction *şi* "and" < Latin *sic*, and uses *dar* "but" < Latin *de ea re* and *sau* "or" < Latin *seu/siue* (Rosén 2009: 393; Mallison 1986: 115ff), for adversative and disjunctive coordination, respectively.

distribution. In case no clear syntactic differentiation is attested between the two meanings, this stage consists of semantic specialization, whereby it is the semantic context that provides the clues for unambiguous interpretation of the two values (e.g. see further discussion on *mentre*). At this stage, contexts with dual compatibility may (but do not necessarily need to) become rarer and speakers start to employ the new meaning with increasing frequency, thus reinforcing the association of the form with the new value. Finally, there may be one last stage in which the source value disappears and the target meaning is the only one attested, independently of syntactic context.

1. Initial stage	2. Pragmatic inference and successive form- function reanalysis	3. Syntactic and semantic specialization	4. Extension and independence from cotextual constraints
Contexts with the original value are highly frequent	Contexts compatible with both the original and the new value reach a peak frequency. Contexts with the original value are still very frequent.	Contexts with the original value and contexts with the new value coexist in complementary syntactic distribution. Contexts compatible with both values may become less frequent	Contexts with the new value are extremely frequent. The other two types of contexts are rare or not attested anymore

Table 2: A four-stage model for the development of adversative connectives (cf. Mauri and Giacalone Ramat, submitted)

This model assumes that a thorough qualitative analysis of the constructions of which the form in question is part and a quantitative investigation of their relative frequency (where a balanced and sufficiently large diachronic corpus is available) will help capture the triggering and spreading of the change under observation. In what follows we will mainly focus on the qualitative part, examining the types of contexts and the constructions in which the connectives occur at successive stages of change.

3. Four case studies

3.1 Toutefois/tuttavia/todavía/todavia: From temporal continuity to contrast

The forms Fr. *toutefois*, It. *tuttavia*, Sp. *todavia* and Port. *todavia* derive from the Latin construction *tota via* and were originally characterized by an adverbial function of temporal continuity with the meaning 'always'. Data from Old French, Old Italian, Old Spanish, and Old Portuguese show that the adverb, in its original value, could be found in all positions, namely at the left hand periphery of the clause, after the verb phrase or even at the end of the clause.

In contemporary Italian, *tuttavia* has an adversative function roughly equivalent to French *toutefois* and Portuguese *todavia*: the three forms are interclausal connectives establishing a specific type of contrast, namely contrast derived from the denial of some expectations (i.e. *counterespectative* contrast, cf. Mauri 2008: 124 ff., Giacalone Ramat and Mauri 2009, Scorretti 1988). Extensive research on Italian data clearly shows

different stages in the grammaticalization process as expected from the model outlined above.

The first stage, in which the original adverbial value is the only one attested, is followed by a second stage, in which contexts compatible with both the source and the adversative meaning appear and increase in frequency. Contexts with dual compatibility are characterized by the occurrence of *tuttavia* in clause initial position, between two states of affairs with potentially conflicting semantics. In these contexts, the adversative reading may be reinforced by *ma* or a *concessive subordinate clause* (cf. ex. (3)). *Tuttavia* may be interpreted as having a clause internal value, referring to the temporal continuity of the specific action or state of affairs described in the clause that follows *tuttavia*, or as having an interclausal value, referring to a more abstract notion of continuity that involves both clauses, i.e. the second state of affairs continues to occur during the time in which the first one takes place, even if the two are not expected to cooccur.

Fiore di retorica, red.gamma, 1292 (tosc.) [chap. 58 | page 142] (3) Eavegna che lla naturale memoria sia And although natural.SG memory be.SUBJ.PRS.3SG DEF.F.SG perfettissima cosa a l' uomo. tuttavia molto perfect.SUPERL.F.SG thing to DEF.M.SG man tuttavia be.PRS.3SG very debole e fragile [...] and fragile weak 'although natural memory is an extremely perfect thing for the human being, **always/however** it is very weak and fragile [...]'

The dual compatibility that characterizes these contexts is located at two levels, the semantic and the syntactic one. In semantic terms, *tuttavia* may receive a simple temporal interpretation or an anaphoric one; in syntactic terms, it may be interpreted as a clause internal adverb or as an interclausal connective. It is in these contexts that speakers operate a reanalysis of *tuttavia* as an adversative marker (see Giacalone Ramat and Mauri 2009 and Mauri and Giacalone Ramat, submitted, for a detailed discussion).

According to our analysis of Italian, the number of dual compatibility contexts reaches its highest peak in the 14th century, then decreases, although temporal interpretations are attested until the 17th century.

