Discourse-Pragmatic Markers, Fillers and Filled Pauses: pragmatic, cognitive, multi-modal and sociolinguistic perspectives

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Despite being the object of considerable research effort over several decades, the status and function of discourse-pragmatic markers (DPMs), fillers and filled pause (FPs) continue to be at the forefront of an expanding field of scholarly debate.

The current Special Issue brings together researchers on DPMs and FPs working across different research traditions with a common interest in pragmatics. These include sociolinguists and psycholinguists, those interested in multimodal approaches and more applied aspects such as first and second language acquisition and language contact, alongside those of a more theoretical bent, investigating cognitive aspects of the items recruited as filler words, their socio-interactional functions, and how form-function mappings come about.

Schiffrin (1987) first defined discourse markers as items which 'bracket units of talk' highlighting their role as (p. 31) 'devices which are both cataphoric and anaphoric whether they are in initial or terminal position'. The items she included in her seminal study of discourse markers included particles (*oh, well, now, then, you know* and *I mean*) and connectives *(so, because, and, but* and *or*). For its part, the term pragmatic marker was arguably first coined by Brinton (1996) who summarised (pp.33-35) their prototypical features as: high frequency, stylistically stigmatised, marginal forms, which are difficult to place in a traditional word class, have little or no propositional meaning and are multifunctional, operating on several linguistic levels. Brinton's (1996: 32) list of pragmatic markers in Modern English includes items such as *ah, actually, anyway, basically, mind you, sort of/kind of* and *uh huh* as well as the DMs studied by Schiffrin (1987). Since the appearance of these two ground-breaking studies, many scholars have attempted to define what is meant by discourse-pragmatic markers and to describe their functions (Aijmer, 2002, 2013; Fischer (ed.), 2006; Pichler (ed.) 2016), their sociolinguistic (Andersen, 2001), cross-linguistic (Aijmer & Simon-Vandenbergen (eds.), 2006; Lauwers, Vanderbauwhede & Verleyen (eds.) 2012) and interlanguage (Müller, 2005) features and how pragmatic markers, discourse markers, and modal particles may be distinguished (Fedriani & Sansó (eds.), 2017).

Focusing on a very different area of investigation, which explored the relationship between pausing and speech planning, discourse markers also caught the attention of scholars using more experimental tools and techniques (e.g., Goldman-Eisler, 1961, 1968). In this pioneering work, and the myriad of psycholinguistic research that followed (e.g., Butterworth, 1980; Levelt, 1983, 1989; Merlo & Barbosa, 2010; for a review of some of the early studies based on pauses and hesitations see Petrie, 1987), discourse markers were primarily investigated as hesitation phenomena, forming part of utterance revision and repair processes, which provided valuable insights into how a speaker constructs an utterance and about the choices speakers

have to make as they talk. Given the different focus of those investigations, it may not be surprising that we find discourse markers take on various other classifications, including as filled pauses, verbal fillers or disfluencies.

More recently, experimental investigations have expanded their examination of fillers and filled pauses (*um* and *er)* to scrutinise their effects on both the production *and* comprehension of language. For instance, Corley & Stewart (2008) came to the conclusion that there was no evidence that *um* is intentionally produced or is a 'word' in its traditional sense, while Corley & Hartsuiker (2011) found that it was the pause, not the *um*, which aided comprehension. Such findings have been contradicted by, for example, Tottie (2019) who demonstrates how *uh, um* and *er, erm* (often referred to generically as *UHM*) are used intentionally in written American journalism as a precursor to reformulation or to hedge an inappropriate or ironic word-choice. Tottie qualifies *UHM* as a word in written texts and as on a cline of wordhood in speech. Kirjavainen et al. (2022) conducted a corpus study of the distributional frequency of particular collocates with *um* and then used experimental methods to check whether perception and production (repetition) of particular orders of *um* + collocate/collocate + *um* are, respectively, considered grammatically acceptable and repeated accurately. They produce convergent evidence from the three parts of the study which argues in favour of *um* being classified, not as an empty vocalisation, but as a linguistic item, and possibly a grammatical element, a suffix. Also, more recently, in their study of dialogues in fiction and conversation, Tonetti Tübben & Landert (2022) go even further, referring to *uh* and *um* as pragmatic markers serving a range of textual and interpersonal functions. Taken together, these studies suggest that it is highly appropriate, and timely, for DPMs and FPs to be considered together, as they are here. To our knowledge, pace Swerts' (1998) work on FPs and discourse structure and Crible's (2018) monograph which focuses on (dis)fluencies of various types, this Special Issue is the first to bring together studies of DPMs and fillers in an attempt to identify similarities and differences in their status and function.

