

Fluency Idiolects in L1 and L2 Speech: The Case of Fillers

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Abstract

This paper presents the results of a study of the frequency and functions of fillers in the native-language Norwegian and interlanguage English of six students in tertiary education. The focus is on the speakers' fluency idiolects, i.e., the extent to which they exhibit similar filler use in both languages. The results show that major tendencies regarding forms and functions of fillers are similar between the speakers' L1 and L2 production and thus reinforce the importance of including L1 material in studies of interlanguage production.

Keywords: spoken learner English; fluency; fillers; L1–L2 comparison

1. Introduction

In the L2 classroom, the importance of oral communication skills is increasingly recognized in curricula and learning materials. The *Common European Framework of Reference for Languages* (CEFR) (CoE 2020: 183–184) provides a set of descriptors for the assessment of spoken performance which at least partly operationalize the concept of 'fluency'. However, there are still notable gaps in our knowledge about what characterizes fluent speech. The qualitative descriptors of the CEFR emphasize a lack of pausing and hesitation, and, for the C1 level, 'a natural, smooth flow of language', but this description begs the question of what can or should be considered 'natural' and 'smooth'. One possible interpretation of 'natural' is 'nativelike', and the term 'nativelike performance' has even been suggested as an alternative to 'fluent' (Denke 2005: 19). Crucially, however, 'nativelike' does not necessarily imply 'smooth', at least not if 'smooth' is taken to mean 'free from hesitations and reparation phenomena', as individual speakers exhibit individual degrees of 'smoothness' in their L1 (cf., e.g., Guz 2015; Aas and Rørvik

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2017; Belz et al. 2017; Peltonen 2018; Duran-Karaoz and Tavakoli 2020). A more productive goal for the L2 learner may be ‘to cope with ‘stumbles’ satisfactorily’, i.e., in a nativelike manner (Denke 2005: 27), which may in fact increase learners’ (perceived) fluency (cf. Gilquin and De Cock 2011: 159). However, as pointed out by, for instance, Jiráňková et al. (2019), L2 performance is not only a question of proficiency in the L2. It may also ‘reflect the learner’s speech habits adopted in the mother tongue’ (Jiráňková et al. 2019: 35), or what may be termed a ‘fluency idiolect’.

The present study explores the potential existence of fluency idiolects in the L1 Norwegian and L2 English production of six advanced learners. More precisely, the focus of the study is the frequency and function of lexical and non-lexical ‘fillers’ (e.g., ‘well’ and ‘eh’, respectively) in speech management, as these features may be seen to interrupt the ‘natural, smooth flow of language’ alluded to in the CEFR descriptors, potentially causing the speakers’ degree of fluency to be questioned. The following research question guided the study: To what extent can individual fluency idiolects be traced in the L1 and L2 filler use of these six speakers?¹

To answer this question, an exploratory case study was carried out examining every item in the learners’ production that satisfied the following definition: lexical and non-lexical items which lack propositional content and occur in conjunction with an unfilled pause or turn-initially (see further section 3). In the literature, similar phenomena have commonly been termed ‘pragmatic markers’, ‘discourse markers’, ‘filled pauses’ and ‘filled particles’ (Belz 2023). While relevant previous studies using these terms will be included in the literature review in section 2, we have chosen to use the term ‘filler’ (cf., e.g., Bortfeld et al. 2001; Clark and Fox Tree 2002; Tottie 2015; Peltonen 2018) for the following reasons:

- There is no clear consensus in the literature as regards the definitions of the umbrella terms ‘pragmatic marker’ or ‘discourse marker’ (cf.

¹ The terms ‘L2’ and ‘interlanguage’ are used interchangeably throughout the paper as terms for the English produced by the study’s informants, who were all students of English in higher education in Norway when recorded. ‘L1’ and ‘native speaker’ are used to label the reported first language of the informants as well as relevant languages and speakers reported on in the studies presented in section 2.

Denke 2005: 38; Aijmer 2015: 195; Crible 2017: 245), which makes comparability of results an elusive goal whichever term is used.

- Many studies of pragmatic/discourse markers take as their starting point a pre-defined list of items, instead of employing the bottom-up approach taken in the present study, which compounds the problem of comparability of results alluded to above (cf., e.g. Denke 2005, Aijmer 2015; Buysse 2015).

‘Filler’ has been suggested as a ‘neutral term’ for what has traditionally been called ‘filled pauses’ (Clark and Fox Tree 2002: 75), and can be seen as a term that ‘carries almost no semantic baggage’ (Belz 2023: 22), which fits well with the broader object of our study.

2. Previous research

In this section relevant previous research in three areas is presented: (1) the use of fillers in native and interlanguage speech; (2) individual speakers’ fluency idiolects; and (3) the status of fillers in relation to fluency.

