Additive Particles in Romance and Germanic Languages: Are They Really Similar?

Sandra Benazzo (Lille) and Christine Dimroth (Münster)

Abstract

The starting point of this paper is the observation of an unequal frequency of the additive particle *auch* in German as compared to the paucity of its French counterpart *aussi*, in L1 and L2 developmental data as well as in adult native speakers' production, which leads to an investigation of the reasons for the observed difference in language use.

The paper brings together findings on the structure and discourse integration of utterances containing additive particles (translation equivalents of *also*) in written sources from French and German and in oral production data from speakers of French and Italian, German and Dutch. Next to data from native speakers, developmental data from learners of French and German (as L1 and L2) are shown to be relevant sources of information about the integration of the optional particles into utterances and at the discourse level. The developmental data reveal a difference between Romance and Germanic languages, concerning not only the frequency of additive particles, but also their interaction with early markers of assertion: *auch/ook* function as precursors of the assertive value, in competition with the expression of assertion through finiteness, whereas no such interaction is attested for *aussi/anche*.

A comparison of native speakers' preferential choices concerning the information unit highlighted to enhance discourse cohesion confirms the differences between the two language families: speakers of Germanic languages preferentially use particles and Verum Focus, i.e. anaphoric links operating on the assertion value of the relevant utterances, whereas speakers of Romance languages choose anaphoric links operating on the utterance's descriptive content (entities and predicate). Although additive particles across languages share a similar basic meaning, only the Germanic ones are integrated in a system of assertion-related items that push their speakers to apply a discourse perspective oriented towards a comparison of assertions.

1 Introduction

The basic additive particles of French (*aussi*), Italian (*anche*), Dutch (*ook*), and German (*auch*) are optional elements that can occupy different positions in a sentence. All four languages use their particle's mobility in order to signal which part of the sentence is affected by its additive meaning. Despite some cross-linguistic variation concerning their position in the sentence (absolute restrictions and/or the way positions are exploited for scope marking), the four words share the same additive meaning. They indicate that the utterance in which
they occur is claimed to hold in addition to a contextually relevant one in which the piece of information in the particle's scope (see square brackets in (1)) is replaced by a different piece of information of the same type (Klein 2009).

(1) Context: John recently bought a new house
   a) Gianni è anche [andato in vacanza].
      'John also went on holiday'
   b) Jan is ook [op vakanzie gegaan].
   c) Johannes ist auch [in Urlaub gefahren].
   d) Jean est aussi [parti en vacances].

Given these similarities, it comes as a surprise that Blumenthal (1985)1 qualified aussi and auch as faux amis rather than blood brothers. Intrigued by the abundance of 'superfluous' additive particles in the French compositions written by his German students (Blumenthal found these texts "parsemées souvent d'emplois bizarres, sinon aberrants, du mot aussi, que l'apprenant identifie à tort avec auch", p. 1452), he systematically compared the frequencies of the two particles in newspaper corpora and in two novels plus their translations in the respective other language. The results showing that both particles are indeed used with amazingly different frequencies in both languages are summarized in Table 1.

<table>
<thead>
<tr>
<th>Corpus</th>
<th>Additive particles</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Le Monde 4.1.1984 (42047 words)</td>
<td>46 aussi</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>14 également</td>
<td></td>
</tr>
<tr>
<td>Frankfurter Allgemeine 17.1.1984 (47910 words)</td>
<td>197 auch</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>6 ebenfalls</td>
<td></td>
</tr>
<tr>
<td>H. Hesse (1947): Der Steppenwolf</td>
<td>324 auch</td>
<td>75 aussi, 48 même in scalar contexts</td>
</tr>
<tr>
<td>A. Camus (1961): L'étranger</td>
<td>41 aussi</td>
<td>71 auch (33 replacing the original aussi, 38 added)</td>
</tr>
</tbody>
</table>

Table 1: Results summarized from Blumenthal (1985: 146).

Even though this sample certainly contains a relevant number of auch functioning as modal particles (Abtönungspartikeln) and not as additive (focus) particles, Blumenthal provided convincing empirical evidence for Strohmeyer's (1924) earlier classification of auch as a word that 'remains unexpressed in French' (quoted after Blumenthal p. 145). Blumenthal interprets the preponderance of auch as reflecting German speakers' preference for the expression of identity or analogy between chunks of information in discourse whereas French speakers rather rely on causal relations and can therefore get by with less uses of aussi: "Nous ne croyons pas trop nous avancer en supposant à l'allemand une importance plus grande de...

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1 We wish to thank Anna-Maria de Cesare who pointed out this interesting publication to us.
2 '…littered with strange if not erroneous uses of the word aussi that the learner wrongly identifies with auch' (our translation).
l’identité, catégorie de langue et de pensée. Le français, lui, est axé davantage (…) sur le principe de la causalité." (Blumenthal 1985: 148)³.