The contributions in the Special Issue focus on a heterogeneous range of DPMs and FPs across different languages, charting their functional, semantic and syntactic status, how they vary across registers in first language and interlanguage speech, how they are acquired, and how they combine with other DPMs and with gestural and other paralinguistic features in non-coincidental ways.

The range of languages studied attests to the universality of DPMs and FPs. Papers consider data from the following languages, either singly or in combination: English, Finnish, French, German, Greek, Italian, Russian and Turkish. The Special Issue breaks new ground by bringing insights from cognitive and multimodal perspectives to bear on the function and status of FPs and DPMs.

Authors of the articles in the Special Issue were invited to address any of the following questions:

- what contribution do studies of DPMs and FPs make to our understanding of the mental processes involved in human communication?

- what universals (in terms of human cognition and pragmatics) can we identify in the deployment of DPMs and FPs across different languages?

- (contrariwise) are there marked crosslinguistic differences in the use of DPMs and FPs in different languages or cultures?

- what sociolinguistic or cognitive factors have a bearing on the deployment and functions of DPMs and FPs?

- what are the mental processes which lead diachronically to the exploitation of a lexeme for (desemanticised) pragmatic purposes?

- how are the rather complex functions of DPMs and FPs acquired by children and foreign language learners?

- how, and why, are DPMs and FPs realised in written genres including computer-mediated communication?

The Special Issue kicks off with **Beeching & Crible**'s comparison of the child-language acquisition of two DPMs with similar functions in French and English: *en fait* and 'actually'. *En fait* is a cognate of 'in fact' but is a false friend, with a sense closer to 'actually'. Both *en fait* and 'actually' have an adversative (literal) function and an elaborative (metatextual) function. Drawing on existing corpora of children's speech in French and English, Beeching & Crible investigate the order in which the functions are acquired: does the literal sense come first with the metaphorical extension following (as we might expect from the diachronic development of these markers) or does the elaborative (more interactional) use come first (as we might expect from studies of the way children acquire language)? Overall, it seems that children do indeed acquire the literal use first, but this is quickly followed by interactional uses. One of the most interesting findings is that the slight differences between the functions of *en fait* and 'actually' found in adult data are already emerging in the under-five age-group. Studies of the child-language acquisition of DPMs and FPs demonstrate that these are items which are learnt: even apparently semantically 'empty' features such as *UHM* are not merely vocalisations emitted while pausing or hesitating, they occur in a particular set of linguistic and extralinguistic contexts and their functions are acquired gradually – and, indeed, fairly late in the acquisition process.

There have been relatively few studies looking at the child language acquisition of DPMs by comparison with those on second language acquisition, where the focus has been on how learners' use of markers differs both quantitatively and qualitatively from the way that L1 speakers use them. Generally speaking, scholars (Müller, 2005; Fung & Carter, 2007; Denke, 2009, Liao, 2009, Aijmer, 2011; Beeching, 2015, Buysse, 2020) have found that learners use DPMs and fillers more sparingly