2.1 Fillers in native and interlanguage speech

Bortfeld et al. (2001) examined fillers (‘uh’, ‘ah’, ‘um’, and ‘er’) in English native speaker (NS) material, and found that these fillers could be seen to facilitate conversation by signaling ‘delays in producing utterances and perhaps by soliciting help or responses by partners’ (Bortfeld et al. 2001: 142). Similarly, Tottie (2015) examined the use of ‘uh’ and ‘uhm’ in NS English and found that most instances (73%) were used for planning purposes, while less prominent functions were instances where the speaker appeared to want to take over the turn or yield the floor to their interlocutor.

Studies that examine interlanguage speech often include comparison with an NS component. Denke (2005) explored the use of non-propositional instances of ‘you know’, ‘I mean’, and ‘well’ in L1 and L2 English. The interlanguage material came from seminars in the natural sciences at a Swedish university, and the NS material came from corresponding presentations held by L1 English speakers. Learners were found to overuse these markers in connection with silent pauses, and thus they may be considered to signal hesitation, while the NSs primarily used

them as text-structuring devices. It was also noted that there was a great degree of idiosyncratic variation in the use of these items.

L2 speakers' use of fillers to mark hesitation has also been described by Mukti and Wahyudi (2015), who examined the use of 'um' in class presentations by Indonesian university students. Mukti and Wahyudi note that 'when *um* is uttered in the middle of the speech, it is commonly followed by other hesitations such as *well*, *I mean*, or *so*' (Mukti and Wahyudi 2015: 12), and this combination is thus similar to the one consisting of a pause and a filler reported by Denke, as described above.

The function of hesitation or buying planning time, frequently in combination with a pause, was also reported by Buysse (2015) to be the most frequent among interlanguage speakers. Buysse investigated speech management and attitudinal functions of 'well' in multiple L1 components (Dutch, French, German, Spanish and Chinese) of the *Louvain International Database of Spoken English Interlanguage* (LINDSEI) (Gilquin et al. 2010) and compared the English interlanguage of these speakers with that of speakers from LINDSEI's comparable NS corpus, LOCNEC. The LINDSEI speakers were found to overuse 'well' and to use it for different functions than NSs, since the LOCNEC speakers only infrequently used 'well' to buy planning time.

Similar findings concerning 'well' were reported by Gilquin (2016), in a study of the discourse markers 'and so', 'and then', 'I mean', 'like', 'sort of', 'well', and 'you know'. The material employed in this study also came from LINDSEI and covered multiple L1 backgrounds. Comparison with LOCNEC revealed, however, that 'well' is a special case, since most of the other discourse markers investigated were actually found to be underused by the learners (with the exception of 'and so'). In addition, great individual variation was found with respect to which discourse markers were preferred.

Rose and Watanabe (2019) examined the potential cultural value of silence in relation to filled pauses (English *uh/um* and Japanese *e:/e:to*) and observed that Japanese L1 speakers exhibit a greater tolerance for silent pauses than do L1 speakers of American English, who are more likely to use a filled pause at utterance boundaries. Similarly, Sajavaara and Lehtonen (1997: 274) have explored the cultural stereotype of 'the silent Finn', asserting that in Finnish culture 'long pauses in discourse are common and acceptable: a speaker can pause without being threatened with the loss of floor'. This implies that even in cases where speakers do

hesitate, their cultural background might influence whether they use a filler or not. Whether this has an impact on listeners' perception of their fluency is unknown, but this cultural factor is not explicitly mentioned in the CEFR as an aspect to consider when assessing whether interlanguage speakers achieve the desired 'natural, smooth flow of language' (cf. the CEFR descriptor quoted in section 1).

2.2 Evidence of individual speakers' fluency idiolects

In this section the focus is on studies that compare speakers' L2 performance with their L1 performance, which could shed light on the potential existence of fluency idiolects.

In a 2015 study, De Jong et al. examined the impact of personal speaking style on L2 production, focusing on how L1 speakers of English and Turkish potentially transfer fluency behavior such as length of pauses, frequency of silent and filled pauses and syllable duration to their L2 Dutch production. They found that although the speakers were less fluent in their L2 (across all measures), the speakers' individual L1 fluency behavior provided an indication of how they would perform in the L2, and that this applied regardless of whether the L1 was English or Turkish.

Among the many studies of fluency where the target language is English, Guz (2015) compared the L1 and L2 speech of 50 Polish learners of English with regard to—among other features—frequency and length of filled and silent pauses. The results did not show that the speakers were influenced by their L1 behavior in their use of pauses. However, as this may not pertain to learners from other L1 backgrounds, Guz (2015: 237) concludes that 'in order to provide accurate and reliable descriptions of learner oral L2 performance, L1 fluency data need to be obtained first as a reference or a baseline'.

Peltonen (2018) examined the English interlanguage of 42 young Finnish learners. Several features were included in the study, such as speed, fillers and filled pauses, and the results showed that 'the majority of L2 fluency measures could be predicted from L1 fluency measures' (Peltonen 2018: 685). Peltonen (2018: 687) emphasizes the importance of considering personal idiosyncrasies, noting that one participant exhibited a distinct lack of connection between L1 and L2 fluency: he had the highest frequency of repetitions in English of all the participants, but his L1 production was totally devoid of this feature.

