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Adversative Pragmatic Markers in Learner Language: A Cross-Sectional Perspective

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Abstract The intention of this paper is to extend the empirical perspective on the functional acquisition of lexical pragmatic marking in learner English. While previous analyses have mostly focused on speech, and have considered a relatively homogeneous learner population in terms of proficiency, I shed some light on pragmatic marking in written discourse, and at different learner proficiency levels. To this end, I specifically contrast the usage of adversative pragmatic markers (e.g. *actually*, *but*, *in fact*, *on the other hand*) by beginning/intermediate learners (as represented in the *International Corpus of Crosslinguistic Interlanguage*) with the one of advanced learners (as represented by material form the *International Corpus of Learner English*). By way of a quantitative and qualitative analysis, I test when pragmatic markers first emerge in learner language. Factors considered are type of the first language of the learners as well as the patterns of emergence of individual pragmatic markers as well as variation between individual learner groups. In addition, I use data from the *Louvain Corpus of Native English Essays* as a further point of reference to determine whether and when native-like usage levels are approximated. The overall findings suggest (1) that different patterns of emergence can be observed for individual pragmatic markers (notably the core item *but* vs. others); (2) that the first-language background of the learners influences the time and rate of acquisition; and (3) that the development of a diversified system of adversative pragmatic marking represents a challenging feature, which is only mastered by advanced students.

Keywords Adversatives · Learner language · Pragmatic markers · Cohesion · Cross-sectional study

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Introduction

Research on pragmatic markers (PMs) can be considered a highly vital field in linguistics (Aijmer and Simon-Vandenbergen 2011: 224), and PMs have been considered from various diachronic and synchronic perspectives, for instance in terms of grammaticalization/pragmaticalization (e.g. Traugott and Dasher 2002; Brinton 2006; Lewis 2011; Simon-Vandenbergen and Willems 2011; Defour et al. 2012), within information structure and rhetorical structure theories (e.g. Redeker 1990; Barton 1995; Umbach 2005; Lewis 2006a, b), from the point of view of relevance theory (e.g. Blakemore 2000) or as devices establishing discourse cohesion and coherence (e.g. Halliday and Hasan 1976; Lang 2000; Christiansen 2011; Neff-van Aertselaer 2015). However, a number of restrictions apply. First, PMs are conventionally associated with and have primarily been considered in spoken (conversational) usage (see e.g. Park 1998; Ford 2000; Taglicht 2001; Takahashi 2010; Aijmer 2016; Beeching 2016) despite the fact that they may serve equally important discourse functions in writing (cf. Hoey 2001; Mortier and Degand 2009: 339). Second, particular subclasses of PMs (such as quotatives or additives; see e.g. Forker 2016) have received markedly more attention than others (such as adversatives or concessives).

The foregoing equally applies for "interlanguage pragmatics" (Aijmer and Simon-Vandenbergen 2011: 236), the emerging field of study describing pragmatic marking in learner language. Only selected PMs employed by learners of English as a Foreign Language (EFL) have received some attention (see e.g. Buysse 2014, 2015; Aijmer 2015), and again, the focus of the majority of studies rests on speech rather than writing, so that we still "know little about how learners acquire the ability to be functionally appropriate in their written language" (Ishihara and Cohen 2010: 4). In addition, the dearth of research stands in contrast to recent studies emphasizing the importance of written discourse features for the communicative needs of EFL students (Yates 2010: 300; Neff-van Aertselaer 2015: 255).

The current contribution will concentrate on adversative pragmatic markers (APMs). For reasons of space, and as this paper takes an empirical rather than theoretical perspective, I will not discuss benefits and drawbacks of particular alternative labels (such as "discourse markers", "cue markers", etc.).[1] Instead, I seek to mention basic points and definitions to pave the way for the ensuing analysis.

Theoretical accounts agree that the main function of PMs is to connect (characteristically) adjacent discourse units on various levels of linguistic analysis (hence the alternative, and arguably broader, label "connective"; Fielder 2008: 80; see also Schourup 1999: 230), while the expression of "pragmatic meanings (procedural, instructional, indexical, syncategorematic)" (Fischer 2014: 278) is deemed to be central. Accordingly, it has been argued that PMs stand outside the sentence structure and serve to convey "the *relationship* of the basic message to the foregoing discourse" (Fraser 1996: 186, emphasis added) rather than a truth-

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[1] See the extensive lists in Fraser (1998: 301, 1999: 932, 2006b: 190), Blakemore (2006) or Fischer (2014), for instance.

conditional statement (Schourup 1999: 234). The pragmatic force of PMs thus lies in some kind of procedural metalinguistic role (Kong 1993: 83) that "organize[s] a discourse or the writer's stance towards either its content or the reader" (Hyland and Tse 2003: 157, cited in Neff-van Aertselaer and Dafouz-Milne 2008: 87), adding to discourse coherence (Lewis 2011: 420).

It is evident that such definitions are fairly generic and potentially comprise a vast number of linguistic items. While this in principle may do justice to the instable nature of the PM category (Aijmer 2014: 199), the scope can be narrowed down when a number of further characteristics are added. From a formal perspective, PMs may derive from various grammatical classes, notably, adverbs, conjunctions, and prepositional phrases, but also longer predications, such as *X overlooks the fact that* (Barton 1995: 228; Fraser 1998: 302, 1999: 943; see also Schourup 1999: 234; Aijmer and Simon-Vandenbergen 2011: 227) and are typically used sentence-initially (Fischer 2014: 278).[2]

In functional terms, various categorizations have been established. A commonly accepted one has been developed by Fraser (1996, 2006a, b, 2011, 2015; cf. Schourup 1999: 260), who distinguishes between the relationships between two discourse units in terms of (1) temporality, (2) inference, (3) elaboration, and (4) contrast. In the present study, the last category will be analyzed. Note that theoretical accounts occasionally include elaboration under contrast (Oh 2000: 245), and have tried to identify different shades of contrastivity (such as "dismissive", "reformulatory", "replacive", "antithetic", "unexpected contrast", "internal" vs. "external", "subjective" vs. "objective", etc.; see Halliday and Hasan 1976: 255–256; Schourup 1999: 258; Fraser 1998: 309–322, 2006b: 197; Lewis 2006b: 45–47; Mortier and Degand 2009: 342); these are of secondary importance for the present purposes, however.

More specifically, *contrast* is commonly perceived as an extralinguistic cognitive notion, while *adversativity* is viewed as the linguistic expression of this cognitive notion. Crucially, adversativity is explicitly encoded (through an APM), while contrast may be expressed indirectly, as shown in (1) versus (2), respectively, adapted from Schwenter (2000: 259–260), or even non-linguistically, for instance through gestures (Fraser 2006b: 191).

(1)   John is short but he's a good basketball player
(2)   John is short and he's a good basketball player

In formal terms, the general pragmatic function of adversativity is the expression of a relation of contrast (Fraser 2006a: 73) or a "(supposed) incompatibility" (Mortier and Degand 2009: 341) between the first part (*p*, e.g. *John is short*) and the second part of a message (*q*, e.g. *he's a good basketball player*), while the listener/reader is guided toward an inference that q is the only relevant viewpoint (see also Umbach

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[2] As the paper is concerned with the written mode, statements on similar or different uses in and parallel terminology related to speech (e.g. "utterance-initially") will only be used when necessary. On a related note, it has been found that the connecting/coherence function of PMs is particularly salient in written discourse (Fischer 2014: 287).