Blumenthal maintains that these gradual differences in text construction reflect what speakers find important on a relatively general level. In doing so, he adheres to the Sapir-Whorf hypothesis, according to which language diversity affects the ways speakers perceive and conceptualize the world ("we dissect nature according to the lines that are laid down by our native language", Whorf 1956: 212). This is different for Slobin (1996) who also proposes a language specific 'Thinking for Speaking' but assumes that the impact of grammatical or lexical properties is limited to the cognitive processes occurring before and during speech production. According to his proposal, speakers tend to express properties of situations in ways that are facilitated by structural features of their language. Importantly, however, speakers are not obliged to adapt their discourse to the structure of their language. Quantitative studies typically reveal tendencies rather than categorical differences between speakers of different languages. Furthermore, the impact of linguistic structure is seen as being limited to the preparation of speech and not as informing any broader claims about the relation between 'language and thought'.

Blumenthal's (1985) paper closes with a classification of six different readings of auch (including scalar and modal meanings) of which only three are shared by aussi. Since then multiple studies have been devoted to the description and understanding of additive and scalar focus particles in different languages (see König 1991 and Gast/van der Auwera 2011 for an overview⁴). The German modal particles were mainly studied in their own right (e.g. Weydt 1969), and attempts to capture all readings of a particle like auch in the same framework are scarce (Pozlewicz 2011).

Still, Blumenthal's basic observation concerning language specific frequencies of additive particles seems to be valid for spoken language corpora as well. Table 2 summarizes the results of an elicitation study in which the retellings of a picture story by child and adult native speakers of French and German were compared with respect to the frequency of additive (focus) particles proper (Benazzo/Dimroth/Perdue/Watorek 2004).

<table>
<thead>
<tr>
<th></th>
<th>Age of speakers</th>
<th>Total number of retellings</th>
<th>Number of additive particles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>French</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 years (N = 15)</td>
<td>7 years (N = 15)</td>
<td>45</td>
<td>41 aussi</td>
</tr>
<tr>
<td>7 years (N = 15)</td>
<td>adults (N = 15)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>German</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 years (N = 10)</td>
<td>7 years (N = 8)</td>
<td>27</td>
<td>109 auch</td>
</tr>
<tr>
<td>7 years (N = 8)</td>
<td>adults (N = 9)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Results summarized from Benazzo et al. (2004).

³ We do not think to get too much ahead of ourselves when assuming for German a bigger importance of identity, a category of language and thought. French, on the other hand, is based more on the principle of causality (our translation).


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Even though modal particles are not included in Table 2, the frequency differences between *aussi* and *auch* seem to be even more dramatic in spoken language than in the written language corpora investigated by Blumenthal. As will be shown in the following, both French and German seem to share their tendencies with typologically close languages. In narrative discourse, speakers of Italian use the additive particle *anche* as sparsely as speakers of French use *aussi*, whereas speakers of Dutch use *ook* as abundantly as speakers of German use *auch*.

The aim of this paper is to investigate reasons for the observed difference in language use and to find out (i) if it is an isolated and idiosyncratic difference or whether it rather goes hand in hand with other properties of the languages under study, and (ii) if this has consequences for discourse organization that might be described in terms of 'Thinking for Speaking' (see above). In order to do so, we will first provide a brief cross-linguistic sketch of structural similarities and differences (Section 2) and then look at the simple but revealing structural properties of utterances produced by beginning L1 and L2 learners (Section 3). From there we will turn to the study of native speaker data (elicited narrations) from the relevant languages (Section 4) and finish with some conclusions and tentative answers to our research questions (Section 5).

### 2 Cross-linguistic similarities and differences

Languages differ in the way in which they use the positions of additive particles in order to indicate which parts of their utterances are affected by the particle's additive meaning. In some cases languages offer more than one possibility to indicate that a particular constituent is in the scope of the particle, e.g. the grammatical subject in (2). Dutch and German use prosody (in particular, stressed vs. unstressed variants of the particles) in order to disambiguate utterances when a position is compatible with more than one scope reading. For ease of comparison, corresponding constituents and the positions in which additive particles can occur in at least one of the languages are aligned in example (2); stressed variants of *ook/auch* are printed in small caps.

(2) **Context: Paul went on holiday**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>b) ook [Jan]</td>
<td>is</td>
<td>OOK</td>
<td>op vakanzie gegaan</td>
</tr>
<tr>
<td>c) auch [Johannes]</td>
<td>ist</td>
<td>AUCH</td>
<td>in den Urlaub gefahren</td>
</tr>
<tr>
<td>d) [Jean] aussi</td>
<td>est</td>
<td>(lui) aussi</td>
<td>parti en vacances (lui) aussi</td>
</tr>
</tbody>
</table>

A comparison of examples (1) and (2) reveals that Italian seems to obey a simple and clear principle for scope marking, according to which the particle is placed left adjacent to the affected constituent. In case this constituent is moved, the particle moves along. Left adjacency is also an option for Dutch and German, but when the affected constituent is preceding the finite verb, as in (2), a post-finite position of the particle seems to be the default.

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5 Example (2) shows all prototypical positions for additive particles. In Italian, additional positions (e.g. right adjacent to the subject) are possible in restricted contexts (cf. Andorno 2000).

6 Note that example (1) does not contain all possible positions for the additive particles.
In this configuration, but not with left adjacency as in (1), the particle bears a pitch accent. French offers even more possibilities than Dutch and German. A position preceding the subject is excluded but the particle can be right-adjacent to the affected constituent. Positions later in the sentence are also possible. In this case, the particle's scope can be disambiguated by inserting an optional pronoun referring to the subject entity.