than L1 speakers, despite their obvious usefulness for learners in turn-taking, discourse structuring and in compensating while searching for the word to use. There have been some exceptions to this, with fillers traditionally referred to as 'lexical teddy bears' (Hasselgren, 1994), as learners rely on a limited range of markers in L2 (Beeching, 2015) or certain forms being found to be over-used because of transfer effects from L1 (Buysse, 2020). **Blanchard & Buysse** take a rather different, and more sociolinguistic, look at learner language, comparing attitudes to the use of DPMs 'so', 'like', 'well' and 'you know' in three groups: British English speakers living in the UK (L1), users of English as a Foreign Language (EFL) and users of English as a Lingua Franca (ELF), with the latter two groups both being resident in Belgium. Despite (or perhaps because of) their frequency in ordinary everyday spoken English, the use of DPMs, particularly 'like', is often stigmatised and deplored by teachers, parents and employers. The question arises as to whether DPMs should be taught in language-learning classrooms, given that they can provoke a negative reaction in hearers. Blanchard and Buysse report the results of a matched-guise survey which measured speaker attitudes by asking 90 participants to evaluate others' DPM usage. They discovered that the L1, EFL, and ELF participants had varying attitudes about certain markers, and these markers were perceived differently for traits like politeness and friendliness. Generally speaking, L1 speakers were more positively disposed towards markers than either of the other groups, who in their turn rated the propositional functions of the markers more acceptable than the interactional functions. The EFL group was more positive about marker usage than the ELF group, perhaps because the ELF group was more exposed to normative stances than the EFL group who, being students of linguistics, could arguably have been educated to take a more tolerant view. Overall, speakers using markers were considered more positively than those who did not. This would suggest that learners should at the very least be exposed to them in language learning materials, though the authors issue the caveat that, as we have mentioned above, not only some DPMs but some functions of DPMs are more positively viewed than others.

Labrenz , Allen, Pashkova & Wiese take a highly original approach to DPM study by investigating a feature of the written language whose codified meaning is to suggest an omission but which arguably also serves a hesitational function: the three dot sign (…) . The authors identify textual, subjective and intersubjective uses of the three dot sign: in a textual function, it can indicate the incompleteness of information, pointing to a continuation. This function can create a dramatic effect or serve a suspense-building rhetorical purpose. Subjective functions include the indication of speechlessness, implying incredulity and other emotions. Finally, intersubjectively, … can signal an invitation to complete the information either by inferring further meaning or by taking a turn or reacting to the incomplete message. Labrenz et al. compare the use of the three dot sign in instant messages in English, German, Greek, Russian and Turkish in speakers in five countries and from bilingual and monolingual speakers. In that way, they can gauge the impact of majority language uses on heritage users of Greek, Russian and Turkish (in Germany and the US). One major finding was that the three dot sign was more functionally variable and used more frequently in German, and was more often found at minor boundaries by

comparison with English which showed no preference for major or minor boundaries. In comparisons of monolinguals and bilinguals, there is some evidence that, in contact situations, heritage language speakers adopt the usages of their majority language in their use of … in their heritage language. This is perhaps because most of their instant messaging takes place in the majority language (English or German).

Identifying the functions of DPMs and FPs has been a major preoccupation for scholars over several decades. Experimental researchers have looked at whether different types of FPs might have different functions. For example, while Clark and Fox Tree (2002) found a variety of reasons why speakers might use filled pauses – to gain time to search for a word or to indicate that they have not yet finished their turn – they found that speakers were more likely to use 'uh' to signal a short delay and 'um' to signal a longer delay in speaking. DPM scholars, for their part, have frequently highlighted the important role played by prosody in the disambiguation of the functions of DPMs. For example, 'you know?' with rising intonation serves as a backchannel device indicating a desire to have confirmation of shared knowledge between the speaker and hearer while 'you know' with falling intonation can be construed as asserting mutual information, a consensual truth (Schiffrin 1987: 276). With the exception of investigations into pausal and pre-pausal lengthening as part of the work looking at utterance planning (e.g., Cooper and Paccia-Cooper, 1980; Speer et al., 2011), few studies thus far have studied the prosody of DPMs and FPs with a thoroughgoing examination of pitch, duration and intonation contours (Swerts 1998 examines the pitch and duration of FPs), and even fewer have looked at the way that gesture and gaze interconnect with these other features (see Jehoul et al., 2016, for a study of gaze and *euh(m)* in Dutch). The Special Issue breaks new ground in this area by including three articles (Kosmala; Henneck & Mihatsch; Freitag, Cardoso & Tejada) which focus on such suprasegmental and non-verbal features.

