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Research Article

Understanding Fluency and Disfluency in Non-native Speakers' Conversational English

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Abstract

Developing speaking fluency in a foreign language is a challenging goal especially in countries where English is learned as a foreign language as learners have no natural exposure to the target language. This paper discusses how fluency and disfluency are reflected in English conversations of Turkish students. It is assumed that developing fluency in a foreign language can be an easier task if we can understand the nature of fluency. For that purpose, ten Turkish undergraduate students' conversational English was analyzed to examine how fluency and disfluency are realized in non-native data. The data analyses revealed that fluency is related to a number of factors such as pauses, hesitations and discourse markers and language proficiency level of the speakers.

Keywords

Fluency • Disfluency • Fluency markers • Conversational English • Non-native conversations • Teaching fluency

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What is Fluency?

Fluency has often been contrasted with “accuracy” in language teaching (Brown, 2003; Chambers, 1997), and in everyday life it often refers to a general “oral proficiency” in a given language, be it native or foreign. To Riggenschach (1991), fluency is a “complex high-order linguistic phenomenon” (p. 423) and to Fillmore (1979) it is the “ability to talk at length with few pauses” (p. 93). Lennon (1990), on the other hand, states that fluency is related to “producing speech at a native-like tempo” while Chambers (1997) describes it as “effortlessness”. Lennon (1990) also makes a distinction between a “broad” and “narrow” sense of fluency; the former referring to “a cover term for oral proficiency” and the latter to “native-like rapidity”. Although literature review does not indicate consensus as far as the definition of fluency is concerned, one would expect to see at least some of the following features in any account of fluent speech:

In fluent speech:

- a. ideas flow smoothly with ease of production and without a break
- b. language mistakes do not interfere with the message
- c. pauses, hesitations, self-repairs are all part of fluent speech
- d. speakers retrieve language forms automatically, without thinking
- e. communication is effective

Briefly, fluent speech has smoothness, continuity and naturalness. A good way to explain fluency is, perhaps, to think of what disfluent speech consists of. In other words, how do we know that someone is not fluent while speaking in any language, that is, what marks disfluency in someone’s speech? Many would agree that the frequent occurrence of long pauses and hesitations and over and untimely use of discourse markers in speech are some of the characteristics marking disfluency in a given language (Watts, 1989).

Accuracy and Fluency

As mentioned above, fluency is often contrasted with accuracy in language teaching methodology. The historical overview of the methods and approaches shows that often one is favored over the other. However, these two constructs are not mutually exclusive. They are complementary in the sense that proficiency in any language entails the presence of both, simply because successful language use is an orderly balance of both at the same time. Accuracy without fluency in speech often means inability to use the language competently and can cause undue strain for the listener. Fluency without accuracy, on the other hand, could lead to communication

failure in many cases. Often, inaccurate utterances, either because of structural or pronunciation mistakes, may not carry much meaning and may impair fluency.

Conversational Phenomena, Discourse Markers and Fluency

Most research on fluency has involved monologic speech. In this connection, Wood's (2001) model of fluency and his definition of the construct emphasize the significance of pauses and the fluent runs between these pauses. Analyzing conversational fluency brings different variables into question such as discourse markers, back-channeling turn-taking and other phenomena that belong to conversational language. Discourse analysis of naturally occurring conversations in English also reveal other important features that may be related to fluency. Some of these are what came to be known as discourse markers or particles (Fraser, 1990; Özbek, 1995; Schiffrin, 1987; Schourup, 1985), hesitation phenomena and self-repairs (Cucchiaroni, Strik, & Boves, 2000), or "small words" in general (Götz 2013; Hasselgreen, 2004). The mere existence of some of these markers such as *I mean, you know, actually, well, erm...* may make non-native speech more fluent. It is often observed that learners of English tend to use their native language markers in such cases or not to use anything at all mostly because they are hardly taught about them (Hellerman & Vergun, 2007). The important point to note here, however, is the fact that overuse of such particles even in native language may be perceived as speaker's being disfluent, inarticulate or uneducated even by those speakers who use them excessively themselves (Watts, 1989). More surprisingly, no occurrence of them at all may be perceived as unnatural as any stretch of real language use is abundant in these markers. However, not many language teaching programs include the teaching of such particles as part of their oral communication courses to promote fluency. Systematic teaching and activation of such items by means of using authentic listening materials may have a positive effect on students' fluency.