In the following, we will mainly be concerned with relatively simple utterances of the type illustrated in example (2), where neither subtle meaning differences nor the restrictions for utterance integration shown above can account for the differences in particle use (see Table 2). We will first look at the function of additive particles in elementary learner languages in order to see if there are differences in the acquisition of Germanic vs. Romance languages that could be telling for the functioning of the particles in the fully-fledged native variants of these languages.

3 Evidence from L1 and L2 acquisition

The starting point of the following comparison is the early "root infinitive stage" (Lasser 2002) attested in the L1 acquisition of the verb second languages German and Dutch. The relevant developmental stage is characterized by the abundant use of non-finite verbs occurring in their utterance final base position. Whereas a phase of non-finite utterance organization, the so-called Basic Variety (Klein/Perdue 1997), can be observed in the untutored adult L2 acquisition of Romance languages as well, the root infinitive phase in L1 acquisition seems to be a particularity of Germanic languages. In the non-finite varieties produced by L1 and L2 learners of German and Dutch, additive particles play a particular role that will be illustrated in Section 3.1. The findings will be compared to the data from early L1 and L2 learners of Italian and French in Section 3.2.

3.1 German and Dutch

Additive particles are one of the first operator type elements used by young children acquiring German (Nederstigt 2003) and Dutch (Jordens 2012) as their first language. The particles (auch in German and ook in Dutch) typically occur among the first 50 words and are thus part of the children's lexical repertoire when they start to produce multi-word utterances at the root-infinitive stage. The particle thereby typically occurs before the non-finite VP, as illustrated in (3).

(3)

a) auch asteigen (Valle 1;11, example from Dimroth et al. 2003)
   he also in-step

b) ikke ook boot hees (Andrea 2;0, example from Jordens/Dimroth 2006)
   I also boat been

The particles in these structures have been interpreted as early pragmatic 'links' between topics and predicates at a non-finite "conceptual ordering stage" (Jordens/Dimroth 2006). The additive particles express 'semantic finiteness' (Klein 2006) in child utterances that are not yet

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7 Slight differences in information structure are ignored here (see Dimroth 2004).
marked for syntactic finiteness. In that sense additive particles are functional precursors for the expression of affirmative assertions, which is probably why they turn into veritable stumbling blocks (Dimroth 2009) when children learn that this function has to be expressed by the finiteness markings required in their target language (finite morphology and verb raising to V2). Penner/Tracy/Weissenborn (2000: 138) summarize the findings of their corpus study for German: "Even after V2 has become productive, utterances with auch often drop the verb, the verb is non-finite, or it does not raise." The examples in (4) (from Penner et al. 2000) illustrate this case.

(4)

<table>
<thead>
<tr>
<th></th>
<th>Simone Corpus (1;10–2;04)</th>
<th>Juwal Corpus (up to 2;4); 80-90% finite verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>auch (N = 107)</td>
<td>auch (N = 80)</td>
</tr>
<tr>
<td></td>
<td>nicht (N = 37)</td>
<td></td>
</tr>
</tbody>
</table>

In the utterances in (4), finite light verbs are initially present, showing that the children can use them, and subsequently dropped in utterances containing the particle auch. In the second utterance in (4c), in addition, a past participle is replaced by the same verb in the infinitive. The additive particles in (4a-c) seem to have anaphoric relations with the assertion operators in the preceding utterances. The observation that finiteness and additive particles are competing for a position and/or for the expression of assertion (semantic finiteness) is confirmed by quantitative data from Penner et al. (2000) in Table 3 that compares the amount of finite verbs in utterances with and without auch.

<table>
<thead>
<tr>
<th>Corpora</th>
<th>Particles</th>
<th>in finite utterances</th>
<th>in non-finite utterances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simone Corpus (1;10–2;04)</td>
<td>auch (N = 107)</td>
<td>44</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>nicht (N = 37)</td>
<td>24</td>
<td>13</td>
</tr>
<tr>
<td>Juwal Corpus (up to 2;4); 80-90% finite verbs</td>
<td>auch (N = 80)</td>
<td>9</td>
<td>71</td>
</tr>
</tbody>
</table>

Table 3: Summary of quantitative data on the distribution of auch and finiteness in German child language (summarized from Penner et al. 2000).
The numbers for the negation particle nicht in the Simone corpus show that the tendency towards a complementary distribution of auch and finiteness cannot be due to the additional complexity induced by the particle. We therefore conclude that it is rather the competition for a function than the competition for a position that is responsible for the patterns illustrated above.

Similar patterns can be observed for the untutored second language acquisition of German. The example in (5) illustrates the complementary distribution of auch and finite copula-verbs/auxiliaries in a stretch of learner discourse.

(5) Cevdet (L1 Turkish, ESF-Corpus; cf. Dimroth 2009)

die sind runtergefallen
they have fallen-down

der mann auch runtagefallen
the man also fallen-down

(…)
die mädchen und chaplin sind aufgestanden
the girl and chaplin have got-up

und die polizei auch aufgestanden
and the police also got-up

A quantitative analysis of finiteness in untutored adult L2 learners of Dutch and German revealed that finiteness was more often marked in utterances without particles than in utterances containing particles (Schimke et al. 2008). We can thus conclude for these languages that upcoming carriers of finiteness are often eliminated when additive particles are present in the position between topic and predicate. The competition for the expression of assertion indicates that additive particles can be considered as functional precursors of finiteness in L1 and L2 acquisition of these languages. It might also be taken as a hint indicating that the meaning contribution of the particles is intricately linked to the expression of assertion in Dutch and German (cf. the classification "assertion-oriented"; Dimroth et al. 2010 and Section 4).