2005: 215; Giacalone Ramat and Mauri 2012: 487 and example (3), adapted from Blakemore 2000: 475). The APM (e.g. *but*) thus serves the metacommunicative function described above.

(3)   John is short *(and I suggest that this contrasts)* he's a good basketball player

The choice of APMs as objects of study is motivated by the facts (1) that potentially a rich inventory of items is available (see e.g. the lists in Fraser 1999: 947, 2011: 30) and (2) that this class is understudied within the field of interlanguage pragmatics despite its crucial communicative function, namely the expression of contrast as described in the foregoing (Giacalone Ramat and Mauri 2012: 509).

Provided the scarcity of relevant research, two points of departure are conceivable. The first one are investigations on PM within the Second Language Acquisition (SLA) paradigm, as interlanguage pragmatics has become a focal SLA subarea (see, for instance, the metastudies Kasper and Rose 1999; Taguchi 2015). However, as stated above, research has largely been restricted to analyses of learner speech (cf. Taguchi 2015: 1–2) and often carries a focus on transfer from the learner's first language (L1), assessed both in quantitative and qualitative terms (e.g. McClure 1994). General findings emerging from developmental and cross-sectional studies potentially relevant for the present investigation are a strong correlation between general proficiency and the amount of native-like PM use (Neary-Sundquist 2013), and statements on learners' ability to use pragmatic means in a comparable fashion to native speakers (Kasper and Rose 1999: 86).

As a second point of departure, we may be able to relate to findings on other types of PMs in EFL learner speech, as represented in Aijmer (2014), Buysse (2015), or Gilquin (2016), for example. These studies have presented quantitative evidence for both over- and underuse[3] of PMs (such as *so* or *well*) in EFL contexts compared to native frequencies,[4] and it remains to be tested whether these findings can be transferred to written production and adversatives.[5]

Further, previous research on PMs in EFL writing has suggested that they represent a challenging area even at advanced stages (Granger and Tyson 1996: 24), and that both over- and underuse of specific items may occur (see also Callies 2009: 99–100; Lee 2013: 86–87). In terms of APMs specifically, Bolton et al. (2002: 176)

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[3] In line with other corpus-based research (see e.g. Granger 2015), the terms "overuse" and "underuse" in the present article are used purely quantitatively (and crucially in a non-evaluative manner), with frequencies in native control data (see "Data and Methodology" section) serving as a baseline. On a related note, the term "learner language" describes the variety of a community of learners arguably striving for a native-speaker "target" (or "norm") in terms of eventually emulating native frequencies of usage (see Fuchs et al. 2016: 305–306 for discussion). It is acknowledged that there are other conceptualizations of "target" in terms of general learner intelligibility and comprehensibility, as advocated in the "English as a Lingua Franca (ELF)" or "English as an International Language (EIL)" paradigms (see, most notably, Jenkins 2000).

[4] See further Aijmer (2016) for analyses of second-language varieties.

[5] Given the reduced role of fluency on written production, the essential difference between the items tested in these studies and APMs in writing lies in the fact that the former may be viewed as devices for discourse planning ("delay device"; de Klerk 2005: 1191), rather than as a means for structuring discourse.

found overuse of *but* in Chinese learners, and Granger and Tyson (1996: 19–20) identified underuse among their population of French-speaking university-level EFL learners for *however*, *though*, and *yet*, while they implied that results for learners with another L1 background may differ. Note that cross-sectional analyses are largely absent from this type of research.

To broaden the as yet restricted perspective on APMs in EFL learner language, the paper will tackle the following aspects:

- APMs as a challenging feature: When do APMs first emerge in learner language and at which level do learners succeed in emulating native-speaker frequencies?
- Usage frequencies: Of which quantitative nature is the over- or underuse of APMs in learner language?
- Role of L1 background/transfer and individual items: Are patterns of emergence uniform across a set of diversified learner populations and for all APMs?

To this end, the current study considers data produced by beginning, intermediate and advanced EFL learners and seeks to establish trends mainly from a quantitative perspective. The current research thus also seeks to follow recent calls for exploring written productions of younger learners (Neff-van Aertselaer 2015: 272)[6] and, on a related note, establishing cross-sectional and longitudinal takes (Vyatkina and Cunningham 2015: 302) on the area of EFL pragmatics.

The structure of the paper is as follows: The "Data and Methodology" section introduces the methodological approach taken and the corpus data used. The "Results" section presents the findings of the corpus study and relates them to previous research. Overall results are contextualized and discussed in the "General Discussion". The "Conclusion and Implications" section provides a summary, highlights avenues for further research, and considers pedagogical implications of the findings.

Data and Methodology

The present research can be situated within the framework of Contrastive Interlanguage Analysis (CIA; Granger 1996, 2015). Therefore, two dimensions of comparison are introduced. The first dimension pertains to a comparison of writing of different non-native populations (EFL learners), the second one to the comparison with native speaker populations from the UK and the USA as reference language varieties. A fundamental methodological question that arises within such a framework relates to the choice of native speaker data for comparison, as these establish the kind of "norm" against which the EFL material is compared.

It could be argued that EFL learners eventually (should) strive for emulating expert writers, which implies that "professional" data (e.g. published academic writing) should be used as a yardstick, also provided that rhetorical strategies of EFL writers and novice native writers may be congruent to a certain extent (Neff-

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[6] A related area not treated here is the acquisition of (A)PMs by children; see Peterson and McCabe (1991).

van Aertselaer and Dafouz-Milne 2008: 88–89). However, such an approach largely neglects text type effects (expository academic writing vs. typically argumentative essays in EFL writing, see below), so that others have argued for "comparing and contrasting what non-native and native speakers of a language do in a comparable situation" (Granger and Tyson 1996: 18), which can be seen as the main motivation for establishing native-speaker control corpora as counterparts for the EFL data.[7] As a solution taking account of both positions, I will mainly resort to the second approach for convenience, but will mention comparative frequencies from professional writing whenever this seems helpful.

In the present study, the CIA framework is extended in terms of a cross-sectional view possible through the comparison of EFL learners of different ages/school grades, facilitating insights into patterns of emergence across the learner population. To this end, four different corpus sources are used.

Learner material from the beginning and intermediate level is drawn from the *International Corpus of Crosslinguistic Interlanguage* (ICCI; Tono 2012; Tono and Díez-Bedmar 2014). ICCI contains descriptive and argumentative essays of varying length from EFL students from eight countries and comes with metainformation on the individual learners (school grade, gender, L1 background, essay type, essay topic). While the included school grades range from year 3 to year 13, in this study only data from grades 5–12 is analyzed,[8] as this range was available for all components, of which the following are used (primary L1 background of learners in brackets): ICCI-AUT ((Austrian) German), ICCI-CHN + HK (Chinese), ICCI-POL (Polish), and ICCI-SPA (Spanish). The choice of these components was motivated by the aim to map differences and similarities across a set of typologically different L1 language backgrounds (Germanic, Sinitic, Slavic, Romance) and the availability of corresponding sections in the advanced learner data as a prerequisite for comparability.