Jiráňková et al. (2019) compared data from the Czech component of LINDSEI and Czech L1 data from the same speakers, and their results showed that speakers with a rapid speech rate in their L1 also spoke quickly in the L2, although native speech was overall faster than learner language.

Finally, the informants in Duran-Karaoz and Tavakoli's (2020) study were L1 speakers of Turkish representing three different proficiency levels in their L2 English. Their speech rate and pause behavior in both languages were examined, and it was found that although there were more pauses in the L2 production, there was a correlation between L1 and L2 fluency, and this held true across different proficiency levels.

2.3 The status of fillers in relation to fluency: byproduct vs. (conscious) communication strategies

As the overview of previous research on fluency idiolects in section 2.2 shows, there are good reasons to conclude that at least parts of learners' use of fillers can be attributed to transfer of their L1 idiosyncrasies into their interlanguage production. This should have implications for the assessment of L2 fluency. It is also clear, however, that transfer of idiosyncratic L1 speech habits do not account for all instances of fillers in the learners' L2 production. If we consider fillers a byproduct of learners' production-related difficulties, they may be seen as problematic and a property of interlanguage speech that hopefully decreases in frequency with increased proficiency. Indeed, this is a view hinted at in the CEFR descriptor quoted in section 1, which describes fluency at the C1 level in terms of 'smoothness of flow'. On the other hand, one might also view fillers as part of (conscious) communication strategies, and as features used to send signals to interlocutors related to, e.g., speech management and turn-taking. A third option is to consider them parts on a 'scale of (dis)fluency' (Crible et al. 2017), where one might assume that their limited use does not affect the listeners' perception of the speaker's fluency, whereas very frequent use may well do so. Indeed, Götz (2013: 9–10), in her theoretical account of 'fluencemes' of production and perception, posit that 'the listener usually does not take too much notice' of speakers' use of features such as pauses and discourse markers. This issue has a significant impact on how learners' L2 oral proficiency is assessed, and we therefore include a brief overview of various positions presented in the literature.

While there is overwhelming agreement that the pressure of online processing is a major reason for speakers' use of fillers and related phenomena (cf., e.g., Bortfeld et al. 2001; Buysse 2015; Mukti and Wahyudi 2015), there is greater variation in views as regards whether such usage is only a (negative) symptom or whether it also has one or more potential (positive) communicative functions which would render filler use more of a communication strategy than a signal of insufficient fluency (cf. Walker et al.'s (2014) terms 'filler-for-byproduct' vs. 'filler-as-partner'). In support of this more positive view, we find for instance Clark and Fox Tree (2002), who argue for viewing 'uh' and 'uhm' as 'conventional English words' over which speakers execute a great deal of control. Supporting this is the fact that speakers are seen to vary their use of non-lexical fillers depending on register, and that their use does not appear to be determined by the processing demands of the speaking situation (Clark and Fox Tree 2002: 99). One might perhaps conclude at this stage that while there is definitely a planning component involved as a catalyst for the use of fillers, there is also ample support that they have communicative functions. These include warning the addressee of a delay in production and thus making sure that one retains control of the floor (Bortfeld et al. 2001; Clark and Fox Tree 2002; Walker et al. 2014); yielding the floor, i.e. what Tottie terms 'diminished intent to continue'; taking over the floor (Tottie 2015: 401); and avoiding silent pauses in cases where these would exceed the culturally accepted threshold for what constitutes 'normal' silence (Rose and Watanabe 2019).

In the present study, we take the view that fillers have discourse functions that cannot be ignored, and that because they are a frequent feature in L1 speech as well as in L2 speech, they cannot solely be regarded as disfluency markers in interlanguage speech, or as indicators of speech that is not 'natural' in its flow (cf. the CEFR descriptor quoted in section 1). In other words, we agree with Denke (2005) and also Belz et al. (2017: 119) that the aim for learners should be to deal with 'disfluencies in the target language in a native-like way, thus being, in a way, 'fluently disfluent''. Hence, there is a need for studies such as the present one that look into the connection between L1 and L2 filler behavior.

3. Material and method

Our study focuses on whether the six interlanguage speakers interviewed for the corpora employed in this investigation exhibit any evidence of L1–

L2 correspondence in their use of fillers, i.e., whether individual fluency idioms can be traced regarding this feature. The size of the material renders a qualitative exploration of each speaker's filler use possible, but any tentative conclusions that are drawn on the basis of the present study must be tested against a larger dataset in order to establish any general conclusions about the filler use attributable to Norwegian interlanguage speakers of English. Thus, while we rely on normalized frequencies, as described below, to explore the L1 and L2 behavior of each speaker, we do not attempt to establish any form of statistical significance at group level.