During the 16th and 17th centuries we can observe the third stage, characterized by syntactic specialization of the two values (cf. examples (1) and (2) for some earlier occurrences). At this stage, contexts with the source value are in complementary syntactic distribution with contexts with the adversative value (dual compatibility contexts start to be extremely rare). In particular, in postverbal position tuttavia is associated with the source value 'always, continuously', while clause initial position and co-occurrence with ma or a concessive clause are associated to the target connective function 'however, nonetheless'. Syntactic specialization indirectly shows that reanalysis of tuttavia as a connective has taken place.

From the 18th century the adversative occurrences of *tuttavia* are increasingly frequent and nowadays are the only type of context in which *tuttavia* is attested in Italian. This final stage is also characterized by an increase in syntactic mobility of the connective,

which may occur with the new value both in clause initial, clause internal and clause final position (*expansion*, cf. Heine 2002).⁴

The analysis of diachronic data from Portuguese shows that the development of *todavia* is parallel to that of Italian *tuttavia*, both in the spelling of the path and in the chronology.

The successive stages described above are also attested in the development of French *toutefois*, which, however, follows a different pace. The contrastive value for *toutes voies/toutefois* is already present in 12th century texts, and prevails in the 14th century (Soutet 1992: 11, Vanderheyden 2003: 472).⁵

(4) Sovent se plaint a mout bas ton;/ Toutes voies tant often REFL complain.PRS:3SG at sillent low voice toutes voies so s' esforça / qu' a l' ermitage s' adreça REFL try.hard:PST:3SG that to DEF.M.SG hermitage REFL address (Le Chevalier au Barisel, 13th century, 706-708, Buridant 2000: 661) «He often complains in a low voice; however he tries so hard that he reaches the hermitage»

Significantly, during the third stage of syntactic specialization, syntactic position played the same role as in Italian and Portuguese: *toutes voies* with temporal meaning "always, continuously" tended to be associated with post-verbal position, while in initial position, sometimes preceded by other contrastive markers, it tended to assume a contrastive value (Vanderheyden 2003: 472,478). In Modern French *toutefois* may take the final position in the clause, just as *tuttavia*.

Spanish is different from the other three Romance languages at issue, in that Lat. *tota via* never developed into an adversative marker. In the diachrony of Old Spanish *todavia*, the meaning of temporal continuity developed into a phasal value "still", which is the usual meaning in Modern Spanish, as shown in (5)

(5) está durmiendo todavía
AUX.PRS:3SG sleep:GER todavía
'He is still sleeping.' (Corominas and Pascual 1997: 480).

According to Morera Peréz (1999: 515-16), this development was caused by a restrictive inference in the construction 'todavía hasta', in contexts in which the limitative preposition hasta assigned a limit to the value of todavía "always, but until the time signaled". Subsequently, the restrictive inference was conventionalized and the original value 'always' became obsolete. This value starts to be attested with significant frequency in the 17th century. An adversative value is possible in Modern Spanish, but mainly in contexts where todavía follows other adversative elements like pero.

⁵ Two concurrent forms coexist in Medieval French texts: *tote(s)voie(s)* and *totefois*. For the latter a derivation from Latin *vices* has also been proposed (FEW XIV: 411-12). The form *tote(s)voie(s)* is found until the 16th century (Buridant 2000: 661).

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⁴ In restricted contexts, *tuttavia still* maintained his temporal interpretation in the 19th century. Furthermore, in 18th and 19th centuries a phasal value of "still" extending the validity of the temporal relation to the moment of speech is also found (similar to the meaning of Spanish *todavia*) (Giacalone Ramat and Mauri 2009 for details).

The paths of development outlined in this section show that elements grammaticalizing from the same lexical origin do not necessarily change in the same direction or at the same rate. Of the four languages examined, Italian and Portuguese followed the same steps roughly at the same time, French followed the same steps but earlier, and finally Spanish followed a different direction of change, maintaining the temporal dimension as the main one.

3.2 From temporal simultaneity to contrast: Italian mentre, Spanish mientras

Both Italian *mentre* and Spanish *mientras* derive from a temporal subordinator that results from the univerbation of Latin *dum* "while", adverb and conjunction, and *interim* "in the meanwhile, in that time". Forms deriving from Lat. *dum interim* appear since the oldest documents in the Romance area, as exemplified by Old French *domientres* (*que*), Old Provencal *domentre* (*que*), Old Italian *domentre* (*che*), *dementre* (*che*), Old Spanish *domientre* (FEW, III, 178). In the course of time, the initial part lost transparency, came to be reinterpreted as a prefix and was abbreviated in Italian *mentre*, Provencal *mentre*, Spanish *mientre*, *mientras*. The connectives discussed in this section appear in subordinating constructions and only later some of them (cf. Italian *mentre*) developed a coordinating status (see Mauri and Giacalone, submitted).