Accordingly, advanced learner data derive from the *International Corpus of Learner English* (ICLE; Granger et al. 2009), a collection of timed and untimed essays by university students majoring in English, and the respective components (German, Chinese, Polish, Spanish) were used. ICLE comes with extensive metainformation (learner age, L1 background, years of EFL instruction at school and university, knowledge of additional foreign languages and essay topics).

The native control data are represented first by the *Louvain Corpus of Native English Essays* (LOCNESS; http://www.learnercorpusassociation.org/resources/tools/locness-corpus/), which is constructed in parallel fashion to ICLE and contains essays by British A-level students as well as by both British and American

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[7] See further Ädel (2006: 205–208) on the pros and cons of using either non-professional or professional native control data.

[8] Unfortunately, no information on exact learner ages is provided in the corpus metadata, and they may vary slightly between the ICCI subcomponents (see Tono and Díez-Bedmar 2014: 168 for a rationale for relying on "institutional status" in terms of school grades rather than learner ages). Based on the beginning of compulsory schooling applicable to the samples, we can safely assume an age range between 10/11 (year 5) and 17/18 (year 11/12), thus approximately mapping the span from the beginning of secondary schooling up to pre-university. An alternative way of conceptualization is according to the CEFR proficiency levels, where ICCI would cover the range from levels (pre-)A1 to B2 (Leńko-Szymańska 2015: 128–130).

Table 1 Corpus overview learner data (n = number of learners contributing to the sample, based on Tono and Díez-Bedmar 2014: 169 for ICCI)

Level	Beginner/intermediate			
Corpus	ICCI-AUT (n = 773)	ICCI-CHN + HK (n = 1741)	ICCI-POL (n = 751)	ICCI-SPA (n = 654)
Words	97,281	143,498	54,725	42,905
Level	Advanced			
Corpus	ICLE-GER (n = 437)	ICLE-CHN (n = 982)	ICLE-POL (n = 365)	ICLE-SPA (n = 251)
Words	232,231	514,969	235,950	199,204

Table 2 Corpus overview native data

Level	Intermediate	Advanced		Professional	
Corpus	LOCNESS-GB-A (A-levels)	LOCNESS-GB-U (uni)	LOCNESS-US-U (uni)	ICE-GB-ACAD (W2A)	ICE-US-ACAD (W2A)
Words	60,217	125,214	220,707	c. 10,000	10,222

university students. Second, in a similar fashion to Neff-van Aertselaer and Dafouz-Milne (2008), professional written production is taken from the academic writing (W2A) portion of the British and American components of the *International Corpus of English* (ICE; Greenbaum 1996). Tables 1 and 2 provide an overview of the corpus data. Word counts are represented as calculated by *AntConc* (default token definition; Anthony 2014).[9]

The potentially large number of APMs (see "Introduction" section) was narrowed down in a two-step procedure informed by the data itself. The initial corpus search relied on the APM list developed by Fraser (2011: 30). Note that the "core" (Fraser 2006b: 197) APM *but* receives separate treatment (see "APM

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[9] An anonymous reviewer rightly pointed to the unequal sizes of the various corpora (and their subsections) used and potential skewing effects this may have on the results. However, at present, due to the lack of corpus material that is truly comparable (which would imply collecting corpus data from a multitude of learner and native populations of different proficiency levels approximately at the same time, ideally all material controlled for length and topics, excluding social factors, etc., notwithstanding more profane issues such as funding for such a project), for the scenario described there is no other way to arrive at conclusions than using an eclectic approach. One established measure to address the imbalance in corpus sizes is to rely on normalized frequencies (see below), with the insights potentially gathered from such an approach arguably outweighing methodological scruples. In the (unlikely?) case that the practical constraints listed above are surmounted, and fully comparable corpora (or at least datasets approximating this idealization) become available at one point, the validity and plausibility of the current findings will have to be re-assessed, of course. In any case, for the present study we have to bear the potential effects of the unequal corpus sizes in mind particularly whenever tests of significance are reported (see "Results" section).

Emergence" section) as it seems to be mastered by learners quite well from an early stage onwards and as its extraordinarily high frequency (see also Park 1998: 278) may idiosyncratically influence quantitative results as regards the overall emergence of a system of adversative marking. In addition, items that potentially function as concessives (e.g. (*al*)*though*) were ignored.

In the search, only a restricted number of items other than *but* (*actually*, *albeit*, *by contrast*, *conversely*, *despite*, *however*, *in actual fact*, *in contrast*, *in fact*, *in spite of*, *nevertheless*, *on the contrary*, *on the other hand*, *quite the contrary*, *whereas*, *while*, *yet*) received at least one hit (see "Appendix"). This was the sample used for calculations of APM frequencies. Next, the list of items was further reduced by excluding all items that appeared across the corpora in fewer than five of the individual subcorpora. The remaining nine APMs (*actually*, *despite*, *however*, *in fact*, *in spite of*, *nevertheless*, *on the contrary*, *on the other hand*, *whereas*) are used for determining trends for individual items. At the same time, this can be seen as a first indication that the variability in using different APMs is restricted among the EFL learners (on which see further "Variability in APM Usage" section).

As a final step, concordances were manually checked for false positives, for instance uses of APMs in non-contrastive ways (as in (4), where *however* is used as some kind of non-adversative connective, potentially with a meaning close to 'anyway' or in (5), where *while* is used in a temporal sense) and when the surface form of an APM was used for an item from another word class (as in (6), where the intended meaning probably is 'to deceive'). Such occurrences were excluded

(4) I think that was oll. *However*, How are you doing? (ICCI-AUT 444, year 8)[10]
(5) *While* they're looking for Nemo, he is in Sidnay, in a Dentist's house. (ICCI-SPA 357, year 9)
(6) Gandalf, Merry, pippin, etc.. go to the doors of the kingdom of Sauron, this is a trick for *despite* the enemy. (ICCI-SPA 627, year 12)

Further issues worth noting are that APMs as parts of proper names or titles, as in (7), were ignored, and that combinations of APMs were counted twice, that is both for *however* and *on the other hand* in examples such as (8).

(7) My favourite film is "Love *Actually*" (ICCI-POL 721, year 12)
(8) *However, on the other hand* some negative effects can be observed. (ICLE-POL 2072)

Results

As outlined above (see "Introduction" section), previous research has found that non-native speakers of English (including EFL learners) show both over- and underuse of PMs. In the following, the exact nature of this over- and underuse will be assessed for APMs specifically, considering patterns in the learner data both in

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[10] Spelling in examples is preserved as represented in the corpus data.

terms of usage frequencies (token frequency) and variability of expression (type frequency).

Overall Perspective

Earlier studies (Neff-van Aertselaer and Dafouz-Milne 2008: 98; Neff-van Aertselaer 2015: 261) found that younger writers (both native and non-native) show a tendency to overuse particular types of PMs, while others (including APMs such as *however*, *nevertheless*, and *yet*) are underused, at least compared to professional writing. This picture can be complemented by the present data.