3.1 Material

The material used consists of 12 semi-structured interviews with six individual speakers, with each speaker providing one interview in their L1, Norwegian, and one in their L2, English. The interlanguage material appears in the (forthcoming) Norwegian component of the LINDSEI corpus, which consists of informal interviews with a native speaker of English.² The L1 material was taken from a comparable (unpublished) corpus of six interviews in Norwegian with six speakers who also contributed to the Norwegian LINDSEI.³ The six speakers were all in their twenties or early thirties at the time of the recording, there is an even gender distribution, and they were all undergraduate students of English at the time of both recordings. Five of the speakers were in their first year of higher education, and one (Speaker 2) was in their fourth year.⁴ One speaker (Speaker 5) had stayed approximately one year in an English-speaking country. The two interviewers were native speakers of the target language: English in the case of LINDSEI and Norwegian in the Norwegian corpus. The fact that the material comprises interviews and not, for instance, informal conversations could influence the behavior of

² For more information on LINDSEI, the following website can be consulted: <https://uclouvain.be/en/research-institutes/ilc/cecl/lindsei.html>.

³ Both corpora were compiled after approval had been granted from the Norwegian Data Protection Services for research (*Sikt*): <https://sikt.no/en/data-protection-services>.

⁴ As the informants' gender is not relevant to the current discussion, gender neutral pronouns are used throughout the remaining sections of the paper.

the interlocutors, and this should be borne in mind when interpreting the results.

In total, the material used for the purpose of this study comprises 12,110 words in L1 Norwegian and 10,547 in IL English (interviewer utterances excluded), divided between 404 turns in the Norwegian material and 369 turns in the English material, as outlined in Table 1.⁵ A turn is defined here as any utterance from the interviewee when they hold the conversational floor, meaning that the speaker's turn can be interrupted by, for example, backchanneling from the interviewer, if this does not result in a change of speaker. This is illustrated in example (1), where two utterances from the interviewer (speaker A) are included in the interviewee's (speaker B's) turn, since these utterances do not interfere with them holding the floor.

(1) [S6 IL]

B turn, B	no I've [overlap] only worked as a a dance
utterance:	instructor [pause] [response] and a workout
	instructor (end B utterance)
A utterance:	[overlap] no (end A utterance)
A utterance:	[response] uhu (end A utterance)
	(end B turn)

Table 1 provides an overview of the number of words and turns in each interview and shows that the mean length of each interview is slightly longer in the L1 corpus than in the IL corpus. It can also be seen that the average number of turns per interview is slightly higher in the L1 material than in the IL.

To acquire comparable frequency data for the use of fillers, we present normalized frequencies per hundred words and per turn. By providing frequencies per hundred words (with 'words' defined as any combination of letters between spaces), we ensure comparability with relevant previous studies, and by providing frequencies per turn we ensure that the different orthographic conventions in Norwegian and English do not adversely affect the measured frequencies, since, for example, English compound nouns are typically spelled as two words, whereas the convention in Norwegian is to write them as one orthographic word. These two

⁵ Filled pauses, truncated words and unclear words are included in the word count.

measurements thus complement each other. With regard to the filler functions outlined in section 3.2, the results will be presented as percentages, to reflect the distribution of each function.

Table 1: Number of words and turns and average length of turns in each interview in L1 and IL

Speaker	Number of words		Number of turns		Mean length of turns (in words)	
	<i>L1</i> (Norwegian)	<i>IL</i> (English)	<i>L1</i> (Norwegian)	<i>IL</i> (English)	<i>L1</i> (Norwegian)	<i>IL</i> (English)
1	1,890	2,116	64	36	29.5	58.8
2	2,479	1,924	65	89	38.1	21.6
3	2,255	2,107	62	55	36.4	38.3
4	1,889	1,539	78	50	24.2	30.8
5	1,844	1,475	70	73	26.3	20.2
6	1,744	1,386	65	66	26.8	21.0
Total	12,101	10,457	404	369	30.0	28.3
Standard deviation	285.3	329.8	5.3	18.6	5.7	15
Mean number	2,106.8	1,757.8	67.3	61.5	N/A	N/A

3.2 Method

The present study employs the following definition of a ‘filler’ (cf. section 1): lexical and non-lexical items which lack propositional content and occur in conjunction with an unfilled pause or turn-initially. The position criterion—that the item needed to occur in conjunction with an unfilled pause or turn-initially—was employed to focus our attention on items that may perform strategic speech management functions, i.e., ‘to fill pauses, cover for hesitations, gain time, and provide smooth transformations in breakdowns’ (Dörnyei and Scott 1997, Table 1). An unfilled pause is here defined as any silence belonging to the speaker, longer or equal to 250 milliseconds, in accordance with research by for instance De Jong and Bosker (2013: 20), who find that ‘250–300 ms is the optimal threshold’ when measuring pauses for the purpose of L2 research.⁶ Items that satisfied this definition were identified manually, to avoid the potential

⁶ The identification of unfilled pauses (including pause duration thresholds) is an important part of studies that employ such pauses, and several calls have been made (e.g. Trouvain and Werner 2022) for methodological transparency and an acknowledgment of its complexities. For further information on the pause identification procedure employed here, see Aas and Nacey (2019).

problem inherent in using a pre-defined set of items, namely that items satisfying the functional definition might be left out as a consequence of not appearing on the search list.⁷

Once identified, each filler was classified according to its function in adherence with the classification scheme outlined in Table 2 below. The framework employed was based on previous research (cf. section 2, especially 2.3). Acoustic features of the utterance (such as a falling/rising intonation pattern) was used to aid our functional categorization in unclear cases.