As far as Italian is concerned, no clear adversative reading can be detected in the 12th and 13th centuries in Italian documents. The predominance of the temporal meaning is confirmed by the Romance comparison: Old French *dementre* (*que*) and its variants retain temporal meanings; also Old Spanish *demientre*, *mientres* seem to have temporal meanings only. Old Italian *mentre* allowed both the reading of simultaneity 'in the time when' and of co-extension 'until the time when', but it is the former function that gives rise to the adversative meaning.

The type of contrastive function developed by *mentre* is different from the one we examined for *tuttavia*, because in this case no expectation is denied and the conflict is simply generated by some symmetric opposition. The adversative meaning of *mentre* gradually arose in contexts characterized by the presence of somewhat antonymic elements, on the basis of which speakers may identify a *polar opposition* between two linked states of affairs. The antonymic polarity may be based on objective features, i.e. independent from the speaker's perspective, or on more subjective properties, i.e. based on the speaker's belief or evaluation (cf. ex. (6)). In ex. (6), the effort of the opponents is simultaneous with the achievement of the opposite result, so the polar opposition is established at a highly subjective level between an effort towards a specific aim (*'cercate d'atterrarlo'*) and an objective opposite achievement (*'i vostri medesimi assalti lo sollevano e l'avvalorano'*).

(6) Galileo Galilei, *Dialogo sopra I massimi sistemi*, Day II (1624-1630) Vedete adungue qual sia forza la del vero, che See:PRS.2PL therefore what be.SUBJ:3SG DEF.F.SG power of:DEF.M.SG truth that mentre voi cercate. d' atterrarlo i vostri medesimi mentre you.PL try:PRS.2PL of knock.down:CLIT.3SG DEF.M.PL your:M.PL own:M.PL assalti sollevano е 1' avvalorano attack:PL CLIT.3SG.M raise:PRS.3PL and CLIT.3SG.M enhance:PRS.3PL

"You can see what is the power of truth, because **while** you try to knock it down, your own attacks raise it and enhance it."

As a result, an oppositive interpretation becomes available. Frequently, opposition is identified as a consequence of simultaneity itself: given two simultaneous states of affairs, they tend to be perceived as symmetric facets of the same scene, which are compared on the basis of their differences, rather than their similarities. Such dual compatibility contexts appear only in the 16th century, although some isolated cases are attested in the 14th century, and become frequent from the 17th century.

Contexts which manifest incompatibility with a temporal interpretation, and thus may only have an oppositive reading, typically denote non-factual events incompatible with the idea of simultaneity, e.g. expressing some kind of deontic or epistemic modality, or contain explicit reference to the occurrence of the states of affairs at different moments. These types of contexts are attested in Italian from the 17th century. In Contemporary Italian the original simultaneity value and the new oppositive one coexist in a layering situation (Hopper & Traugott 2003:124), and *mentre* can be argued to be polysemous between a temporal and adversative function (cf. English *while*). However, in spoken Italian adversative meanings out-number temporal ones both in the C-ORAL corpus (52% vs. 48% out of a total of 117 occurrences) and in the LIP corpus (77% vs. 23% out of 151 occurrences). The development of the adversative value of *mentre* is associated with the gradual loss of the optional *che* (in *mentre che*) and the acquisition of a coordinating status.

In the development of the adversative function of *mentre* no stage of syntactic specialization is attested, because the marker neither undergoes a category change nor does it change distributional properties. However, in the last stage of the path, we observe the development of a coordinating oppositive function, besides the subordinating one attested from the origins (see Mauri and Giacalone Ramat, submitted, for a detailed discussion), thus displaying a change in syntactic function from subordinator to coordinator (cf. also Scorretti 1988: 238). This diachronic path deserves further investigation and will be left to future research.

Let us now come to a comparison to the other Romance languages under examination. Old French *dementre que* is attested until the end of the 14th century, when its functions were taken up by other connectives, like *pendant que* and *tandis que*, which originally were used with the temporal meaning of "meanwhile" (Marchello-Nizia 2007, 2009: 8). Interestingly, *tandis que* is nowadays also employed to convey the same oppositive contrast as *mentre*, thus providing further evidence for the path of semantic change going from temporal simultaneity to opposition.

Turning now to the Iberian peninsula, we find Old Spanish *demientre*, *mientra* and *mientras* and Modern Spanish *mientras* (*que*), which can be considered parallel to Old Italian *dementre* (*che*) and Modern Italian *mentre*, both in the spelling of the path and in the values they have taken on. In Spanish too, *mientras* is in a situation of layering, occurring in purely temporal contexts, in contexts compatible with both values (cf. ex.(7)) and in purely oppositive ones (cf. ex. (8)).