Due to the potential unfamiliarity of the display (Sönning 2016: 123), a few general notes on the layout and interpretation of the dot plot shown in Fig. 1 are in order. The left panel shows the normalized frequencies (pmw) of APMs in the different learner and native samples studied on the x-axes. The right panel shows differences between the two learner levels in terms of the frequency ratio. It includes 95% confidence intervals (displayed through error bars) calculated from absolute token numbers. In simplified terms, the confidence intervals establish that we are 95% confident that the actual frequency ratio for the population is within their range. The confidence intervals further imply the results of a significance test (and thus substitute it) in that we see differences (in this case, between frequencies
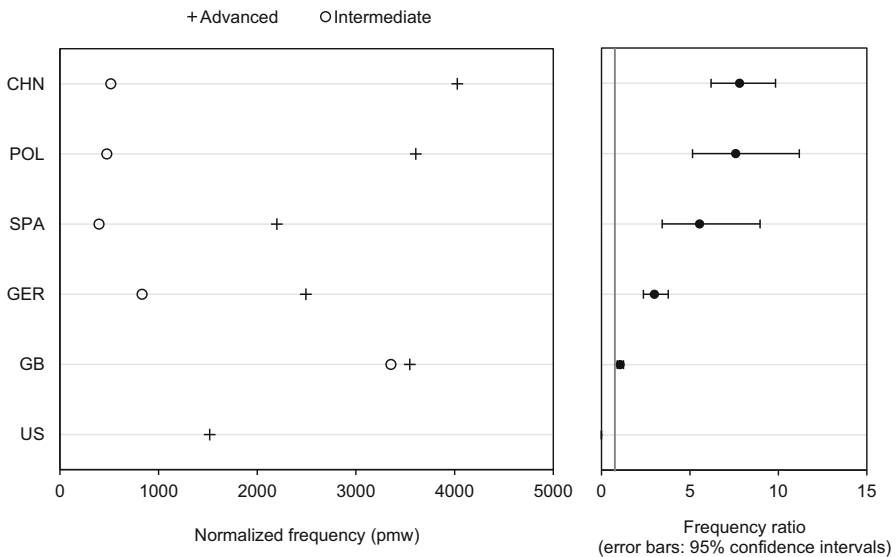

Fig. 1 Normalized frequencies per million words (pmw) of APMs in beginner/intermediate learners (ICCI), advanced learners (ICLE) and native speakers [LOCNESS-GB (The data point for "intermediate" for GB native speakers represents the data from A-level students, the "advanced" one those from university students. No data point is available for intermediate native speakers from the US) and LOCNESS-US]; *vertical grey line* in *right panel* indicates frequency ratio of 1 (= no change) [All figures were created with the *xl.plotter* (Sönning 2016)]

in the two proficiency levels) as statistically significant if the error bars do not overlap with a value of 1, as indicated by the vertical grey line in the right panel.

The left panel of Fig. 1 shows that APM[11] frequencies for intermediate learners from all L1 backgrounds (range 396–832 pmw) are well below the native value for British English (GB; 3355 pmw). It further reveals that learners from all L1 backgrounds show an increase in usage frequencies from the beginner/intermediate to the advanced stage, while the data yield a highly diversified picture as regards patterns of emergence. While APM frequencies of advanced German (GER; 2493 pmw) and Spanish (SPA; 2199 pmw) learners stay below the comparable native value for British English (GB; 3546 pmw), this value is approximated by Polish (POL; 3607 pmw) and surpassed by Chinese (CHN; 4027 pmw) advanced learners. The right panel of Fig. 1, which yields the frequency ratio (frequency advanced/frequency intermediate learners), indicates that all learner groups show a statistically significant increase. The highest increase over time occurs with the Polish and Chinese learners, with a factor of 7.8 (+3512 pmw) for the former and a factor of 7.6 (+3132 pmw) for the latter. Note in this regard that the change in APM frequency with a factor of 1.1 (+191 pmw) is minimal (and not statistically significant) in the native (GB) control data. Among the remaining learner populations, APM frequencies increase by a factor of 5.5 (+1803 pmw) for Spanish and by a factor of 3.0 (+1661 pmw) for German learners.

At first sight, while German learners start strong, they seem to show least progress over time. Both Spanish (−1347 pmw) and German (−1053 pmw) advanced learners appear to show underuse of APMs in comparison to the native (GB) control data, while Polish learners (+61 pmw) closely match native frequencies and Chinese learners (+481 pmw) overuse APMs. If only the US data (1518 pmw) are compared, advanced learners from all L1 backgrounds show overuse. However, if the average value (2532 pmw) for advanced US and GB native speakers (not shown in Fig. 1) is taken as a baseline, the picture markedly changes again. In this view, it is the advanced Spanish (+333 pmw) and particularly German (+39 pmw) learners that most successfully emulate native frequencies, while marked overuse by advanced Polish (+1075 pmw) and Chinese (+1495 pmw) learners can be observed.

In sum, it is evident that the type (and variety) of native control data is influential here, and this becomes even more obvious if comparative values form professional academic writing are considered. The values for the relevant section of ICE (18,587 pmw for GB; 15,100 pmw for US; not shown in Fig. 1) in turn would suggest considerable underuse by all groups (native writers included), and the wide divergence of values between learner and professional data raises the question of how practical it is to use professional data as only means of comparison (see "Data and Methodology" section). What the comparison to professional writing shows, however, is that the previously claimed "abundance of connector use" (Neff-van Aertselaer 2015: 261) by students (both native and non-native) cannot be confirmed for the specific area of APMs.

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[11] Recall that *but* is not included in the counts, as it will receive separate treatment ("APM Emergence" section) due to its particular status (see "Data and Methodology" section).

APM Emergence

Figure 2, which provides a fine-grained perspective on the emergence of APMs, indicates individual differences for the learner samples studied. A three-part pattern can be deduced. First, Fig. 2 suggests that APMs already start to emerge from grade 6, but that usage frequencies remain low. More specifically, while German and Chinese learners use at least a restricted amount of APMs from year 6 to year 9, the data yield the first occurrences of APMs by Spanish learners from grade 9, and for Polish learners from year 10 onwards only. A second interval can be established for the period grade 9/10 to 11/12, where APMs are consistently (yet modestly) used by all learner populations, but where frequencies only increase slightly. A third period is characterized by a steep increase in APM frequencies. It marks the transition from the intermediate to the advanced level, that is, from the end of secondary schooling (grade 11/12) to university. The highest growth in APM usage frequency occurs for the Polish learners (+2614 pmw; factor 3.6), while their Chinese peers (+1450 pmw; factor 1.6) eventually reach even higher frequencies, surpassing the native (GB) values (see also "Overall Perspective" section). The increase for the Spanish learners in this transition is less strong in absolute terms (+1212 pmw), but still substantial (factor 2.2). An exception to this pattern is to be found in German learners, who have the highest APM frequency at the end of secondary schooling (grade 11/12), but whose APM frequency (+313 pmw; factor 1.1) on the transition from the intermediate to the advanced level yields least growth compared to the other learner groups, so that a smoother pattern ensues in terms of frequency increase. Recall, however, that German learners are the ones eventually matching native frequencies most closely if a US-GB average value is taken as a baseline (see "Overall Perspective" section).