Table 2: Framework for categorization of filler function

Function	Sub-category
Filler-for-partner (interpersonal)	Avoiding pause (these appear turn-initially or as the only item in turn)
Filler-as-byproduct (cognitive)	Hesitation/planning
Combination	‘Diminished intent’ (Tottie 2015) (turn-yielder: gives other speakers a chance to take over the turn)

The overarching functions summarize the discussion in section 2.3 as regards the status of fillers. We identify two main uses of fillers, which we have labeled ‘filler-for-partner’ and ‘filler-as-byproduct’, following Walker et al. (2014), and a third function which is a combination of these two. In our material, filler-for-partner manifested itself in the form of fillers interpreted as being used to avoid pauses, as illustrated by the highlighted filler in example (2).

⁷ The *PRAAT* software (Boersma and Weenink 2013) was used to identify pause length, and the software *Filemaker* was used for coding of filler functions.

(2) [S1 IL]

A turn: oh
(end A turn)

General pause

B turn: so
(end B turn)

This function is considered interpersonal and related to the issue pointed out by Rose and Watanabe (2019), in the sense that speakers want to avoid silences exceeding a perceived limit for what is culturally acceptable. Fillers are seen to be used for this purpose either turn-initially or when the filler is the only item in the turn (but not in all cases, cf. example 9 below). In the case of example (2), the filler ended up being the only item in the turn.

The second function is cognitive and occurs in cases where fillers are used to buy planning time while the speaker is still retaining control of the floor, as illustrated in example (3).

(3) [S1 IL]

B turn: yeah write down people's name when
you call them so that if you ever have
to [pause] **em** complain about
something not going through you
have something to go back on

Fillers are typically used for this purpose in the middle of turns, as is the case with the use of 'em' in example (3). The speaker appears to have no intention of yielding the floor here but the speaker gives the impression of needing planning time in order to select a verb.

The final function is a combination of interpersonal and cognitive factors. What may initially be interpreted as a signal of hesitation is interpreted by the listener as 'diminished intent' (Tottie 2015), and results in the other speaker taking over the floor, as exemplified in the exchange in (4).

(4) [S5 IL]

- B turn:** yeah cos [pause] yeah Hawaii is very much like a melting pot with people from all over [pause] and you see contrast also in Hawaii among the rich and the poor [pause] many Asians Japanese Chinese [pause] yeah
(end B turn)
- A turn:** did you hear the pidgin
(end A turn)

By their very nature, fillers of this type occur at the end of turns. If the listener had not interpreted the filler as a sign of diminished intent and therefore taken over the floor, the original speaker would have remained in control of the floor, and thus the filler would most likely have been interpreted as a signal of hesitation or planning, and categorized as such in our framework.

4. Results and discussion

The process of manual filler identification yielded a total of 497 fillers in the L1 material and 640 fillers in the interlanguage material. Table 3 provides a breakdown of these numbers per speaker in each language.

Table 3: Number of speakers per filler

Speaker	Number of fillers			
	L1 (Norwegian)		IL(English)	
	Raw figures	Per 100 words	Raw figures	Per 100 words
1	87	4.6	118	5.6
2	97	3.9	130	6.8
3	71	3.1	107	5.1
4	63	3.3	115	7.5
5	109	5.9	94	6.4
6	70	4.0	76	5.5
Total	497	4.1	640	6.1
Mean number	82.8	4.2	106.7	7.1
Standard deviation	17.9		19.2	

In the following sections, we describe and discuss the filler use of each of the six speakers in turn (sections 4.1–4.6).

4.1 Speaker 1

Table 4 provides an overview of Speaker 1's filler use. This and subsequent tables contain three types of results: frequency of fillers (per turn and per 100 words), distribution of lexical and non-lexical fillers (percentage of total fillers), and distribution of filler functions (percentage of total fillers).

Table 4: Speaker 1's filler use

Speaker 1							
Frequency of fillers							
L1				IL			
Raw figures	Per turn	Per 100 words		Raw figures	Per turn	Per 100 words	
87	1.4	4.6		118	3.3	5.6	
Distribution of lexical vs. non-lexical fillers							
L1				IL			
Lexical		Non-lexical		Lexical		Non-lexical	
Raw figures	%	Raw figures	%	Raw figures	%	Raw figures	%
24	27.6	63	72.4	16	13.6	102	86.4
Distribution of filler functions							
Function		L1		IL			
		Raw figures	%	Raw figures	%		
Interpersonal	Avoiding pause	2	2.3	2	1.7		
Cognitive	Hesitation / planning	83	95.4	107	90.7		
Interpersonal & cognitive	Diminished intent	2	2.3	9	7.6		