(7) Juan estudia, **mientras que** tú no haces nada de provecho John study.PRS:3SG **mientras que** you NEG do.PRS:2SG nothing of useful

'John is studying, while you are doing nothing useful' (Real Academa Española, *Diccionario de la lengua española*)

(8) Yo soy católico, mientras que mi mujer es protestante I am catholic mientras que my wife is protestant 'I am a catholic while my wife is a protestant' (Francisco Ruiz de Mendoza, p.c.)

Finally, Portuguese behaves differently, since Old Portuguese *mentre* is replaced by *enquanto* as early as in the 16th century, which may nowadays be used also to signal an opposition. Therefore Portuguese, just like French, confirms the fact that this path of semantic change is recurrent across languages, even though it may start from completely different lexical sources.

To summarise, in the development of Lat. *dum interim*, we may observe once again both parallel paths and innovations. On the one hand, Italian and Spanish first kept the form with the original simultaneity value and then developed an oppositive function around the 16th century. On the other hand, in French and Portuguese the original form was dismissed between the 14th and 15th centuries and was replaced by new expressions. As already mentioned, despite the formal innovation, the semantic change we examined in this section took place also in the latter two languages, thus revealing the recurrent nature of this change even from different lexical sources.

3.3 From cause to contrast

The diachronic path that will be examined in this section derives the adversative function from an original causal or resultative one. In other words, we observe a sort of functional reversal: whereas in their early occurrences the markers at issue introduced the cause or the result of a causal sequence, at the end of the process they signal the opposite, namely the denial of an expected causal sequence.

There are two Latin constructions that undergo this semantic change, *per tantum* 'for such an important reason', and *per hoc* 'for this'. Despite their functional parallelism, the two paths will be analyzed separately, because the lexical sources are different and the outcomes in Romance languages display some variation. In 3.3.1 we will compare the development of Lat. *per tantum* into French *pourtant*, which is nowadays a frequent adversative connective, to Italian *pertanto* and Portuguese *portanto*, which retain instead their original resultative meaning. Section 3.3.2 will then take into account the development of the two adversative markers It. *però* and Sp. *pero* from Lat. *per hoc*.

3.3.1 Latin per tantum > French pourtant, Italian pertanto, Portuguese portanto

French *pourtant*, Italian *pertanto* and Portuguese *portanto* have a common origin from a (late) Latin construction *per tantum* "for such an important reason" (Letoublon 1983, Gaudin, Salvan & Mellet 2008: 99), expressing a cause-effect relationship between a proposition p and a second proposition q and underlining the noteworthy nature of the cause p.

The occasional shift to adversative meaning is attested from the 14th century (perhaps earlier) in French texts, and also in Italian texts of the 13th and 14th centuries. For a

certain period of time the two languages have followed a common path of evolution; thereafter only French has completed the change to a contrastive connective, while in Italian the adversative occurrences ceased to be attested around the 18th century and pertanto is nowadays employed with its older causal meaning. In Portuguese no adversative occurrences are attested for *portanto*, which retains its resultative meaning from the origins. Let us start by examining the French situation.

In Old and Middle French por tant, portant the resultative meaning 'for this reason' (cf. ex. (9)) is attested until the 16th century (Huguet 1925-1967).

Chrestien de Troyes, 12th century, *Guillaume d'Angleterre* (Soutet 1992: 117) [...] Biau sire, jou ne voel / avoir rien que voient dear sir Ι NEG want.PRS.1SG to.have nothing that see.PRS:3PL oel. / fors cel anel que vos portés;/ por tant eye except that ring that you wear.PRS:2PL por tant you acuités [...] serés AUX.FUT:2PL discharge:PTCP.PST 'Dear Sir, I don't wish to have anything that my eyes see, besides this ring that you

are wearing: for this reason, you will be discharged.'

The reanalysis from resultative to adversative occurs between the 13th and 14th centuries in contexts that may be compatible with both meanings, and such contexts are characterized by the presence of some explicit negation having scope over the connective. The construction non portant "not for this reason" indeed denies the causal inference generated by the first proposition, thus determining a conflict between the expected causal sequence and its overt denial. In such cases, the whole construction may be interpreted as bearing some contrastive meaning, and the conditions for a shift to the contrastive meaning are thus met: non portant is compatible with both a resultative and an adversative meaning. Later on, negation is not felt to be obligatory anymore and portant may be used alone to convey a counterexpectative contrast.

Soutet (1992: 11, cf. also Buridant 2000: 658) identifies the first adversative occurrences of *portant* very early, in the 12th century, but later studies conducted by Marchello-Nizia have postponed the contrastive use of *portant*, which remains ambiguous until the end of the 14th century, as shown in example (10).