Before we look at potential consequences for adult speech, we will have a brief look at the acquisition of French and Italian, where the situation is entirely different.

### 3.2 Italian and French

As was shown in Section 1, the Italian particle anche typically precedes the affected constituent. When a situation is claimed to hold for a subject/topic in addition to another one (as is the case in the examples discussed in 3.1 for German and Dutch), the particle would have to occur left adjacent to the subject. In these contexts it cannot occur in a 'linking' position between predicate and topic and is therefore less suitable than ook/auch to function as an assertion marker in early learner language. It is therefore not astonishing that Andorno (2000, 2005) comes to the conclusion that anche does not affect the development of finiteness in L2 Italian.8

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8 We are not aware of any systematic study of the L1 acquisition of anche.
The picture for French is slightly more complicated. Instead of being the first operator after negation in L1 speech\(^9\), the acquisition of *aussi* is preceded by the acquisition of *encore* 'still/another' (Boysson Bardies 1996; Gayraud 2004), as shown in Table 4.

<table>
<thead>
<tr>
<th>Corpora</th>
<th>encore</th>
<th>aussi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grégoire (1;9–2;6)</td>
<td>24</td>
<td>8</td>
</tr>
<tr>
<td>Philippe (2;1–3;3)</td>
<td>70</td>
<td>52</td>
</tr>
</tbody>
</table>

Table 4: Frequency of *encore* and *aussi* in French L1 (summarized from Gayraud 2004).

It is also revealing to compare the absolute numbers of *auch* (107) and *aussi* (8) in the corpora of Simone (1;10–2;4) and Grégoire (1;9–2;6) that cover nearly the same age range. Whereas *auch* and *ook* are attested nearly exclusively in utterance internal position in early German and Dutch, *aussi*, while being more variable, shows an initial preference for the utterance peripheral positions, as illustrated in example (6) from Gayraud (2004). *Aussi* in utterance internal position appears only later.

(6)

a) Grégoire (2;5)

**Adult:** elle met ses sandales Anne Sophie
'she puts on her sandals Anne Sophie'

**Child:** et moi aussi je mets mes sandales
and me also I put-on my sandals

b) Philippe (2;11)

**Adult:** tu as fait de très jolis dessins là
'you have made very nice drawings there'

**Child:** regarde, j'ai fait des petites voitures aussi
look, I've made small cars also

The relevant literature does not contain evidence for an interaction of the additive particle with finiteness (e.g. a tendency towards a complementary distribution of *aussi* and finite verbs).

Adult second language learners of French show a different order of acquisition. In untutored learners, *aussi* is attested (next to negation) before *encore* (Benazzo 2002). The stepwise structural integration, however, seems to proceed rather parallel to L1 acquisition from an utterance external (7a-b) to an utterance internal position (7c) (cf. Perdue et al. 2002; Benazzo 2005; Giacomi et al. 2000; Véronique 2012).

(7) Berta (L1 Spanish; from Benazzo 2005)

a) le garçon /ele/ en classe spéciale aussi
the boy he-is in class special also
'the boy is in a special class too.'

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b) moi **aussi** je ne sais pas
me too I **NEG** know **NEG**
'I don't know either'

c) il y a **aussi** un restaurant
there-is also a restaurant

The utterance internal 'linking' position of **aussi** is only attested after finite verbs are available as well and there are no signs of a competition between finite verbs and the additive particle.

Thus to summarize, we argue that additive particles compete with finiteness for the expression of assertion in early L1 and L2 learner varieties of German and Dutch but not in learner varieties of Italian and French. Do additive particles express the addition of assertions (Klein 2009) in some languages and not in others? More generally, do speakers of Dutch and German express an additive relation between different assertions when they use **ook/auch** in 'linking' position, whereas additive particles in Italian and French operate more locally and therefore do not get in the way of finiteness marking during acquisition?

4 Scope particles and discourse perspective in Germanic and Romance languages: native speakers' production

The studies presented in the previous section highlight salient differences in the L1/L2 acquisition process of additive particles between Germanic and Romance languages, which concern both their relative order of emergence, their frequency in the data and their variable interaction with the acquisition of finiteness marking.

In this section, we point out further differences concerning their use by adult native speakers, whose discourse is by definition not affected by any acquisitional problems with finiteness marking. More precisely, we report some results from a cross-linguistic study on perspective taking and discourse cohesion in Germanic and Romance languages (Dimroth et al. 2010), which compares the anaphoric linking devices (including scope particles) attested in oral narrative discourse produced by native speakers of German, Dutch, French and Italian. The use of a specific visual stimulus ensured the collection of more controlled data from different languages, which were then employed to verify whether asymmetries in the (repertoire and) use of scope particles influences discourse structure10.