Speaker 1 has a higher frequency of fillers in L2 than in L1, both when measured as number of fillers per turn and per 100 words. In both L1 and L2 most fillers are non-lexical, but Speaker 1 uses approximately 10% more lexical fillers in L1 than in L2. The distribution of filler functions is remarkably similar in both languages, with hesitation/planning accounting for approximately 95% in L1 and 90% in L2, which is in line with Tottie's results (2015). The difference is accounted for primarily by a higher

frequency of diminished intent in the interlanguage, as illustrated by example (5), which is also similar to the findings reported by Tottie (2015).⁸

(5) [S1 IL]

A turn: em then let's go on to talk about other things [pause] em wha what do you do in your free time do you have hobbies interests that type of thing

(end A turn)

B turn: [pause] yeah [pause] computers gadgets [pause] writing about computers and gadgets [pause] em [pause] photography [pause] and geocaching which is sort of related because you can [pause] walk off and do geocaching while you're doing photography [pause] eh and basically anything that has to do with gadgets and computers [pause] em [pause]

(end B turn)

A turn: so what's the most useful gadget you have

(end A turn)

The filler 'em' at the end of speaker B's turn is enclosed by pauses and seems to be interpreted by speaker A as a sign that the floor is available, so the interviewer therefore asks a new question to move the conversation forward

4.2 Speaker 2

An overview of Speaker 2's filler use is shown in Table 5.

⁸ Examples are reproduced exactly as they occur in the data, so they may contain several instances of fillers. The highlighting should be taken as an indication of which filler(s) to focus on in each case. For L1 examples, a translation is provided that follows the original as closely as possible.

Table5: Speaker 2's filler use

Speaker 2							
Frequency of fillers							
L1				IL			
Raw figures		Per turn		Per 100 words		Per 100 words	
97		1.5		130		6.8	
Distribution of lexical vs. non-lexical fillers							
L1				IL			
Lexical		Non-lexical		Lexical		Non-lexical	
Raw figures	%	Raw figures	%	Raw figures	%	Raw figures	%
51	52.6	46	47.4	25	19.2	105	80.8
Distribution of filler functions							
Function		L1		IL			
		Raw figures	%	Raw figures	%		
Interpersonal	Avoiding pause	6	6.2	12	9.2		
Cognitive	Hesitation / planning	80	82.5	112	86.2		
Interpersonal & cognitive	Diminished intent	11	11.3	6	4.6		

The filler frequency per turn is identical in the L1 and IL, but when measured per 100 words, the picture changes, and the frequency of fillers in L2 is nearly twice that found in L1. This discrepancy results from the fact that Speaker 2 has a greater number of turns in L2 than in L1, but each turn is shorter on average, since the number of words is greater in the L1 interview (cf. Table 1). The distribution between lexical and non-lexical fillers is nearly identical in the L1 material, while in the interlanguage material, non-lexical fillers account for more than 80% of fillers. As regards filler functions, Speaker 2 primarily employs fillers with the cognitive function of hesitation/planning in both languages, although the frequency is somewhat higher in English than in Norwegian. On the other hand, they use more fillers that are seen as expressing diminished intent in Norwegian than in English, while pause avoidance is more frequent in the interlanguage. These findings are in line with those reported by Tottie (2015) as regards the primary function of hesitation/planning in both languages and the frequency of diminished intent in the L2 material. Example (6) illustrates Speaker 2's use of fillers to alleviate cognitive load.

(6) [S2 IL]

B turn:

so it was hectic [pause] eh we it was a
twenty year anniversary for the
[pause] Football Club support [pause]
eh Scandinavian supporters club
[pause] so [pause] they [pause] had a
anniversary and we had [pause] eh
[pause] vip [pause] eh V I P boxes at
[pause] eh the stadium and [pause] got
shown around and talked to
everybody and after game the man of
the match came and gave b gave us his
shirt and [pause] yeah it was a great
trip (*end B turn*)

Speaker 2's turn in example (6) contains five non-lexical fillers and one lexical filler, all of which have been categorized as functioning to buy planning time. In all cases the speaker does not appear to have the intention to relinquish the floor, but needs to either furnish more precise description, as in the case of 'Scandinavian supporters club' or search for the correct term or pronunciation of the term, as in the case of 'vip' which becomes 'V I P' pronounced as separate letters after some thinking time.

4.3 Speaker 3

Speaker 3's use of fillers is summarized in Table 6. Speaker 3 only has a slightly higher frequency of fillers in the L2 than in the L1, both in terms of frequency per turn and per 100 words. However, as regards the realization of fillers, we find that lexical fillers are approximately 10% more frequent in the L1 material than in the interlanguage, which has a correspondingly higher frequency of non-lexical fillers, although in both languages the majority are non-lexical. There is also a noticeable difference regarding filler functions. While the vast majority of fillers in both L1 and L2 have the cognitive function of hesitation or buying planning time, the frequency of this function is about 10% higher in the interlanguage than in the L1 data, which is accounted for by the fact that pause avoidance accounts for about 10% of fillers in L1 but is nearly non-existent in L2. This may be because Speaker 3 feels that the cultural threshold for pauses is lower in Norwegian than in English (cf. Rose and

Watanabe 2019). The interpersonal and cognitive function of diminished intent is not attested in L1 and is extremely infrequent in L2, so there are traces of transfer also for this feature.