Overall, the fine-grained cross-sectional perspective developed provides some first indication that APMs (other than *but*, on which see further below) are "latecomers", and, by implication, a difficult feature in EFL acquisition. Usage levels remain low at the beginner level (grades 5–9), modest at the intermediate level (grades 10–12), and only surge at an advanced stage. We have to take account
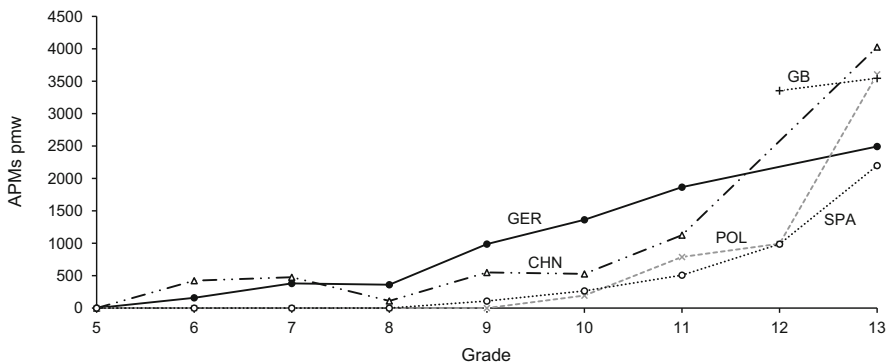

Fig. 2 Emergence of APMs [no data points for grade 12 for GER and CHN; grade 13 = university learners/advanced level (ICLE)]

of the fact that there is some variability in the steepness of this surge, and also as regards the time of the first emergence of APMs in the data (ranging from year 6 to year 10).

One factor that may be considered in the interpretation of the data, and that is related to the cross-sectional design, is the scope of internal variability that is inherently different in learner samples from the beginner/intermediate (ICCI) versus the advanced level (ICLE). Due to the principles in data collection (see "Data and Methodology" section), ICCI contains a sample representing a broad population of pupils, while ICLE represents students of English specifically. We can expect the latter group to be overall highly proficient in English, (1) as many English departments (possibly by way of an entry exam) exclude students with low proficiency, and (2) as more proficient students are more likely to specialize in English language study at the tertiary level. However, in view of the differing ambitions between the learners from the different levels, it is surprising that the steep rise on the transition to the advanced level is not uniform across all samples; in view of the high proficiency of the learner groups contained in the ICLE data, it is even more surprising that this advanced group still shows, depending on L1 background, both over- and underuse of APMs in relation to native speakers (see Fig. 1).

Another motivation for the late emergence of APMs, transpiring from Fig. 3, and more clearly from the regression displayed in Fig. 4, can be sought in the fact that learners from all samples rely on the "core" (Fraser 2006b: 197) item *but* from early stages (grade 6 at the latest), while a decrease in its usage can only be observed later. Declining frequencies for *but* are found from grade 8/9 for the Chinese and German learners, and from grade 11 onwards for the Polish and Spanish samples, where an increase in the period grade 8 to grade 11 occurs. This provides a complement to the patterns represented for the emergence of the other APMs represented in Fig. 2, with frequencies for items other than *but* rising earlier for the two learner samples where frequencies for *but* start to drop at an earlier point (Chinese and German), and a late decrease for *but* for the two learner samples where other APMs emerge at a comparatively late stage (Polish and Spanish).

Overall, these inverse usage patterns can be interpreted as a late diversification of the system of APMs in learner English, with items other than *but* covering an increasing share with increasing proficiency, though to different extents and at different points for specific learner groups. Note, in addition, that *but* is overused in comparison to the British baseline value even at the advanced levels (grade 11/12 and university learners) for all learner groups apart from Chinese university learners (see Fig. 3). This suggests that the core status of *but* persists, a view that is supported when comparing normalized frequencies for advanced learners between *but* and the other APMs (see Fig. 2), where frequencies are higher for *but* for all learner samples apart from the Chinese one.
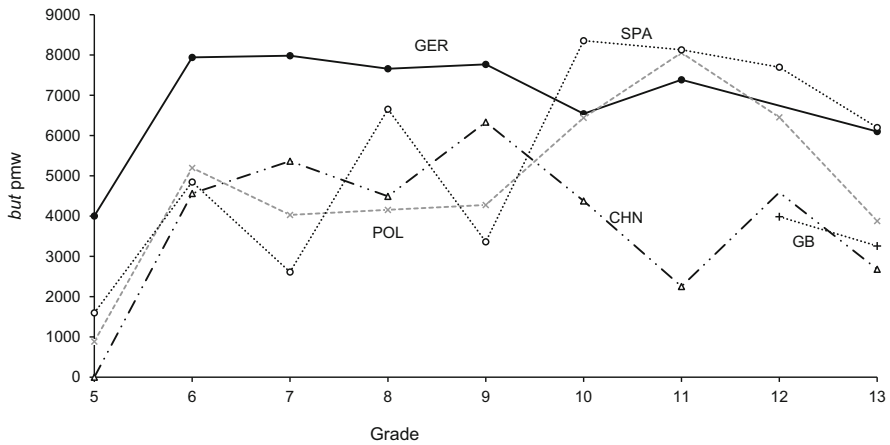
Fig. 3 Cross-sectional frequencies of *but* [no data points for grade 12 for GER and CHN; grade 13 = university learners/advanced level (ICLE)]
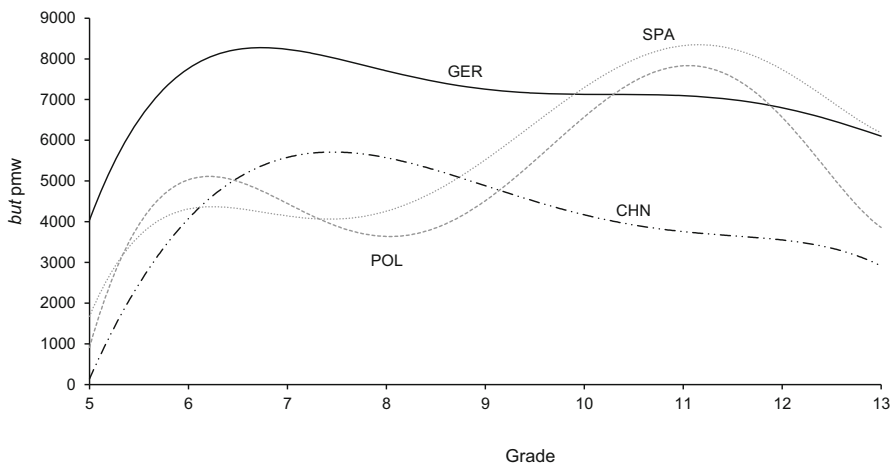

Fig. 4 Polynomial regressions for cross-sectional frequencies of *but* [fit of the regression lines (R^2): 0.93 for GER, 0.72 for SPA, 0.76 for CHN, and 0.98 for POL]

Variability in APM Usage

A complementary perspective on learner development can be established through assessing the variability in learner expression in terms of different APM types used. Previous research on other PMs (Buysse 2014: 23, 2015: 83) has suggested that EFL learners only rely on a limited inventory of PMs. This section will test whether such findings equally apply for APMs.