As a matter of fact, numerous studies have attested the presence of the 'Thinking for Speaking' effect proposed by Slobin (1996), namely a correlation between certain typological features of a language and its speakers’ preferences in discourse organization. Verbalizing any situation presents the speaker with a series of choices, such as deciding which aspects of the situation to express, how to express them and in which order. These choices are, at least

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10 The study was conducted in the framework of the LANGACROSS project (2008–2010) financed by German DFG and French ANR. It applies a cross-linguistic and comparative approach in order (a) to understand language use and acquisition in different languages, and (b) to gain insights into speakers' conceptual representations and their correlations with language specific properties. In the project, two main themes are investigated: discourse relations and reference to time/space. In both cases, the same stimuli are used to compare native speakers' production in different languages, child L1 acquisition at different ages or adult L2 acquisition for different L1/L2 combinations. Only adult native speakers' data are considered in this paper.
partly, constrained by the typological features of each language. The typological influence has been attested in particular for cross-linguistic differences in the lexicalization patterns of motion events (cf. Talmy's distinction between satellite vs. verb framed languages, applied for example in Slobin 2006; Hickmann 2006; Han & Cadiero 2010), in the expression of spatial concepts (cf. Carroll/von Stutterheim 1997; Carroll et al. 2000) and in the variable degree of grammaticalization of time relations, in particular verbal aspect (cf. von Stutterheim et al. 2002; von Stutterheim/Nüse 2003), which push the speakers of a given language to adopt a preferential conceptualization of the information to be verbalized (also described as 'perspective taking' or 'perspectivation'). As put by Klein/von Stutterheim:

One possible explanation for this intricate interrelation between linguistic structure and perspectivation could lie in the eminent role of obligatory linguistic categories for conceptualization.

(Klein/von Stutterheim 2002: 24 2008: 37)

The cross-linguistic variation in the expression of obligatory linguistic categories seems indeed a plausible explanation for cross-linguistic variation in discourse structure. Note however that scope particles are not obligatory categories: although they contribute to strengthening discourse cohesion in a narrative, their presence is grammatically optional. As it will become clearer in the next section, cross-linguistic differences in their structural properties nevertheless lead to differences in perspective taking in discourse.

In the following we first explain the structure of the experimental task used to elicit narrative discourse (section 4.1), then discuss the results for two narrative contexts (additive and contrastive) which show remarkable differences between Germanic and Romance speakers' use of scope particles (section 4.2 and 4.3).

4.1 A narrative task for cross-linguistic comparisons of discourse cohesion

The study realized by Dimroth et al. (2010) is focused on the cohesive devices adopted by speakers of different languages in specific informational contexts. The analysis is based on narrative data elicited with a video made of 30 short sequences (the Finite Story), showing the misadventures of three protagonists during a fire episode. The informants were asked to retell what happened in the story immediately after having watched each sequence.

The video was designed to elicit informational contexts, which deviate from the prototypical flow of information attested in narratives. The basic information structure of an utterance, or stretches of discourse, is often analyzed in relation to an (explicit or implicit) question (cf. Givón 1983; Lambrecht 1994; Klein/von Stutterheim 2002). Consider the narrative stretch reported in (8).

(8) Context: There is a fire in the house of Mr. Red, Mr. Green and Mr. Blue.
   Here comes Mr. Red
   He calls the fire brigade
   Then he jumps out of the window
   And Ø tries to warn his neighbors…

Both the discourse on the whole and the individual utterances it consists of can be understood as answering an implicit question like 'What happened then to X?". This results in a
prototypical narrative structure in which the protagonist (here Mr. Red) is kept constant from an utterance to the next, while the relevant predicates that hold for the entity and the time interval talked about constantly change. Cohesive devices are therefore typically attested in the domain of the topic entity (cf. the use of personal pronoun and zero anaphora in (8)) or of the time intervals for which the successive predicates hold (cf. implicit or explicit 'and then'). The contexts analyzed in Dimroth et al. are instead sequences like (9), where entities are constantly changing from one utterance to the next, while the predicates are semantically related in that they refer to similar (9a) or opposite (9b) situations.

(9)  
Context: There is a fire in the house of Mr. Red, Mr. Green and Mr. Blue.

  a) Mr. Red wakes up  
     Mr. Blue wakes up  
     …

  b) Mr. Red does not jump out of the window  
     Mr. Green does jump out of the window

In the first case (cf. 9a), two characters perform the same action: the changing information unit corresponds to the topic entity. This is the context eliciting additive particles like auch/aussi: their presence signals that the relevant assertion is also valid for another entity, thus creating an anaphoric link with the previous utterance. In the second case (cf. 9b), two characters perform opposite actions: the change of information concerns both the domain of entities and the polarity of the assertion. The contrastive context favors the use of assertive particles (like doch in German or bien in French), which also create an anaphoric link to the previous utterance by highlighting the switch from negative to positive polarity of a similar assertion. In both cases, the action represents the constant ('given') piece of information, while the changing ('new') piece of information concerns either the entity (Mr. Blue, Mr. Green, Mr. Red) or the entity and the polarity (doing instead of not doing X)11.

The analysis focused on the different (lexical, grammatical, prosodic) linking devices that speakers would use to signal the information structure of such contexts, and thus reinforce discourse cohesion. With respect to the previous section, we shift therefore from the observation of specific forms (scope particles) to the study of certain informational contexts that should favor their production.