Table 6: Speaker 3's filler use

Speaker 3							
<i>Frequency of fillers</i>							
L1				IL			
<i>Raw figures</i>	<i>Per turn</i>	<i>Per 100 words</i>		<i>Raw figures</i>	<i>Per turn</i>	<i>Per 100 words</i>	
71	1.1	3.1		107	1.9	5.1	
<i>Distribution of lexical vs. non-lexical fillers</i>							
L1				IL			
<i>Lexical</i>		<i>Non-lexical</i>		<i>Lexical</i>		<i>Non-lexical</i>	
<i>Raw figures</i>	<i>%</i>	<i>Raw figures</i>	<i>%</i>	<i>Raw figures</i>	<i>%</i>	<i>Raw figures</i>	<i>%</i>
14	19.7	57	80.3	11	10.3	96	89.7
<i>Distribution of filler functions</i>							
Function		L1		IL			
		<i>Raw figures</i>	<i>%</i>	<i>Raw figures</i>	<i>%</i>		
Interpersonal	Avoiding pause	8	11.3	1	0.9		
Cognitive	Hesitation / planning	63	88.7	104	97.2		
Interpersonal & cognitive	Diminished intent	0	0.0	2	1.9		

Example (7) illustrates the pause-avoidance function in the L1 production of Speaker 3. Speaker A does not contribute anything that can further the conversation at this stage, so Speaker B takes the floor, but as this is not in response to a question or some other prompt from the interviewer, there is a need for a pause-avoiding filler.

(7) [S3 L1]

General pause**A turn:** mm**(end A turn)****B turn:** mm og så nå når vi har åp eller når det er åpen vinterpark å så merker vi å at det er mer familier for eksempel i vinterferien [pause] enn det det har vært tidligere**(end B turn)**

‘mm and then now when we have op or when the winter park is open also then we notice too that there are more families for instance in the winter vacation [pause] than there have been earlier’

4.4 Speaker 4

An overview of Speaker 4’s filler use is presented in Table 7, and it is evident that while there is a higher frequency of fillers in the interlanguage according to both frequency measures, the realization is remarkably similar, with almost identical percentages for lexical and non-lexical fillers in both languages.

There are traces of transfer of filler behavior as regards the most frequent filler function, with identical percentages for the hesitation/planning function, at approximately 90%. There is a difference as regards the distribution of the other two functions, however. In the L1 dataset, Speaker 4 evenly splits the remaining 10% of fillers between pause avoidance and diminished intent, while in the interlanguage, the frequency is lower for diminished intent and higher for pause avoidance. Speaker 4, like Speaker 3, may thus perceive the cultural threshold for pauses to be lower in English than in Norwegian.

Table 7: Speaker 4's filler use

Speaker 4							
Frequency of fillers							
L1				IL			
Raw figures	Per turn	Per 100 words		Raw figures	Per turn	Per 100 words	
63	0.8	3.3		115	2.3	7.5	
Distribution of lexical vs. non-lexical fillers							
L1				IL			
Lexical		Non-lexical		Lexical		Non-lexical	
Raw figures	%	Raw figures	%	Raw figures	%	Raw figures	%
16	25.4	47	74.6	31	27.0	84	73.0
Distribution of filler functions							
Function		L1		IL			
		Raw figures	%	Raw figures	%		
Interpersonal	Avoiding pause	3	4.8	8	7.0		
Cognitive	Hesitation / planning	57	90.5	104	90.4		
Interpersonal & cognitive	Diminished intent	3	4.8	3	2.6		

Example (8) illustrates an instance where Speaker 4 uses a filler to avoid a continued pause in the L2 interview.

(8) [S4 IL]

B turn:

yeah well I stayed most of my
childhood I was [pause] ill [pause]
during the winter so instead of
playing out with the [pause] other
kids I was just [pause] staying inside
and watching movies on television
(end B turn)

General pause

B turn:

so [pause]well I [pause] certainly
know my movies
(end B turn)

In the general pause following Speaker 4's first turn, as included in (8), there is no attempt by the interviewer to take over the floor, and Speaker 4 must therefore either continue or risk a longer general pause.

4.5 Speaker 5

Speaker 5's filler use is presented in Table 8, and it indicates clearly that this speaker has similar filler frequencies in both languages, and also a very similar distribution of lexical and non-lexical fillers.