Temporal Variables and Fluency

There have been many attempts in literature to link fluency with 'measurable temporal variables' such as pauses, speech rate and speed of delivery (Wood, 2006, p. 14). It seems that qualitative and quantitative analyses of pauses in speech has a big impact on perceived fluency. The former is related to the length and frequency of pauses and the latter to their position and quality, i.e. whether they are filled or unfilled pauses. Ling (2007) argues that speech-pause ratio determines our perception of fluency. Riggensbach (1991) also links fluency to pauses and states that fluent speech is what lacks unnatural pauses in nonnative data.

Wood (2001) highlights the importance of temporal variables and argues that what affects our perception of fluency or dysfluency is speech rate, speed of delivery, frequency,

length, location and the distribution of the pauses and, more importantly, length of fluent runs between pauses in speech. Wood (2001) states that "...the most important variable of speech associated with fluency is the quantity and quality of the runs of speech which occur between pauses. Together with the distribution of pauses, this feature not only serves as a discriminator of fluent and disfluent speech but also provide a key to the means by which fluency can be facilitated through instruction" (2001, p. 4). His view of fluency highlights the significance of "longer runs between pauses".

Formulaic Units and Fluency

Miller and Weinert (1998) suggest that an important proportion of our spontaneous utterances contain a combination of formulaic units stored as wholes as well as newly created chunks. These chunks are given several labels in literature, some of which are "lexical phrases, multi-word phenomena" (Nattinger & De Carrico, 1992, p. 1), "automatised chunks" (Wood, 2001) and "multi-word expressions" (MWEs) (Dahlmann & Adolphs, 2007). Nattinger and Decarrico (1992) state that they are "multi-word phenomena that exist somewhere between the traditional poles of lexicon and syntax, conventionalized form/function composites..." (p. 1) These formulaic chunks seem to share certain characteristics such as helping learners extend the length of fluent runs between pauses (Chambers, 1997) and they improve fluency as they are retrieved from the memory without any planning or processing time (Wood, 2001). Another significant feature shared by these chunky phrases is their "holistic storage" as Dahlmann and Adolphs (2007) argue. They are "stored holistically in the mental lexicon and therefore are produced without pauses in naturally occurring discourse" (p. 49) and Hickey (1993) states that these expressions display more phonological coherence. This suggests that their holistic storage in memory causes their full retrieval at one go, without any pause, and as Pawley and Syder (1983) put it, such pauses, i.e. pauses within the expressions, are less acceptable than the ones within the free expressions. For Pawley and Syder (1983) only a small number of our utterances are novel and memorized phrases and chunks, in fact, form an important proportion of our everyday conversations. This implies that the more formulaic chunks learners are able to use competently, the more fluent they could be.

McCarthy's (2005; 2010) discussion of fluency, besides including all the above concepts such as rate of talk, lack of pauses, natural rhythm and stress, questions the strength of traditional assumptions on fluency and bases his fluency discussion on the analysis of spoken language corpora. His examination of real-life conversations reveals that fluent utterances in speech have two important components: formulaic chunks of high frequency such as 'and then, I mean, you know' and 'the newly synthesized non-chunked content elements'. McCarthy (2005) states that the former contributes to the phonological fluency as well as lexico-grammatical fluency as they tend to be

spoken more quickly and as a separate tone unit. The latter, on the other hand, can be spoken more slowly, he continues, without harming fluency. Wood (2006) also links formulaicity and fluency in spoken language as his research indicates that formulaic sequences play a significant role in facilitating fluency in spoken language. Another phenomenon related to fluency, as raised by Raupach (1980), is syntactic complexity, which may be related to formulaicity. If learners are highly proficient in the foreign language, then, they will be able to form utterances of varying degrees of syntactic complexity with no difficulty and this may increase the chunky proportion of their spoken language. So far, the discussion of fluency in literature has mainly focused on two points: temporal variables and automatization of a repertoire of formulaic speech units, also called as lexical phrases (Chambers, 1997; Nattinger & De Carrico, 1992; Pawley & Syder, 1983; Towell, Hawkins, & Bazerqui, 1996).

Another significant point McCarthy (2005) raises on the same account of fluency is how “the cooperative construction of meaning across speaker turns impacts conversational fluency.” This means that listener’s involvement and “backchannels” (Yngve, 1970) or “acknowledgement tokens” (Beach & Lindstrom, 1992) may have an impact on the speaker’s fluency. In this connection, Wolf’s (2008) research findings indicate a similar result as he concludes that “the fluency of non-advanced Japanese learners of English fluctuates in response to various kinds of listener backchannel responses.”