This task has been used with native speakers of two Germanic languages (German and Dutch) and two Romance languages (Italian and French). For each language 20 native speakers have been recorded, producing a total of 80 retellings. As it will become clear in the next sections, the target contexts analyzed allow the speaker to adopt different discourse perspectives. Our aim was actually to verify if there is a correlation between the speakers' language and their choices in terms of linguistic means and discourse structure, in other words if we could find evidence for a Germanic and a Romance way of 'Thinking for Speaking'.

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11 In both cases the time interval is constantly shifted.
4.2 Discourse relations: the additive context

The first context analyzed corresponds to film segments in which a similar situation applies sequentially to two different protagonists. For example, the speaker first sees Mr. Blue going to bed (scene 3), then Mr. Green going to bed (scene 4). Such sequences were meant to encourage the use of an additive particle, like in (10b), signaling that the same situation applies to an additional topic entity; however, the data showed that speakers could also establish an anaphoric link on the predicate, like in (10c), thus highlighting the identity of the situation. Both options are possible, given that the two relevant scenes immediately follow each other. Note that the speaker can also choose to mark neither of these relations by expressing a basic assertion with no anaphoric link, as in (10a).

(10) antecedent: Mr. Blue goes to bed
   a) Mr. Green goes to bed
   b) Mr. Green also goes to bed
   c) Mr. Green does the same

Each of the four languages analyzed presents similar means to mark both relations, namely additive particles, on the one hand (Fr. aussi, également, It. anche, Ge. auch, Du. ook) and different anaphoric devices expressing the maintenance of the predicate, on the other (Fr. faire la même chose, It. fare la stessa cosa, Ge. dasselbe tun, Du. hetzelfde doen). The global proportion of marked utterances in this context (either for an additive or an identity relation) is actually similar in all of the four languages, the variation being comprised between 58% and 67%. These percentages reflect the presence of a cross-linguistic consensus on the importance speakers attach to signaling this information configuration and, at the same time, the optionality of the relevant markings.

Native speakers differ however in the means used to this end and consequently on the discourse perspective chosen. The following figure considers only marked utterances and quantifies the proportion of speakers who, in these contexts, choose to explicitly highlight the identity of the situation (as in 10c) instead of marking an additive relation (as in 10b).

![Figure 1: Discourse perspectives: identity of situation vs. additive relations](image)

The additive relation is actually dominant in the production of the four groups of speakers, but is more frequently encoded by speakers of Germanic languages. Romance speakers, instead, quite often highlight the identity of the predicate via anaphoric expressions like faire.
de meme/fare lo stesso (ex. 11a–b), which are almost entirely absent from the production of Germanic speakers. The contrast is particularly evident between French (15 anaphoric links on the predicate out of 60 contexts) and German (0 occurrences of this relation).

(11)  **Identity of the predicate**

<table>
<thead>
<tr>
<th></th>
<th>French</th>
<th></th>
<th>Italian</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>M. Rouge / Mr. Red</td>
<td>fait / does the same</td>
<td>de même / la même chose</td>
</tr>
<tr>
<td>b</td>
<td>la stessa cosa / the same thing</td>
<td>viene ripetuta dal signor Rossi</td>
<td>is repeated by Mr. Red</td>
</tr>
</tbody>
</table>

French also stands out for the variety of the means attested to encode the additive relation which is expressed by different particles (aussi, également, both replaced by non plus in negative contexts) as well as by other adverbial expressions (as in M. Rouge s'est mis dans son lit à son tour), whereas one dominant additive item is attested in the other languages (It. anche, Ge. auch, Du. ook).

These results suggest a first explanation for the unequal frequency of aussi vs. auch that was already attested in Blumenthal (1985) and Benazzo et al. (2004): the specificity of the same informational context can be highlighted via two different discourse relations, which seem to be in competition in French. This also means that speakers of French do not find "l'identité, catégorie de langue et de pensée" (Blumenthal 1985) less important than the speakers of German – both groups only differ in the way they mark the similarity between context information and information expressed in their utterances.

Independently of this asymmetry, the native data confirm a second salient difference concerning the integration of additive items in the utterance and their relative scope. As was mentioned in section 2, a typical feature of additive particles is their possibility to occupy different positions and to show variable stress patterns, in particular when the element affected is a unit of topic information (as in example 2). Moreover, the developmental data from L1 and L2 acquisition support the hypothesis that additive particles can anaphorically relate to the assertive value of a preceding utterance. On the grounds of such differences concerning both, particle position/prosodic marking and scope, a distinction was made between (a) utterances where the particle is adjacent to the expression of the topic entity (unstressed variant in Germanic languages), which were considered as marking an *addition of entities*, and (b) utterances where the particle carries a contrastive stress and is integrated in the linking position, considered as marking an *addition of assertions*. This different is reminiscent of the distinction between (a) 'association with focus' and (b) 'association with a contrastive topic' proposed by Krifka (1999) and Dimroth (2004). The following table illustrates some examples for both configurations for German, Dutch and Italian.
Some of the occurrences in the French data could not easily be classified as belonging to either of these categories. For the category 'addition of entities' we included utterances where the particle is placed right adjacent to the subject (M. Rouge aussi va se coucher) as well as utterances where the particle is inserted elsewhere (included in the linking position) but accompanied by a pronoun copy referring to the entity, with which it forms an intonational unit (M. Rouge va lui aussi se coucher). For the category 'addition of assertions', we relied on the position criterion, given that prosody was not discriminating the scope of aussi. However, French also offers the possibility to place the additive particle in utterance final position: the analysis of the relevant utterances did not reveal a prosodic marking signaling the scope of the additive particle. These occurrences are therefore classified as undecidable, hence the question mark in the following table.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Link</th>
<th>Predicate</th>
</tr>
</thead>
<tbody>
<tr>
<td>M. Rouge aussi</td>
<td>va</td>
<td>se coucher</td>
</tr>
<tr>
<td>M. Rouge</td>
<td>va lui aussi</td>
<td>se coucher</td>
</tr>
<tr>
<td>M. Rouge</td>
<td>va</td>
<td>se coucher lui aussi</td>
</tr>
<tr>
<td>M. Rouge</td>
<td>va aussi</td>
<td>se coucher</td>
</tr>
<tr>
<td>M. Rouge</td>
<td>va</td>
<td>se coucher aussi</td>
</tr>
</tbody>
</table>