Kosmala's highly original article is based on a video corpus of French interactions and analyzes how gazing and gestural behaviour vary depending on how the 12 speakers use FPs, either nasal (eum) or oral (euh). The FPs are observed in two conditions, an in-class presentation and a direct face-to-face conversation. FPs occurred more often in the presentation than in the conversation and they were 21% longer in the presentation than in the conversation. Nasalised pauses were more frequent in the presentation than in the conversation. What is more, the gazing and gestural behaviour were almost categorically different in the two conditions, 82% of gestures in the presentation condition were discursive and word-searching gestures whereas in the conversation most gestures (65%) were either referential or interactive gestures. Similarly, in the presentation situation most gazing activity which was linked to the filled pauses involved looking down towards one's own notes (75%) whereas it was either looking away or towards the interlocutor in the conversation. The functions of filled pauses are thus highly constrained contextually and are coupled by distinctive body language depending on the level of speaker-hearer interaction involved. Kosmala's article breaks very new

ground in considering the way that filled pauses connect with non-verbal behaviour, gestures and gaze and in coming up with some very clear results.

Hennecke & Mihatsch consider the use of the placeholders *truc* and *machin* ('thing') in French, investigating whether the prosodic characteristics of their three different uses, as placeholders, fillers and general extenders, can shed any light on their grammatical status. As placeholders, *truc* and *machin* are arguably more like pronouns and would be prosodically reduced and integrated. As fillers, they might be expected to be more like DPMs and thus prosodically detached. 112 occurrences of *truc* and 57 occurrences of *machin* from the audio data of the PFC (*Phonologie du Français Contemporain*) Corpus were analysed using PRAAT with a focus on the acoustic duration, the individual pitch contour and the integration of *machin* and *truc* into the intonation contour of the utterance. Even though there was great variability in the prosody of *truc* and *machin,* making the disambiguation in some cases challenging, Hennecke and Mihatsch found no evidence that placeholders were prosodically weakened or even phonetically reduced. In the case of fillers, there was, however, some evidence that these are phonetically detached and thus more like DPMs. In general extender constructions, *truc* and *machin* were both strongly integrated into the construction as a whole which determines their prosody and differentiates them from the placeholder and filler functions.

Freitag, Cardoso & Tejada investigate a range of linguistic and non-linguistic factors which may help a listener disambiguate *(eu) acho que* ('I think that') in Brazilian Portuguese, including structural, informational, prosodic and emotional features. The authors argue that *(eu) acho que* can express certainty, uncertainty or doubt and a conditional decision tree approach can help decide which features are crucial in determining which of the functions is most likely in the context. Unlike 'I think (that)' in English, Brazilian Portuguese cannot lose the complementizer *que* or appear utterance finally; it can, however, lose the pronoun and this proves crucial in its interpretation. Certainty was associated with the presence of the pronoun, more formality, a topic on which the speaker had direct experience, higher intensity and lower duration. The authors did not find a statistical association between facial expressions (such as the contraction of the eyebrows or mouth) and (un)certainty but argue that further work is required in identifying and charting associations of this sort. Kosmala's work, described above, shows the value of studying gesture and gaze in the disambiguation of the functions of fillers, particularly in contexts in which turn-taking and interactional factors come into play.