Figure 5 displays an increase in the number of different APM types used (all APMs except *but* included; see "Data and Methodology" section) in all learner populations. All intermediate learner groups show a comparable range (6–7
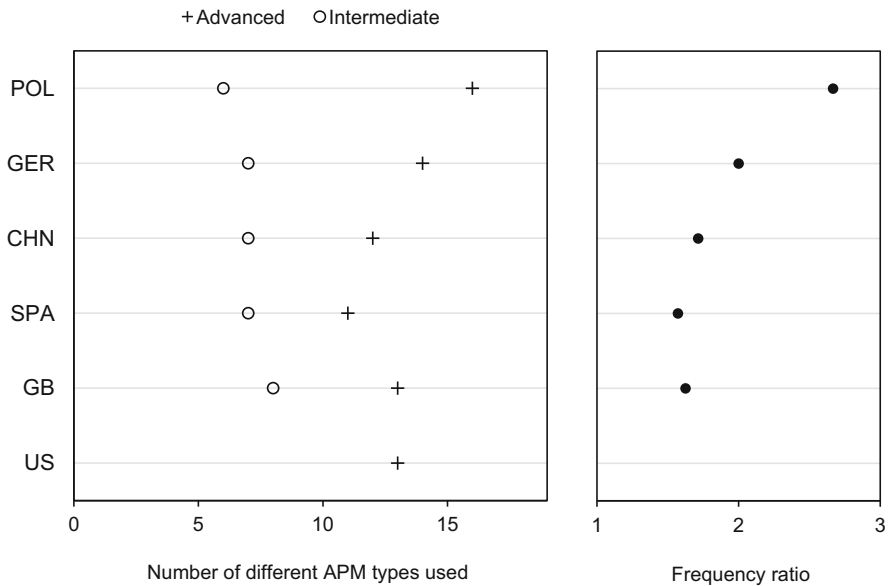
Fig. 5 Variability of APM usage in beginner/intermediate learners (ICCI), advanced learners (ICLE) and native speakers (LOCNESS-GB and LOCNESS-US)

different APMs), and lie just below the value (8) for the (GB) control data. The value for the advanced native control data (13 different APMs for both GB and US) is approximated (11 for Spanish; 12 for Chinese) or even surpassed (14 for German; 16 for Polish) by the advanced learners. While these results have to be taken with a pinch of salt due to the low absolute number of APMs, the frequency ratios shown in the right panel of Fig. 3 indicate that Polish learners (increase by a factor of 2.7) are most successful in broadening their range of APMs over time, followed by the German (2.0), Chinese (1.7), and Spanish (1.6) population. Surprisingly, the analysis further shows that the variability of APM use in learner (as well as non-professional native) writing lies within the range of professional writing (7 for academic writing from ICE-GB; 13 for ICE-US; not shown in Fig. 5).

The preceding analysis indicates that learners (particularly intermediate) rely on a restricted set of APMs. Indeed, there are a number of items, associated with more formal usage, present in the native data, but not (or only rarely) appearing in the learner material, as illustrated in (9) and (10).

(9)   He manages to present these views through characters who lack personality but maintain a philosophical identity, *albeit* in many cases perversely. (LOCNESS-GB-U)
(10)   Much *to the contrary*, the conservative pro-lifers believe that every human being has a constitutional right to life […] (LOCNESS-US-U)

Note that even though advanced learners appear to have broadened their repertoire of APMs, individual items are used with dissimilar frequencies. For instance, the

data yield a stable pattern across all four learner samples studied to primarily rely on the APMs *however*, *in fact*, and *on the other hand* (in addition to *but*, see "APM Emergence" section), while other items (such as *nevertheless* or *whereas*) occur consistently, but less frequently in the data (see "Appendix").

Sentence Position

This section broadens the view on a syntactic aspect of APMs, namely their sentence position. While PMs prototypically occur sentence-initially (alternatively labeled "left periphery"; Aijmer 2016: 140), they may in principle appear in all kinds of positions (Aijmer 2014: 200; Fischer 2014: 274; see also Fielder 2008: 95), notwithstanding constraints for individual items (Fraser 1998: 306), such as *in fact*. Previous research on non-native and learner writing has suggested that there is a tendency toward overuse of PMs in sentence-initial position (or, conversely, underuse in non-initial position) compared to native writing (by a factor of almost 2; Granger and Tyson 1996: 24), potentially due to processing constraints (Aijmer 2016: 142). Whether this is the case for the present data will be tested subsequently.

The results displayed in Fig. 6 corroborate Granger and Tyson's (1996: 24) finding of underuse in non-sentence-initial position and extend the perspective to learner populations with other L1 backgrounds. The percentages for all learner populations (both intermediate and advanced) lie below the (GB) control values.
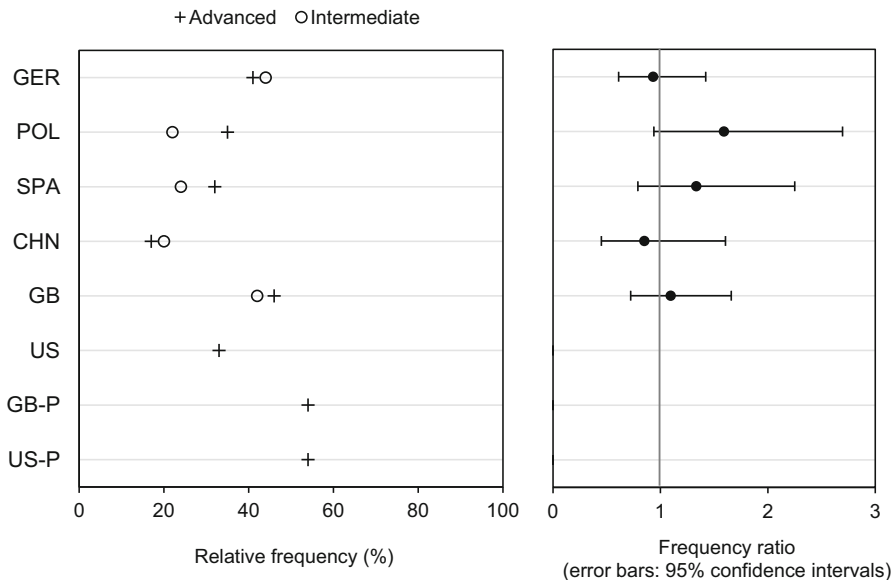

Fig. 6 Percentage of APMs in non-initial position in beginner/intermediate learners (ICCI), advanced learners (ICLE), non-professional native writers (LOCNESS-GB and LOCNESS-US) and professional native writers (academic writing from ICE-GB and ICE-US); *vertical grey line* in *right panel* indicates frequency ratio of 1 (= no change) [A random sample of 100 occurrences was used to determine the percentages for the native control data (LOCNESS and ICE)]

However, two qualifications are in order here. First, German learners (of both levels) seem to match the native (GB) values closely, and differences are not significant ($\chi^2 = 1.67$, $df = 3$, $p = 0.64$, $\varphi = 0.06$). Second, the same applies to advanced Polish ($\chi^2 = 0.12$, $df = 1$, $p = 0.73$, $\varphi = 0.00$), Spanish ($\chi^2 = 0.02$, $df = 1$, $p = 0.89$, $\varphi = 0.01$), and German ($\chi^2 = 01.62$, $df = 1$, $p = 0.20$, $\varphi = 0.08$) learners if the US value is taken as a baseline. This suggests that advanced learners generally (Chinese learners being an exception here) succeed in matching native percentages as regards the placement of APMs within sentences.