(10) Chronique de Morée 194; ca. 1320-24 (Marchello-Nizia 2008 : 8) accuilly une maladie, de laquelle morurent if CLIT.3PL frapper:PST:3SG INDEF.F.SG illness, of which die:PST:3PL plus grant partie de eaux. Non pourtant sires de Caraintaine DEF more big part of them **non pourtant** DEF.M sir of Crantaine lassoit pas sejourner [...] les

⁶ In Old French a series of negative adverbs is formed by associating portant to ne- or non; ne porquant, nepurtant, non porec, etc. (Buridant 2000: 662). Godefroy (1891-1902) has two distinct entries for portant 'à cause de cela' and ne portant 'cependant, malgré cela'. Marchello-Nizia (2008: 8), however, singles out from this older layer non pourtant, attested only at the beginning of the 14th century, in which the negation has scope only on *pourtant*, independently of a possible negation on the verb.

NEG CLIT.3PL leave.PST:3SG NEG rest

'They were caught by an illness, because of which the majority of them died. **Not for that/ Nonetheless**, the sir of Caraintaine did not allow them to rest.'

During the 15th and 16th centuries both the causal and the adversative interpretation are found, but in different syntactic distributions: the resultative function tends to be associated to the presence of *et* (*et pourtant*) and the adversative one occurs with a negation. Montaigne's *Essais* (1580) offer a wide range of causal and adversative uses of *pourtant* (Gaudin, Salvan & Mellet 2008: 100-101). In the 16th century the first occurrences of adversative *pourtant* without negation are attested, and from the 17th century the connective is most frequently attested with its actual contrastive meaning. It is worth mentioning that in the *Dictionnaire de l'Académie française* (1694), the only meaning attested for *pourtant* is the adversative one.

Italian *pertanto* confirms the direction of change from causal to adversative connective; however, differences in frequency of use, or the concurrent use of *però*, have produced a different result. Let us see in detail what happened.

In Italian the resultative value "therefore" is well attested along the course of centuries and is the only meaning of *pertanto* in Modern Italian. However, from the 13th and 14th century dual compatibility contexts in which *pertanto* is preceded by a negation are attested and show the same properties as French *non portant*. The dual compatibility construction *non pertanto* does not show any peak frequency, but remains significantly present until the 19th century (reaching between 5% and 10% of the total amount of occurrences).

Interestingly, during the 18th and 19th century, *non pertanto* begins to be attested with the unambiguous value 'nevertheless', frequently preceded by a concessive clause or by *ma*, as shown in example (11). However, negation is always necessary in order to allow a contrastive meaning, because *pertanto* alone still links two clauses in a causal relation.

(11) Giacomo Leopardi, Zibaldone di pensieri [12 Ott.1821, Pag.1901] Tale suol essere prosa degli greci e Such use.to.PRS:3SGbe DEF.F.SG prose of.DEF.M.PLancient:PL greek and latini. E è non pertanto, assai notabile diversità fra latin and CLIT.LOC is **non pertanto** very remarkable diversity between DEF indefinito del linguaggio poetico, e quello del indefiniteness of.DEF.M.SG language poetic and that.M.SG of.DEF.M.SG prosaico [...]

prosaic [...]

'Such used to be the prose of the ancients, Greek and Latin. And there is nevertheless (* not for that) a highly remarkable variation between the indefiniteness of poetic language and that of prosaic one.'

During the 18th and 19th centuries *non pertanto* is even attested after *ciò* 'it', giving rise to a construction *ciò non pertanto* that is modelled on *ciò-nonostante* and *ciò-nondimeno*, which are two adversative connectives used in literary Italian and sharing with *non pertanto* the presence of a negative element. Such an analogical process is a clear sign of the semantic opacity of the construction *non pertanto*, which is perceived by speakers as

a unified chunk bearing an adversative function, without any link with resultative pertanto.

(12) Il Conciliatore (periodical, 1818-1819), N.73 [PB, Giovanni Muller, 2].14 fortuna dell' La armi smentì allora la sapienza DEF.F.SG chance of.DEF weapons deny.PST:3SG then DEF.F.SG wisdom ciò non pertanto, dello storico: egli non iscemò di it non pertanto of.DEF.M.SG historian he NEG decrease.PST:3SG of fama presso ad un popolo che per conservarsi ha bisogno fame by INDEF.M.SG people that for need.PRS.3SG of keep:REFL elevazione nelle idée [...] elevation in.DEF ideas 'The fortune of weapons then belied the historian's wisdom; nonetheless, his notoriety did not decrease in the eyes of a people, who need elevation in ideas in

These occurrences show that the diachronic path of *pertanto* never developed an adversative value, while *non pertanto* underwent a process of 'constructionalization' (cf. Traugott and Trousdale 2010: 13-14, Bergs and Diewald 2008: 4), acquiring an adversative value equivalent to French *pourtant*. However, these adversative uses of *non pertanto* disappeared at the beginning of the 20th century⁷ and *pertanto* in Italian retains its role of resultative connective.