Table 6: Entity addition vs. assertion addition in French.
Under this point of view the contrast is particularly evident between speakers of Dutch and German, on the one hand, and speakers of Italian, on the other: the former highly prefer to use the stressed variant of the particle in the linking position, while the latter always use the unaccented particle and place it immediately before the topic entity. With a caveat concerning the undecidable occurrences of aussi, French seems to align with Italian, since in most cases the additive particle marks an addition of entities.

Native speakers' data thus confirm the presence of cross-linguistic differences in the frequency and use of additive particles, which lead to different discourse perspectives in Germanic and Romance languages: the former are more oriented towards anaphoric links on the assertion level, while the latter prefer to highlight anaphoric links on the predicate (identity relation) or on the entity domain (addition of entities).

The next question is whether a similar opposition between Romance and Germanic languages also holds for the contrastive contexts, which elicit particles expressing contrastive affirmation.

### 4.3 Discourse relations: the contrastive contexts

The contrastive context corresponds to video segments in which a given situation applies to two of the protagonists, while the opposite situation applies to the third protagonist. For example, the firemen first invite Mr. Green (scene 24) and Mr. Red (scene 25) to jump out of the window, but both refuse to do so; then the firemen invite Mr. Blue (scene 26) who, contrary to his neighbors, follows their suggestion and jumps out of the window.

This context presents an information configuration implying a change in two different information units: the entity and the polarity of the assertion, which switches from negative to positive. The speaker can thus highlight a contrast either between topic entities, as in (12b), or between assertions, as in (12c). Once again, there is no obligation to encode any of these relations: the speaker can also simply state a basic utterance, as in (12a).

(12) Context: Mr. Green does not jump out of the window
   a) Mr. Blue jumps out of the window
   b) Mr. Blue **on the other hand** jumps out of the window
   c) Mr. Blue does **indeed** jump out of the window

As it was the case for the previous context, the percentage of marked utterances attested in the four languages is very similar. The data also reveal the possibility of marking both relations in the languages analyzed, although by quite different means. Thus, the contrast between entities is realized by a variety of structures, ranging from the use of strong pronouns (13a) or lexical markers of opposition (13b), to the expression of unicity, through cleft constructions (13c) or restrictive particles (13d), and the use of a contrastive intonation (13e-f).

(13) **Contrast of Topic entities**

   a) M. Bleu **lui** il saute
      Mr. Blue him he jumps
Although attested in each of the four languages, this relation is more frequently encoded by speakers of Romance languages. The means employed for doing so are however different: most French speakers resort to strong pronouns (as in 13a), which is a grammaticalized means to mark a contrastive topic, whereas speakers of Italian rather use lexical markers of opposition or cleft constructions associated with the expression of unicity (13b-c).

The contrast between assertions is expressed either by affirmative particles, like Du. wél (14a), Ge. doch (ex. 14b) and Fr. bien (ex. 14c), or by a contrastive intonation on the finite verb, the so-called Verum focus (Höhle 1992), that can moreover be combined with particles, as in (13d-e).

(14) Contrast of assertions

| a) Meneer Blau springt WÉL uit het raam | Mr. Blue jumps out of the window |
| b) der hat sich dann entschieden DOCH zu springen | he has himself then decided to jump |
| c) Monsieur Bleu a bien voulu sauter | Mr. Blue has wanted to jump |
| d) deswegen IST er dann wohl auch gesprungen | therefore he then also jumped |
| e) der blauwe mannetje heeft geen keuze meer dus die MOET wel springen | the blue man has no choice anymore therefore he MUST jump |

This relation is more frequently encoded in Germanic languages, and especially in Dutch. German and Dutch also present some differences in the preferred means for doing so: particles are more frequently used in the Dutch data, while German speakers resort more often to Verum focus (cf. also Turco et al. 2014).

As for Romance languages, affirmative particles are attested only in French and very rarely (bien in ex. 14c is actually the sole occurrence for this context), while they seem absent from the Italian data, although some constructions with a similar meaning are available. Similarly,
contrastive intonation is in principle possible in both Romance languages (cf. Turco et al. 2012), but rarely attested in these data. More precisely, a few speakers contrastively stress the non-finite part of the verbal form (typically the past participle) instead of the finite verb (as do the German/Dutch speakers in 14d-e), thus leading to ambiguity concerning the scope of the contrast (the lexical predicate or the polarity of the assertion).