Fedriani & Molinelli's study of the negative particle *no(?)* in present-day Italian supports the notion developed in this Special Issue that a single form can be used for both cognitive (processing) functions and sociolinguistic (interactional) functions. Analysing examples from the KIParla Corpus of contemporary Italian, the authors demonstrate that politeness-induced concerns, mainly related to the acknowledgment of the interlocutor in discourse, have played a role in the procedural expansion of *no(?)*, which has largely to do with the incremental co-construction of common ground and mutual alignment. *No* is typically used to

respond negatively to a question or assertion, as it is in English, in turn-initial positions. In Italian, however, *no(?)* can also be used to convey turn- and topic-management functions, usually in turn-initial positions where the speaker wishes to change the subject. What is more, *no(?)* can also be used in turn-final position with rising intonation: in this context, it typically performs interpersonal functions, inviting or establishing common ground between interlocutors. *No(?)* serves as a pause-filler while the speaker fleshes out a list of items which create an ad hoc category of, for example, the types of things you do in your home town or what your parents spend their money on. At the same time, however, it is being used to appeal for agreement and mutual understanding from the interlocutor ('you wouldn't say 'no' to my ad hoc list?'). Fedriani & Molinelli provide convincing evidence that the ability of *no(?)* to perform filler functions derives from its use in contexts where complex concepts are being elaborated, which reflects the higher cognitive load required when structuring an uninterrupted flow of talk. They also underline the role of high frequency effects and routinization in spoken interaction which enhance the use of *no(?)* as a highly bleached pause-filler, which, while keeping contact with the interlocutor, helps the speaker take time during the conceptualization of an utterance and speech generation.

Finally, in their study investigating the category membership of the Finnish planning particle *tota* (that behaves similarly to *um* in English), **Kirjavainen & Nikolaev** show that this filler-word groups most closely with grammatical than with lexical items. *Tota*, a bleached determiner/demonstrative pronoun ('that'), typically has hesitant (e.g., word finding) and pragmatic (e.g., politeness, turn taking) functions[1]. In two corpus-based investigations, Kirjavainen & Nikolaev demonstrate, firstly, that *tota* does not behave identically to the other items (*ee/öö*) used for hesitation purposes in Finnish – *tota* was less often used in contexts where greater cognitive load is involved and thus hesitational planning might be expected. It also appears utterance finally, suggesting a pragmatic, turn-taking role. In the second investigation which takes a network approach, they show that those people who are frequent users of *tota* are also frequent users of politeness morphemes (such as the conditional suffix) – but there was no clear link between the frequency of use of *tota* and lexical items expressing politeness such as kiitos 'thank you'. Kirjavainen & Nikolaev argue that, along a continuum from lexical to grammatical forms, *tota* behaves more like a grammatical item.

The collection of articles in the Special Issue as a whole provides convincing evidence of both the universality of DPMs and fillers across languages and cultures and of the way that frequency of exposure to particular uses of such items in particular contexts entrenches their interactional and pause-filling functions in the mind of the speaker/hearer. Children learn how to use *en fait* and 'actually' with their similar but slightly distinctive functions between the ages of two and five years, starting with propositional functions but quickly exploiting the more metaphorical, discourse applications for interactional purposes in both English and French. The situation is

[1] Interestingly, the demonstrative adjective/pronoun ('this'/'that') is used for similar purposes in other languages (e.g., *este* in Latin American Spanish, see Graham 2018, or это in Russian, see Zaides 2022).

rather different in bilingual speakers / writers – but, fascinatingly, in the instant messaging studied by Labrenz et al., written language makes use of the three dot sign for very similar interactional purposes as other DPMs and FPs in the spoken language. They found that in the contact situations they studied, heritage language speakers adopted the frequencies of three dot usage of the majority language in their heritage language. These bilingual speakers use a range of functions of this translinguistic graphic marker in both their languages, where the frequency of use in the heritage language is influenced by the majority language. Attitudes to DPMs and FPs in L1 and non-L1 contexts are somewhat mixed. Respondents to Blanchard and Buysse's survey were positively disposed to marker use, and found that speakers who used them were more friendly. However, the 'emptier' the semantics and the more frequently the form is used and the newer it is, the less positive are attitudes towards them.