The reasons why the adversative construction *non pertanto* was eventually dismissed are still to be identified. Plausibly, the fact that resultative *pertanto* was very frequent across the whole path eventually favored the victory of the resultative meaning at the expense of the adversative one, which instead never reached a significant peak frequency. Furthermore, Italian already had a widespread dedicated marker for counterexpectative contrast, namely *però*, which might have been perceived as a stronger competitor to *pertanto*.

Finally, Spanish displays the resultative expression *por lo tanto*, which, however, seems to be a more recent and still transparent construction. To summarize, *pourtant* and *pertanto* show two divergent developments: Italian, together with Portuguese, has revealed to be more conservative in that the adversative inference was never conventionalized, even though *non pertanto* underwent a process of constructionalization. On the contrary, in French the adversative meaning has ousted the causal one.

3.3.4 From cause to contrast: the case of però/pero

order to keep going.'

A similar path from cause to contrast is exhibited by Italian *però* and Spanish *pero*, both endowed in the modern languages with the adversative meaning 'however, but'. Both

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⁷ One occurrence is attested in Pirandello, Sei Personaggi in cerca d'autore (1921, [43]): " [...] maschere espressamente costruite d'una materia che per il sudore non s'afflosci e non pertanto sia lieve agli Attori che dovranno portarle [...]" 'masks specifically built of a material that does not melt with sweat and nonetheless is light for actors who will have to wear them.'

connectives derive from Latin *per hoc* 'for this' and their development displays univerbation and loss of morphological transparency.

In Old Italian, resultative *però* 'therefore' occurred mostly in clause initial position and after *e*, and is to be distinguished from the construction '*però che*' with causal meaning 'since', which was frequent until the 17th century and then was ousted by *perché*. *Però* is attested from the 12th century and until the 16th century predominantly had a resultative meaning 'therefore'.

The change from cause to contrast is triggered in contexts in which *però* is in the scope of the negation, and is occasionally reinforced by *ma* or a *concessive subordinate clause*. These contexts have specific semantic properties, which parallel under many respects the critical contexts we discussed for *pourtant*. They present two states of affairs that are normally in a causal relation, but such relation is overtly denied by the negation. In other words the construction *non però* ([clause] [NEG *però*] [clause]) introduces some consequence that will not take place despite expectations, determining a contrast between the cause and the denial of the expected effect. Such contrast is not explicitly coded, but is inferred by negation of the consequence; only later, after a form-function reanalysis, *però* comes to be reinterpreted as overt marker of the contrast conveyed by the whole construction. These types of contexts, which are compatible both with the source and the target meaning, are frequent in the 15th and 16th centuries (cf. example (13)), and often the contrastive inference is reinforced by *ma* or by the presence of a concessive clause.

(13) Giorgio Vasari, Le Vite de' più eccellenti architetti, pittori, et scultori italiani, II Parte - Antonello da Messina (1550)

Ma benché molti avessino sofisticamente cerco di

But although many AUX:SUBJ.PST:3PL painstakingly look.for.PTCP.PST of
tal cosa, non però avevano trovato modi [...]
such thing NEG però AUX:PST.IPFV:3PL find:PTCP.PST way:PL
'But although many had looked for it painstakingly, not for that did they
(/nonetheless they did not) find out how to make it [...]'

Contexts that are incompatible with the resultative meaning show that the reanaysis of *però* as an adversative marker is complete. They increase from the 16th century onwards and are the only type of context attested in Modern Italian. In parallel, the purely resultative occurrences of *però* gradually disappear.

During the 17th and 18th centuries a stage of syntactic specialization can be observed, in which the source meaning and the target meaning of *però* coexist in complementary distribution: resultative *però* tends to take clause initial position or occurs after *e*; *però* with adversative function tends to follow the first constituent of the clause (for a detailed discussion see Giacalone Ramat and Mauri 2008 and Mauri and Giacalone Ramat, submitted).

The adversative reading of *però* was strictly dependent on the presence of negation for a long period of time (about three centuries), then the construction *non però* became rarer and during the 19th century disappeared. At the same time the purely adversative occurrences of *però* become increasingly frequent. From the 18th century, *però* may occur with contrastive value in every syntactic position, i.e. in an initial or in a postponed position.

The development of Spanish *pero* is similar both as regards the successive stages of

change and with respect to chronology: its frequent use in negative clauses triggered the adversative meaning of Castillian *pero* in the early Middle Ages (Corominas and Pascual), which started to substitute *mas* with adversative meaning. In Modern Spanish *pero* conveys a contrast derived from the denial of an expectation, and it is functionally equivalent to Italian *però*. French and Portuguese, instead, did not develop any adversative connective from Latin *per hoc*.