In terms of differences between learner levels, a split picture emerges. While the data for advanced Polish and Spanish EFL learners yield an increase in non-initial uses compared to the intermediate level, the data for their Chinese and German peers show a slightly reverse trend, as also indicated in the frequency ratio as represented in the right panel of Fig. 6 (values below 1). However, as the results partly rely on comparatively small samples for some of the categories (e.g. n = 23 for ICCI-POL), also indicated by the wide error bars in the right panel of Fig. 6, overall trends need to be confirmed by more research. Note, in addition, that if the values from professional writing are taken as a means of comparison, all other groups (non-professional native writers as represented in LOCNESS included), show underuse of APMs. In this perspective, we can submit that underuse of APMs in non-initial sentence position is a characteristic of non-professional writing generally, even though marked differences can be observed between native and (at least some) non-native groups.

General Discussion

This section revisits the research questions raised ("Introduction" section) in the light of the findings presented in the foregoing ("Results" section). Overall, the picture that emerges from the quantitative analyses is a fairly intricate one, so that a uniform "learner" pattern cannot be deduced. Consequently, the data suggest that broad statements across all learner populations investigated (e.g. in terms of "advanced learners overuse APMs"; cf. Vyatkina and Cunningham 2015: 301) cannot be provided or at least have to be put in perspective.

A split picture emerges as to the issue whether APMs can be seen as a challenging feature for EFL learners. One item, *but*, appears from early stages and yields persistently high usage rates in all learner groups studied ("APM Emergence" section). Frequencies only decline toward the advanced stage, with a decrease only occurring at highly advanced stages in two learner samples (Polish and Spanish). The results of the present study thus corroborate others that have established *but* as the core APM both in native (e.g. Fraser 2006b) and non-native language (e.g. Bolton et al. 2002), and extend such claims to the domain of learner English, also if a cross-sectional perspective is taken (see also Lee 2013: 86–87). Conversely, APMs other than *but* show a late but consistent increase in frequencies, so that they complement the core item, eventually resulting in a diversification of the APM system ("APM Emergence" section). This finding converges with earlier statements in the developmental SLA

literature for (A)PMs in speech (Neary-Sundquist 2013: 121), so that the combined qualitative and quantitative evidence robustly indicates an overall development in the learners APM repertoire that occurs at an advanced level only. Globally, this implies that not APM usage as such (cf. Granger and Tyson 1996: 24), but the development of a diversified APM system indeed represents a challenging task for EFL learners.

When APM usage frequencies in leaner language are compared to native data, the present findings are in line with those for other PMs in EFL learner speech (see e.g. Aijmer 2014; Buysse 2015; Gilquin 2016), as both over- and underuse may occur. However, findings suggest that, rather than diagnosing a general over- or underuse of APMs in learner language (Neff-van Aertselaer 2015: 261), it is sensible to take account of (1) learner levels, (2) learner groups with differing L1s, and (3) patterns for the core item *but* versus the remaining APMs.[12] Results indicate an overall tendency for beginning/intermediate learners to overuse *but*, and to underuse the remaining APMs. Patterns diverge for advanced learners, where the data of one sample (Chinese) yielded considerable overuse of non-core APMs, while overuse of *but* (see also Lee 2013: 87) and underuse of the remaining APMs could be traced in the further learner groups tested ("APM Emergence" section). Another factor to be considered is sentence position ("Sentence Position" section), where an underuse of APMs other than *but* occurred in learner writing (but also in the non-professional native control data) in non-initial slots, so that this can be viewed as a general pattern of learner Englishes of all levels (cf. Granger and Tyson 1996: 24). Overall, the contrastive perspective provides additional evidence that emulating APM usage patterns (in terms of token frequency) comparable to native speakers is challenging for EFL learners of all L1 backgrounds, even though they may succeed in extending their APM repertoire and approximating it to their native peers (at least in in terms of type frequency; see "Variability in APM Usage" section and Kasper and Rose 1999: 86) over time.

Conclusion and Implications

Overall Summary

The analysis of learner language presented showed that APMs can be viewed as an area of pragmatic marking where an overall increased proficiency in the target language is necessary to approximate usage levels of native speakers (see also Yates 2010: 295; Vyatkina and Cunningham 2015: 301). The particular nature of the area of APMs can further be seen from the fact that other categories of PMs used by EFL learners (e.g. additives) emerge at much earlier stages and are overused rather than underused, as was the case for APMs for some learner populations (Neff-van Aertselaer 2015: 261). Thus, I submit that a diversified use of APMs can be categorized as difficult or "learner-hard" (Fuchs et al. 2016:

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[12] Another issue is the choice of the native control data (see "Data and Methodology", "Overall Summary", and "Directions for Further Study" sections).

298), while there is variability across the learner samples studied as to APM usage frequencies ("Overall Perspective" section), patterns of emergence ("APM Emergence" section), and sentence position ("Sentence Position" section). The data suggested that the range of individual APMs used by learners (type frequency) matches that of their native-speaker peers. Quantitative findings varied along the L1 background of the learner populations, determining both the time and rate of APM acquisition. However, universal patterns across the individual aspects tackled could not be observed, thus excluding consistent typological influences as to the specific language backgrounds of the EFL learners. In addition, on a methodological note, it was evident that statements on whether EFL learners succeed in approximating native usage depends very much on the type (novice vs. professional writing) and variety (British vs. American English) of the control data, and thus on the type of "norm" used against which the learner data are compared.

Directions for Further Study

While the present study sought to broaden the perspective on an understudied area within the realm of pragmatic marking, for instance by way of comparing multiple learner populations and through providing a cross-sectional perspective, there remain a number of loose threads that provide multiple points of departure for further analyses. Among the most pressing issues are (1) a comparison to spoken cross-sectional data (e.g. from the *Trinity Lancaster Corpus*; Gablasova et al. 2015) to determine effects of mode, (2) a comparison to data from a native ICCI-equivalent to mirror developments in beginning/intermediate learners on an even more fine-grained level, (3) an analysis of aspects such as sentence position on a by-item basis to determine effects of individual APMs (see e.g. Oh 2000: 248–253; Bondi 2004; Simon-Vandenbergen and Willems 2011: 338; Defour et al. 2012: 40), (4) a study of combinations and combinability of APMs in learner language to obtain insights into their interaction (see e.g. Barton 1995: 228–229; Blakemore 2000: 479; Fraser 2015; Aijmer 2016), (5) more contrastive typological views of APMs in different languages (see e.g. McClure 1994; Lewis 2006a) to further describe potential transfer effects, as well as (6) a comprehensive analysis of the input (textbooks and teacher talk; see also Gilquin 2016) to determine the exact sources of teaching-induced over- and underuse (on which see further "Implications for EFL Instruction" section). A separate, but complementary aspect of the present analysis is a qualitative look into non-target-like uses ("error analysis") to further identify transfer- and hypercorrection-induced occurrences.