Most articles in the collection demonstrate the usefulness of DPMs and FPs in structuring interactional discourse and maintaining social relations: this is true of *no(?)* in Italian and of *(eu) acho que* which, like 'I think' in English, can express both certainty and uncertainty in different contexts. Freitag et al's study shows how a combination of factors including pronoun presence or omission, prosody, intensity, duration, not to mention the speaker's direct experience, influences the way that hearers interpret the expression as either certainty or uncertainty. Hennecke & Mihatsch's article on *truc* and *machin* demonstrates the importance of intonation in showing the degree of integration of the expression in the clause. Kosmala, for her part, demonstrates how gesture and gaze accompany the FP *euhm* in French differentially in presentations and conversations, a finding which aligns her discoveries with the seminal work of Goldman-Eisler from the 1960s (e.g., Henderson, Goldman-Eisler & Skarbek, 1965, 1966). The collection thus shows the value of studying extra-linguistic and suprasegmental features such as intonation, gesture and gaze which, alongside position in the utterance, can provide hints as to function, and help us extend our existing knowledge and debates.

Finally, a couple of articles address the question of the category membership of specific items as either grammatical or lexical entities, Kirjavainen & Nikolaev on the hesitation particle *tota* in Finnish and Hennecke & Mihatsch on the placeholders/hesitation markers *truc/machin* in French. The former suggest *tota* ('that') is more of a grammatical item and the latter that *truc/machin* ('thing') are more similar to lexical items. Their conclusions thus suggest that the category membership of the original source item lives on in the form(s) with DPM or filler functions, at least in these cases. However, this can also be influenced by additional factors such as the level of bleaching (i.e. how abstract the meaning of the item is) and specific usage (is it used in lexical or grammatical environments, e.g., attached to the ends of words like a suffix).

The articles in the collection support Traugott and Dasher's (2002) contentions about the ways that items come to have scope-over-discourse by becoming semantically-bleached/pragmatically enriched. The Finnish hesitation particle *tota* is a good example of this and also illustrates the left- and right-peripheral notions explored by

Beeching & Detges (2015): *tota*, from having a hesitational role in the centre of the argument structure can move to the right periphery of the utterance and have turn-taking potential. Similarly, Italian *no* on the left periphery constitutes a negative particle but comes to have a hesitational function in central positions and, on the right periphery, with rising intonation (*no?*), appeals to the interlocutor for mutual understanding.

We now return to the first research question, which we asked authors to attempt to address, viz.

> what contribution do studies of DPMs and filled pauses make to our understanding of the mental processes involved in human communication?

The eight articles in the Special Issue provide strong evidence of the ubiquity of DPMs and fillers across different languages, mainly in spoken but also in written interaction (in instant messaging, for example). They show the ways in which lexical or grammatical items with particular semantic cores are pressed into service for pragmatic purposes and that these are similar across languages. We see the huge variety of categories that are recruited for these language-processing and interactional requirements: so-called vocalisations (*eum*), the three-dot sign, determiner/demonstrative pronouns (*tota*), negatives (*no?),* adversatives ('actually', *en fait),* similatives ('like'), expressions with highly generic meanings (*truc, machin*), and mental state verbs (*(eu) acho que*), to name but the handful studied in this collection. Not all occur in all languages, but many have translation equivalents (albeit not in a one-to-one relationship), showing both the universality of the reflex to draw on 'small words' for interactional and processing needs, and also the variability in the detail of their implementation. The study of DPMs and FPs gives insight into semantico-pragmatic change, and polysemy. The use of particular forms in interactional contexts with particular side-effects leads to a routinisation of the association with the side-effect in a metonymic way – speakers request agreement of their rather hesitantly formulated but conceptually complex ad hoc list by using the negative particle *no? - no?* comes to be associated with hesitancy (as well as with negation).
The articles in the Special Issue lead us to turn our original research question on its head: what we seem to be asking and answering is, rather:

> what contribution do studies of DPMs and filled pauses make to our understanding of the ways that human communication impacts on our mental processes?

The articles published here demonstrate rather conclusively that the mental lexicon is far from being a water-tight box. Both the cognitive difficulties involved in formulating what we want to express and the desire to interact politely and satisfactorily with hearers while we do so have an impact on the language system we use every day in ordinary conversation.

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