Psychological Factors and Fluency

There are a number of psychological factors that affect spoken language fluency in any language be it native or foreign. Each time we speak to someone or to a group of people, we are concerned with expressing our meaning and making a good impression. When speaking clearly and fluently is already difficult for some people even in their native tongue the challenge is doubled in a foreign language. To Hall (2011, p. 1) we are all no fluent “when we are feeling unresourceful” and also “when we are in a creative state”, both of which are experienced frequently by foreign language learners.

Apart from the above reasons, back-channeling and listener involvement mentioned above may have a positive impact on speaker fluency, and this could be related to psychological factors as well. The more one feels appreciated or attended to, the more they are likely to carry on with their conversation (Wolf, 2008).

Method

In this qualitative case study it is assumed that a detailed conversational analysis of fluent and disfluent speech on discourse level may clarify where a disfluent speaker goes wrong and thus, help us improve our learners’ conversational fluency. In this connection, the present paper seeks answers to the following research questions:

1. What makes people fluent in conversational language?
2. How is disfluency realized in nonnative English conversations?

The participants in this study were ten first year undergraduate students studying in a four-year English language teacher education program in Turkey. The participants were chosen via convenience sampling as they were one-third of the students enrolled in the oral communication course taught by the researcher. This course aimed at improving their speaking and pronunciation skills both at a segmental and suprasegmental level. Before starting to study in their current departments, the students have had six years of English language education. They were all native Turkish speakers and have learned English as a foreign language.

The data were collected in the form of an interview, which was part of their evaluation process and the interviews were videotaped in the researcher's office. The participants already knew that they were going to be recorded and they had been approached for their consent. Before the interview, the participants were asked to choose a number between 1-20 which referred to the numbers of the questions in the interviewer's list. Below are a few sample questions:

- 1) What were some of the challenges you faced when you first started studying at this university?
- 2) Why do you want to become a teacher of English?
- 3) What kind of advice would you give to someone who wanted to improve their English language skills?

The interviews were interactive in the sense that the participants were not in a monologue. They were often asked questions and the interviewer made comments on what they were talking about. There was a friendly atmosphere and the researcher did her best to make the participants feel more comfortable and less anxious as the interviews were being videotaped in her office. As the transcripts indicate, the participants and the researcher ended up talking about other things as the conversation flowed more naturally and smoothly than a formal interview situation.

As for the interviewer, data was collected by the present author who has been involved in English Language Teacher Education for over 25 years. The interviewer is a native speaker of Turkish and speaks fluent English and she has studied German, French and Italian. The researcher's area of expertise is teaching oral communication skills with an emphasis on conversational fluency.

Video files of the data were watched three times before the transcriptions were completed and the researcher took general notes on markers of fluency and disfluency.

After this phase, most of the data were transcribed with the help of Exmaralda (Extensible Markup Language for Discourse Annotation) program. However, those parts that were seen more relevant to the researcher in terms of fluency and disfluency are presented in this study. The total number of words in the transcribed data is 3445 words.

The Transcription Conventions

The transcription conventions used in this study are presented below and they are directly taken from HIAT English Overview presented in the official website of Exmaralda while the examples are taken from the current study.

Pauses

- one bullet for a short interruption of the flow of speech (micro pause)
- two bullets for an estimated pause up to half a second
- three bullets for an estimated pause up to one second

student5 [v]	er rather than only studying er •••you know only reading books She •••should
--------------	--

Pauses more than one second are transcribed writing the exact seconds in double round brackets like in the following example:

S1 [v]	((1,2s)) results in the lesson is very poor.
--------	--

REPAIRS

In the transcription, the repair sequence is represented by a forward slash immediately after the reparandum.

student5 [v]	authentic materials er she/ if she wants to improve his English sorry/ her English
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Unintelligible Words and Utterances

If a stretch of speech is completely unintelligible, this is indicated by the string ‘‘((unintelligible))’’, possibly noting the length of the stretch, e.g. ‘‘((unintelligible, 2.5s))’’ for an unintelligible stretch which is 2.5 seconds long. If the unintelligible stretch is very brief, the description can be abbreviated accordingly (e.g. ‘‘((unint.))’’)

Researcher [v]	other subjects
S1 [v]	if ((unint.))/ if I had the chance of Mathematic I didn't call that

Non-phonological Phenomena

Non-phonological phenomena (e.g. coughing, laughing, throat clearing), as far as they are alternative (rather than simultaneous) to speech, are described between

a pair of double round brackets, possibly noting the length of the phenomenon. Such phenomena can occur inside utterances, at the beginning of an utterance or in isolation.