4. The pace of gradual change: parallel and divergent patterns in the development of Romance adversative connectives

Let us now summarize the results of our comparative analyses and look at them from the point of view of gradualness and pace. Despite having the same lexical source, all the paths analyzed have revealed some diversification in their outcomes and also in the diachronic process, as the overall picture provided in Table 3 shows.

From the original temporal adverbs of continuity derived from Lat. *tota via*, Spanish developed a phasal adverb meaning 'still', thus retaining the temporal semantic component, while French, Italian and Portuguese developed three equivalent adversative markers. The three pathways of change towards the adversative value (> Fr. *toutefois*, It. *tuttavia*, Port. *todavia*) are gradual and roughly follow the same stages: after an initial stage in which only the original value is attested, we identified a second stage in which the adversative connective function arises through conversational inferences, in contexts where *TOTA VIA* occurs in clause initial position between two somewhat conflicting states of affairs. Then during the third stage we observed a syntactic specialization of the two values, attested in complementary syntactic distribution, thus confirming the close association between synchronic gradience and diachronic gradualness. Finally, the fourth stage coincides with the extension of the adversative value to all syntactic contexts, together with the loss of the source meaning. Despite the recurrent gradualness of these three paths, they do not show the same pace, namely French starts the diachronic process earlier than Italian and Spanish, and it reaches the fourth stage earlier.

LATIN FORM		12 TH	13 TH	14 TH	15 TH	16 TH	17 TH	18 TH	19 TH	20 TH
Tota via	Spanish Italian Portuguese French	2				3 3		•		
Dum interim	Spanish Italian Portuguese French	1		/		_			3	
Per tantum	Spanish Italian Portuguese French	_								
Per hoc	Spanish Italian Portuguese French	1		_			-		4 4	

Table 3. Pace and gradualness in the development of adversative connectives in Romance languages: summarizing the paths at issue. Explanation: numbers refer to the stages of change, as described in Tab. 2. Grey cells mean that the connective at issue is not attested (any longer) in a given language.

Moving on now to the second set of paths, the comparison in Table 3 highlights a clear bipartition within Romance languages: on the one hand, Italian and Spanish are completely parallel in developing the two oppositive connectives It. *mentre* and Sp. *mientras* from Lat. *dum interim*; on the other hand, French and Portuguese both dismiss the ancient forms Fr. *domientres* and Port. *mentre* and innovate, introducing new expressions for temporal simultaneity. The development of the two oppositive connectives takes place in stages, following the model described in Table 2, thus confirming the gradualness of change. As far as pace is concerned, the only noteworthy phenomenon is that French, once again, innovates slightly earlier than the other Romance languages at issue.

Moving on now to the third path under examination, the one where adversative markers derive from originally resultative ones, we believe that a unified discussion of the outcomes of Lat. per tantum and per hoc may help shed further light on the question. Portuguese is the only language examined that does not develop any adversative marker from one of these two lexical sources, although it must be remarked that Port. porém, the usual adversative marker of the language, is to be traced back to Lat. proinde 'therefore', thus confirming the cause-to-contrast path. As far as French, Italian and Spanish are concerned, they distribute across two diachronic paths, with French developing adversative pourtant from Lat. per tantum and Spanish and Italian developing pero and però, respectively, from Lat. per hoc.

Let us now examine the data in detail. Portuguese is very conservative in retaining the resultative value of *portanto*, without displaying any sign of incipient change. In Spanish, instead, no outcome of this lexical source is attested. French and Italian both start a diachronic path towards contrast, but only French pushes the change through, whereas Italian retains the resultative value of *pertanto* and eventually dismisses the adversative construction *non pertanto* (cf. discussion in section 3.3.1). On the other hand, Spanish and Italian develop their adversative connectives along the second path, the one starting from Lat. *per hoc*, while no correspondent forms are attested in Portuguese and French. Data from cause-to-contrast paths once again show the gradualness of the change and provide further evidence for a faster pace in French, which in this case is compared to Italian in the development of *pourtant/pertanto* from Lat. *per tantum*.

All in all, French seems to follow a different pace, being ahead of other Romance languages, and at the same time it shows a tendency toward innovation. If we consider the whole range of adversative markers attested in French, we can indeed observe that it displays a number of recent connectives derived from the expression of temporal relations, thus confirming the general path "time-to-contrast". Among others, it is worth mentioning *cependant*, which in Old French retained a temporal meaning 'during this time' until the 16th century, despite allowing ambiguous contexts as early as in the 15th century (Marchello-Nizia 2007), and nowadays is equivalent to *pourtant*; *alors que*, whose oppositive inference was already attested in the 15th century (according to TLFi) and which nowadays is used both with temporal and oppositive function, although the

former is rather archaic; tandis que, derived from the Latin temporal expression tandiu and retaining both readings in Modern French (like Italian mentre).