Implications for EFL Instruction

The final remarks are devoted to wider issues such as cultural differences in argumentative writing and potential implications for the second-language instruction related to (mainly, non-core) APMs in English writing.

Cultural differences, or, to be exact, a transfer of culture-specific patterns in rhetorical strategies in particular types of writing, have been mentioned as a likely

factor determining usage frequencies of APMs (Lewis 2006a: 151). More specifically, earlier studies have found higher frequencies of APMs in native English academic writing, both when professional (see e.g. Carrió Pastor 2016: 96 on differences between English and Spanish) and non-professional academic writing (see e.g. Granger and Tyson 1996 or Neff-van Aertselaer 2015: 261 on French and Swedish learner English) are compared. Therefore, it has been claimed that native English discourse is characterized by a strategy to "build arguments which contrast the pros and cons of an opinion" (Neff-van Aertselaer and Dafouz-Milne 2008: 95), requiring an extensive amount of APMs as pragmalinguistic means. By implication, APMs are underrepresented in the language of learners not familiar with this rhetorical strategy. This view seems to be supported by the present learner data; however, with slight qualifications, as the various learner groups show quite divergent patterns, as regards (1) APM frequencies ("Overall Perspective" section), (2) the point of diversification of the APM system ("APM Emergence" section), (3) variability of individual APMs used ("Variability in APM Usage" section), and (4) sentence position ("Sentence Position" section).

However, this transfer feature does not account for why some learner populations (e.g. the Chinese learners; see "Overall Perspective" section) yield even higher APM frequencies than the native controls. While this overuse could be merely described as a feature typical of novice writers, it can also be explained as a teaching-induced issue (Neff-van Aertselaer and Dafouz-Milne 2008: 93). First, observers agree that pragmatic marking represents an undertaught area in foreign language instruction (see e.g. Granger and Tyson 1996: 23; Yates 2010: 288), which is also reflected in the underrepresentation of the topic in textbooks (Buysse 2015: 83). This may motivate the uncertainty of learners when and where to (not) use APMs (and other PMs). Second, the use of connectors (and thus, APMs) is often taught as a simple way to enhance one's personal style (Granger and Tyson 1996: 25) without considering appropriate contexts. The present data provide some tentative evidence for this, as, for instance, advanced Chinese learners (which represent a group where APM usage frequencies are above the native controls), are at the same time the learner group that deviates most strongly from the native value for non-sentence-initial uses of APMs (see "Sentence Position" section). In other words, it could be hypothesized that learners simply rely on APMs for the sake of using them with the aim of achieving a (subjectively) "good quality" writing style, but neglecting where their use (or omission) would be appropriate. This is, in all likelihood, due to the fact that learners are not explicitly taught usage contexts (Yates 2010: 295) and probably do not receive enough practice in this linguistic area (see above).

The issues mentioned in the preceding paragraphs imply a number of suggestions for an effective instruction of APMs for EFL students, and mainly relate to the following two issues: Overall, the present data indicate that the diversification of the APM system emerges comparatively late. In addition, as regards rhetorical strategies in writing, it may be constructive to make students aware of cross-cultural register differences.

The late diversification of the APM system (see "APM Emergence" section) suggests that focused instruction from grade 10 onwards may guide learners to

target-like usage. On a related note, it has been claimed that the overall proficiency of beginning/early intermediate learners is still limited, and that only a few "pragmatic routines" (Takahashi 2010: 392) can be acquired, so that the effects of an earlier introduction of APMs (other than *but*) may be limited. Apart from taking account of the overall proficiency of the learners, EFL instructors should further aim to expand the range of individual APMs (see "Variability in APM Usage" section) if native patterns are to be mapped. Additional issues salient for highly advanced learners only (which were not assessed for the present data) are functional splits of individual APMs (e.g. of *in fact*, which may serve to reinforce or to refute; Lewis 2006b: 51; see also Aijmer 2013: 104, 2016: 115 on *actually*), and different shades of contrastivity that APMs may express (Fraser 2006a: 75; Vicente 2010: 382; see also "Introduction" section). If these aspects are tackled by EFL instructors, learners are enabled to go beyond a quantitative approximation of target patterns.

As to the second point, cross-cultural register differences in writing, it may be constructive to outline the specific conventions in argumentative or academic writing in the learner's L1 and contrast them with the ones in the target language. In the area of PMs, existing intervention studies have suggested that explicit teaching (Barton 1995: 236; Neff-van Aertselaer and Dafouz-Milne 2008: 99; Vyatkina and Cunningham 2015: 301), for instance through the introduction of the concept of metadiscourse/information structuring and metapragmatic categories by the teacher or through providing metapragmatic comments in the teaching material, facilitate the development of pragmatic target-language competence. The same applies for implicit input-based practice (Takahashi 2010: 403), ideally using authentic material (Vyatkina and Cunningham 2015: 301). It can reasonably be assumed that the same holds for APMs as a subcategory of PMs, but a purpose-built long-term intervention study would be needed to clarify the case, thus also contributing to elucidate the understudied issue of "pragmatic learnability" (Takahashi 2010: 413; cf. Taguchi 2015). In any case, the subject of APMs is an area that deserves decidedly more attention on the part of language teachers, both in terms of explicit and implicit instruction.

Appendix

	ICCI-AUT	ICLE-GER	ICCI-POL	ICLE-POL	ICCI-SPA	ICLE-SPA	ICCI-CHN	ICLE-CHN	LOCNESS-GB-A	LOCNESS-GB-U	LOCNESS-US-U	ICE-US-ACAD	ICE-GB-ACAD
Actually	34	73	3	43	0	21	11	171	14	34	43	18	17
Albeit	0	0	0	0	0	0	0	0	0	3	0	5	1
By contrast	0	0	0	1	0	0	0	16	0	1	0	1	0
Contrariwise	0	0	0	0	0	0	0	0	0	0	0	0	0
Conversely	0	1	0	0	0	0	0	7	0	0	1	2	2
Despite	0	16	5	32	3	20	0	42	18	38	9	9	13
However	25	228	8	443	8	137	46	1255	146	251	199	97	99
In actual fact	0	1	0	0	0	0	0	0	0	0	0	0	0
In contrast	1	10	0	7	0	7	1	22	0	3	4	5	0
In fact	5	59	4	97	2	55	7	207	14	43	38	21	0
In spite of	0	8	2	18	0	31	2	12	0	3	0	6	0
Nevertheless	1	67	0	53	1	37	3	57	1	6	3	7	6
On the contrary	0	15	0	24	0	20	0	30	2	3	2	0	0
On the other hand	14	59	3	92	1	88	10	234	2	25	24	9	0
Quite the contrary	0	2	0	1	0	0	0	0	0	0	0	0	0
To the contrary	0	0	0	2	0	0	0	0	0	1	1	1	0
Whereas	0	39	0	33	1	20	0	21	5	33	7	9	13
While	0	0	0	1	1	2	0	0	0	0	3	0	0
Yet	1	1	0	1	0	0	0	0	0	0	1	0	0
Total	**81**	**579**	**25**	**851**	**17**	**438**	**80**	**2074**	**202**	**444**	**335**	**190**	**151**
But	843	6102	362	3878	311	6200	800	2680	3986	3258	619	228	326

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