	..	2 [00:08.8]	3 [00:13.9]	4 [00:17.1]	5 [00:20.9]
researcher [v]				hm hm	hm hm
S2 [v]		lessons •erm ((laughs)) that but I •er ((1,6s)) insistently er study hard			

Transcriber’s Comments

An extra tier for every speaker (with category ‘k’ and type ‘a’) can be used for transcribers’ comments. These comments should be exactly aligned with the part in the verbal transcript to which they refer, i.e. the comment and the thing commented on should be in events with identical start and end points.

Transcriber’s comments typically give information of the following types:

- the standard form for a strongly deviating form in the verbal tier

S1 [v]	because I want to • a/ I wanted to be a loveyer or ee •• on the scientist for: lawyer
S1 [c]	

- a word pronounced in another language other than the language of the dialogue

	2 [00:06.5]	3 [00:10.0]	5 [00:20.9]
S1 [v]	Turkish in sözel but I think it was very •bad •account of my ((1,3s)) next		
S1 [c]	tur: verbal		

tur: abbreviation for Turkish.

- IPA transcription of pronunciation peculiarities which cannot be adequately represented with the help of literary transcription
- possible alternatives in cases of uncertainty.

Findings

Fluency Markers

When the data were transcribed and analyzed the results indicated that fluent and disfluent speakers have some common strategies. To start with fluency markers, i.e. how fluency is realized in the data, the analysis of the data showed that generally speaking, the ten participants were more fluent than disfluent. However two-third of the subjects were perceived to be more fluent than the rest by the researcher.

Fluent participants seem to share the following strategies:

- filled the pauses with either hesitation markers or discourse markers
- hesitations and hedges either preceded or followed the formulaic chunks

- formulaic chunks were stored and uttered as single items
- when asked a question their hedges or discourse markers indicated planning function
- as they were planning what they were going to say they were observed to repeat a part of the question to gain time
- they had more eye contact than disfluent speakers as disfluent speakers tended to look around when they had difficulty in making their meaning clear.
- they seemed to be less conscious of what they were saying and let go of their mistakes

The following extract from the data exemplify all of the above points:

	0 [00:00.0]	1 [00:04.6]
	erm actually •er she/I/I use/ I would say that er she •should deal with some	
	..	2 [00:08.0]
student5 [v]	authentic materials er she/ if she wants to improve his English sorry/ her English	
	3 [00:13.5]	4 [00:16.9] 5 [00:20.6]
student5 [v]	er rather than only studying er •• •you know only reading books She •• •should	
	..	6 [00:26.8]
student5 [v]	er watch some er you know series in English in foreign language and she used to	
	..	7 [00:31.1] 8 [00:33.2]
student5 [v]	listen to ehm some foreign music ••I mean eee it's not enough only to •study on	
	..	9 [00:37.1] 10 [00:39.9]
student5 [v]	books so she should do different things	

Disfluency Markers

Linking and formulaic chunks

The most commonly observed problem in disfluent speakers' conversation is the linking problem. These speakers sound hesitant as the idea units do not come out of their mouth as chunks but they are articulated separately as in the following examples. Speaker I's hesitant "to-be-honest" is a good example for the linking problem. A phrase such as "to be honest" is usually spoken out as one single chunk and the fact that it is spoken as three single items has a disfluency effect.

	0 [00:00.0]	1 [00:01.5]	2 [00:07.0]
researcher [v]	Right, ok. So can you tell me why you decided to study English?		
S1 [v]	..	3 [00:10.3]	((2,1s))to be 4 [00:13.8]
S1 [v]	•honest •••er at the first year of my high school ••er my ma/ mathematics is		
	..	5 [00:19.2]	6 [00:23.5]
S1 [v]	very •poor because of the teacher because of the quarrel with •••him and •my		
	7 [00:25.5]
S1 [v]	((1,2s)) results in the lesson is very poor.		

Pauses. Wood’s (2001) discussion of fluency focuses to a great extent on the pauses. Wood argues that frequency, length, location and distribution of the pauses have a big impact on fluency. The transcribed data reflected similar results in terms of pauses.

First of all, disfluent speakers have a large number of pauses, mostly unfilled pauses and these tend to be longer than fluent speakers’ ones. Any pause longer than two seconds is perceived to be a long one (Jefferson, 1989) and the analysis shows that fluency problems cause longer pauses as in the previous example given in 5.2.1.