Spanish and Italian, on the other hand, appear more conservative and slow in the development of adversative markers. In a hypothetical ranking, Portuguese could be placed in between, showing some conservative patterns together with a high degree of innovation. In the next section, we will summarise the results of this work and look for some of the explanations for these processes.

5. Conclusions: hypotheses and explanations

The comparison of the diachronic processes leading to contrastive connectives in Romance languages has shown many regularities in semantic changes. We have tried to show that these regularities can be effectively captured if a stages model is adopted, characterized by gradualness and by a close link to the type of context. Furthermore, we have argued that gradualness in change consists of discrete partial changes that involve specific features of linguistic items and are triggered in contexts through pragmatic inferences.

Our data confirm the fact that French seems to have a faster pace and to be more innovative, being the most independent among Romance languages, sometimes being ahead and some others going in its own direction. The search for explanations can be, however, only speculative: we will limit ourselves to discussing some hypotheses calling into question the so-called "external factors" involved in this change.

Our first hypothesis rests upon the great differentiation that characterized spoken Latin, leading to a distinct variety of Latin spoken in Gaule. Although we have scarce documents of spoken Latin or Pre-Romance from the 5th to the 8th century, we can safely assume that many important changes developed in that period, which is crucial for the formation of so-called Standard Average European (cf. Haspelmath 2001). On the other hand, recent research has shown that grammaticalization processes giving rise to such crucial categories for Romance such as auxiliaries, definite and indefinite article, or the grammaticalization of reflexive pronoun *se* onto an intransitivizing marker originated still earlier, in the imperial Latin of the first centuries of our Era (Cennamo 2008, Banniard 1992). This would suggest that, at that time, spoken Latin gave birth to a number of innovative features further developed by Romance languages. The role of Latin as a model for innovations clearly appears in the case of adversative connectives, for which Latin itself offered the lexical sources of renovation (*dum interim, tota via, per hoc, per tantum*).

A possible reason behind the faster pace of French would reside in *language contact*: as argued by Hopper and Traugott (2003: 212), a situation of intense and long contact with bilingualism may result in the emergence of new constructions (not necessarily replicated from one of the languages in contact: Heine and Kuteva 2005) and in the restructuring of particular grammatical areas.

We could therefore hypothesize that the long lasting language contact between the Romance vernacular spoken in Gaule and the surrounding Germanic languages could have triggered or accelerated innovation as well as the development of new connective

⁸ We would like to thank an anonymous reviewer for pointing this out.

meanings, along patterns following recurrent tendencies of semantic change (Traugott and Dasher 2002).⁹

Some interesting data and insights are provided by Matras (1998), on universals of grammatical borrowing, at least partially supporting our hypothesis. Matras (1998: 301-305) identifies the implicational hierarchy in (14), according to which in bilingual contexts languages replacing combination markers also replace alternative (disjunctive) markers, and languages replacing alternative markers also replace contrast (adversative) markers:

According to Matras, this implication mirrors the different degrees of "intensity with which the speaker is required to intervene with hearer-sided mental processing activities" (Matras 1998: 305-325) in establishing the relations of combination, alternative and contrast. The more the relation implies a contrast, the more the speaker has to maintain assertive authority despite the denial of the addressee's expectations. In order to do this, bilingual speakers tend to adopt connectives from the pragmatically dominant language.

In our view, the explanation provided by Matras on the one hand points to the deeply intersubjective function of adversative connectives, and on the other hand highlights the boost for innovation and language change that bilingual contexts provide. Adversative connectives are crucial to the expressive potential of speakers, and therefore speakers are constantly in search of new and expressive ways of conveying contrast, determining a high synchronic intra-linguistic variation and a quicker renewal (see Giacalone Ramat and Mauri, in press). As a consequence, we may posit that the intense language contact that characterized Old French might be the ground for its higher rate of innovation in adversative connectives and possibly also for its faster pace. Yet, further historical research is needed in order to confirm our suggestion.

List of Abbreviations

AUX=auxiliary; CLIT=clitic; DEF=definite; F=feminine; FUT=future; GER=gerundive; IMP=imperative; IPFV=imperfective; INDEF=indefinite; LOC=locative; M=masculine; NEG=negation; PFV=perfective; PL=plural; PRS=present; PST=past; PTCP=participle; REFL=reflexive marker; SG=singular; SUBJ=subjunctive; SUPERL=superlative.

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⁹ One may, however, object that *pourtant* only develops its adversative meaning in Middle French, which is already rather remote from the Germanic invasions and the possible Germanic influence, as an anonymous reviewer pointed out. Yet, this issue is in need of further research.

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