Table 8: Speaker 5's filler use

Speaker 5							
Frequency of fillers							
L1				IL			
Raw figures		Per turn		Per 100 words		Per 100 words	
109		1.6		94		1.3	
						6.4	
Distribution of lexical vs. non-lexical fillers							
L1				IL			
Lexical		Non-lexical		Lexical		Non-lexical	
Raw figures		%		Raw figures		%	
37		33.9		72		66.1	
				33		35.1	
				61		64.9	
Distribution of filler functions							
Function		L1		IL			
		Raw figures		%		Raw figures	
Interpersonal		Avoiding pause		23		21.1	
Cognitive		Hesitation / planning		83		76.1	
Interpersonal & cognitive		Diminished intent		3		2.8	
				4		4.3	

When it comes to the filler functions, we also find evidence of Speaker 5's filler idiolect in both languages: the frequencies for each function are very similar in both languages, with the cognitive function of hesitation/buying planning time accounting for approximately 3/4 of all fillers. The second most frequent function is the interpersonal function of pause avoidance, which accounts for about 20%, and the remaining occurrences belong to the interpersonal and cognitive function of diminished intent. It would seem that Speaker 5 perceives the acceptable pause threshold to be

relatively low in both languages. We exemplify Speaker 5's filler use with the utterance in (9), which exemplifies hesitation/planning in the interlanguage data

(9) [S5 IL]

A turn: did you backpack around in in
Cambodia and Vietnam or how
(*end A turn*)

B turn: [pause] eh yeah [pause] we were part
of a Christian Christian missions
organization [pause] and we took a
school that [pause] was located in
Hawaii and then
(*end B turn*)

In example (9), there appears to be no confusion as to whose turn it is to speak, so this is not an instance of general pause avoidance. Rather, Speaker 5 seems to need some thinking time to work out how to answer the interviewer's question. The filler 'eh' is preceded by a pause, which is a constellation also described by Clark and Fox Tree (2001: 84).

4.6 *Speaker 6*

Finally, we come to the presentation of Speaker 6's filler use. The relevant frequencies are presented in Table 9. In terms of overall filler frequency, there is only a slightly higher frequency in the L2 when measured per 100 words, but we can see that Speaker 6 uses more lexical and fewer non-lexical fillers in L1 than in L2, although non-lexical fillers are most frequent in both languages. The most common filler function (hesitation/planning) occurs with very similar frequency in both languages, viz. around 82%. The second most frequent function is pause avoidance, and diminished intent is the least frequent. Although there are slight differences in the percentages for each of these functions, the overall pattern is the same across languages. The fact that hesitation/planning is the most frequent function matches Tottie's (2015) findings, as does the percentage accounted for by diminished intent in the interlanguage data.

Table 9: Speaker 6's filler usage

Speaker 6							
Frequency of fillers							
L1				IL			
Raw figures	Per turn	Per 100 words		Raw figures	Per turn	Per 100 words	
70	1.1	4.0		76	1.2	5.5	
Distribution of lexical vs. non-lexical fillers							
L1				IL			
Lexical		Non-lexical		Lexical		Non-lexical	
Raw figures	%	Raw figures	%	Raw figures	%	Raw figures	%
15	21.4	55	78.6	10	13.2	66	86.8
Distribution of filler functions							
Function		L1		IL			
		Raw figures	%	Raw figures	%		
Interpersonal	Avoiding pause	11	15.7	9	11.8		
Cognitive	Hesitation / planning	58	82.9	62	81.6		
Interpersonal & cognitive	Diminished intent	1	1.4	5	6.6		

We end this section with example (10), which is an instance where Speaker 6 expresses diminished intent by means of the filler 'mm'.

(10) [S6 IL]

B turn:

[pause] I don't know maybe they had but I I don't think at that time in my life I wasn't able to do that [pause] I think I needed to grow up and be able to put down some boundaries [pause] for myself mm

(end B turn)

General pause

A turn:

so you've been out in the schools already [pause] to

(end A turn)

In the case of example (10), Speaker 6 seems to intend to yield the floor, as the turn ends with the filler. However, there follows a general pause

before the interviewer realizes that this was Speaker 6's intention and initiates a new turn.

5. Summary and concluding remarks

Our study set out to explore to what extent individual fluency idiolects may contribute to accounting for similarities found between the Norwegian L1 and English interlanguage filler use, through a bottom-up identification and subsequent analysis of fillers in both languages. As can be seen from the results presented and discussed in the previous section, the present dataset provides evidence in favor of the existence of transfer of fluency idiolects from L1 to L2, in the sense that major tendencies regarding forms and functions of fillers are similar between the speakers' L1 and L2 production. This corroborates findings from studies by De Jong et al. (2015), Peltonen (2018), Jiráňková et al. (2019), and Duran-Karaoz and Tavakoli (2020). Some patterns found in the material from each speaker were discussed in connection with specific examples, such as the different frequencies and realizations of the functional category of 'diminished intent'. Our study thus adds to the existing literature in reinforcing the importance of including L1 material in studies of interlanguage production. The major difference between L1 and L2 production in the present dataset is to be found with regard to frequency of fillers, which is higher in the interlanguage material for all six speakers when measured in number of fillers per 100 words. The overall conclusion is thus that we can trace fluency idiolects in the form and function of fillers as they were used by our six informants, but that filler frequency is more likely to be a function of L2 proficiency (cf. Guz 2015). The dynamics of the interview situation could also greatly affect speakers' behavior, and this ultimately affects the analysis of the function of each filler. The precise nature of the interplay between these factors remains a rewarding avenue for further research, but it is clear that fluency assessment of L2 speakers should take into account behavior in the L1.

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