The quantification of marked utterances for each of the two relations is given in Figure 3.

![Figure 3: Discourse perspective: entities vs. assertions contrast (2 contexts, 20 speakers per language).](image)

The figure shows the presence of a clear-cut opposition between speakers of Romance languages, who prefer to mark the entity contrast, and Dutch speakers, who show a clear preference for the contrast of assertions, whereas German seems to be in-between.

Regarding this point, it is useful to underline that the preferred marking attested in German for this relation is intonation. Given that we applied very rigorous criteria for prosodic markings, considering only cases of Verum focus when the stressed finite verb was not in the utterance final position, the real proportion of this marking was probably underestimated. The application of more tolerant criteria (i.e. the inclusion of contrastively stressed verbs in sentence final position) would give the proportions depicted in Figure 4, where German speakers are again more similar to Dutch speakers as for their preferential discourse perspective.

![Figure 4: Discourse perspective: entities vs. assertions contrast (inclusion of contrastively stressed verbs in utterance final position).](image)
The comparison of the results for both additive and contrastive contexts shows the presence of strong similarities between the two Germanic languages, i.e. their speakers' preference for the use of (additive and affirmative) particles or Verum Focus to mark addition or contrast between assertions. In both languages, additive and affirmative particles form a homogenous set of means – sharing the same linking position and stress pattern – which allow the speaker to create anaphoric links on the assertion level. In other words, the underlying question answered by the speakers of German and Dutch seems to be: "What about Mr X, does he perform action y or not?"

On the other hand, speakers of Romance languages are less systematic in their choice of linguistic means. According to the context and to the language, they might use strong pronouns, marked word orders, lexical markers of opposition, scope particles, and so on. Nevertheless, they share the tendency to mark addition and contrast either between topic entities or in the domain of the lexical predicate (cf. expression of identity of situations for additive contexts). This preference is clearly linked in French to the availability of a grammaticalized means to refer to contrastive topics, namely strong pronouns, which are attested in both contexts. If we look at both Italian and French, the question underlying the relevant utterances does not concern the assertion value as in German and Dutch, but rather "What happens to Mr X with respect to Mr. Y and Mr. Z?", as their utterances mostly induce a comparison of contrastive topics.

5 Summary and conclusions

The starting point of this paper was the statement of an unequal frequency of the additive particle auch in German as compared to the paucity of its French counterpart aussi, in developmental data (L1 and L2 learners) as well as in adult native speakers' production, which led to an investigation of the reasons for the observed difference in language use: in particular, we aimed to find out (i) whether the phenomenon represents an isolated and idiosyncratic difference between French and German or rather goes hand in hand with other properties of the languages under study, and (ii) if this has consequences for discourse organization that might be described in terms of 'Thinking for Speaking'.

In order to answer these questions, we first reviewed the results of several studies on L1/L2 acquisition of additive particles in German and French, extending our observations to two more languages that are typologically related to the first two, namely Dutch for Germanic languages and Italian for Romance languages. The developmental data confirmed the existence of a contrast between these two language families, concerning not only the frequency of such particles, but also their interaction with early markers of assertion: auch/ook function as precursors of the assertive value, in competition with finiteness, whereas such an interaction is not attested for aussi/anche.

Next, we compared native speakers' discourse in the same four languages, focusing on their preferential choices to express two specific narrative contexts, the first eliciting additive particles and the second assertive particles. The cross-linguistic comparison showed once again the presence of a split between the two language families concerning the information unit highlighted to enhance discourse cohesion: speakers of Germanic languages preferentially use particles and Verum Focus, i.e. anaphoric links operating on the assertion
value of the relevant utterances, whereas speakers of Romance languages tend to resort to different linguistic means which set up anaphoric links operating on the descriptive content of the relevant utterances (entities and predicate). Such preferences – even if they do not concern obligatory markings – lead to a different discourse perspective. In other words, coming back to our research question, although additive particles share a similar basic meaning and functioning in both language families, only the Germanic ones are integrated in a system of assertion-related items that push their speakers to apply a discourse perspective oriented towards a comparison of assertions.

To conclude, let's consider a question raised by Blumenthal. Puzzled by the different frequency of auch in German source texts, as opposed to the absence of aussi in French translations, he wonders whether this implies a loss of information in the target language or the suppression of redundant information present in the source language: "…dans bien plus du tiers des cas (…) il ne se trouve pas, en version française, la moindre trace d'une signification quelconque de auch. Véritable perte d'information ou simple suppression d'une indication redondante?" (Blumenthal 1985: 146)

Based on Blumenthal's observation one might wonder whether additive particles are more 'optional' in certain languages than in others. The results of the present study reveal, however, that this might not be the right question: there is no loss of information in one language compared to the other, but the application of a different discourse perspective; if speakers follow the assertion-oriented route, the information is not redundant either.

References

12 "In more than one third of cases (...) you don't find, in the French version, the slightest trace of whichever meaning of auch, real loss of information or mere suppression of a redundant indication?" (our translation).