The above pauses, three in one single turn, impair the fluency. The following exchange has the longest pause in the data:

	0 [00:00.0]	1 [00:03.3]
researcher [v]	So how did you learn to cope with these difficulties? What did you do to cope	
	..	2 [00:05.8] 3 [00:05.9] 4 [00:07.9] 5 [00:09.9]
researcher [v]	with these difficulties?	
S6 [v]	••Hmm ((3,9s))then I fee/ I eee •••try to understand my	
	6 [00:10.0] 7 [00:15.5]	8 [00:18.3] 9 [00:23.9]
S6 [v]	very •poor because of the teacher because of the quarrel with •••him and •my	
	..	7 [00:25.5]
S6 [v]	friends. •and everyone has difficulties.	

These examples also indicate that if a pause of a reasonable length (not more than 5 seconds, for example) comes after a question and is preceded by a hesitation marker it sounds more acceptable, or goes unnoticed, as it clearly marks speaker planning time. Therefore, the length of the pauses and their location in the turn seems to impact perceived fluency.

	0 [00:00.0]	1 [00:02.0]	2 [00:04.3]	3 [00:04.4]	4 [00:05.2]
researcher [v]	what were some of the difficulties when you first started university?				
S6 [v]	••				
	5 [00:07.2]	6 [00:08.0]	7 [00:09.0]	8 [00:09.9]	
researcher [v]	this university				
S6 [v]	•hmm ((2,5s)) dormitory life.				

Here, speaker 6 also has prolonged eye contact which shows more involvement with the listener as compared to others who look around while speaking. Some participants were observed to look at the floor as they were planning their turn and this also has a disfluency impact as the speaker seems to be temporarily detached from the conversation. In the previous example (0.9), however, although the long pause has the same features such as following a question and hesitation marker, it still has a disfluency effect as nine seconds is a very long pause and takes away listener’s concentration.

Hesitation Markers

Hesitation markers refer to those non-lexical particles that fill in the pauses and the most typical examples are *er* and *erm* in English. These are often preceded and followed by pauses. Hesitation markers also show variation across languages (De Leeuw, 2007). Language learners, as observed by the researchers, have a tendency to transfer their native language hesitation markers to their learned foreign languages. The data analysis showed that this is also the case for Turkish speakers of English. In Turkish, hesitations are usually marked by an extended *ı* which is realized as *uu*.

Hesitation markers and pauses tend to share some characteristics in terms of their contribution to fluency and just like them their frequency, location and overall distribution in a turn have a big impact on perceived fluency. The most common examples in the data are those in which the hesitation markers are used within the *chunks* and *formulaic units* and not before or after them.

The following extract from the data is remarkable not only in terms of frequent use of hesitations but also for their location.

	0 [00:00.0]	1 [00:04.8]
S3 [v]	It was very tiring ta/ it was very tiring yes ••and	erm •••after school I ••eee I was
	2 [00:11.2]	3 [00:15.9]
S3 [v]	going to •eee home •••and eee I was sleeping a bit ••I was sss/studying eee at nights	
	4 [00:19.7]	5 [00:24.6]
S3 [v]	••always at nights because eee ••eee nights ((1,3s))as you/ as you know eee how can I	6 [00:29.7] 7 [00:30.0]
	8 [00:34.2]	9 [00:40.3]
S3 [v]	say •••it is eee quiet •and eee •••no/ there is no erm distribution	

	0 [00:00.0]	1 [00:02.7] 2 [00:03.2] 3 [00:04.8]
Researcher [v]	So you've been studying in this department for two terms.	It's been one
S4 [v]	Yes.	Yes,
	4 [00:05.9]	5 [00:06.9] 6 [00:07.4]
Researcher [v]	year One long year.	Have you enjoyed that, studying in this
S4 [v]	really. Yes.	
	7 [00:10.4]	8 [00:12.9] 9 [00:15.9]
Researcher [v]	department?	eee because I love eee and eee I
S4 [v]	eee yes eee I'm enjoying	English.
	10 [00:20.6]	
Researcher [v]	Very good. Why do you like English so	
S4 [v]	love eee being in this department.	
	11 [00:23.3]	12 [00:24.9] 13 [00:25.5]
Researcher [v]	much? What makes you like it?	It's very good but I'm just curious.
S4 [v]	eee	Yes ee
S4 [v]	to know ee another language ee apart from ee my ee own language ee is a	
		15 [00:38.3]
S4 [v]	good opportunity I think.	

In the underlined part we have an idea unit which normally comes out of speakers' mouth as one single item "going home, or I was going home". However, in our example we have a hesitation marker within the chunk and a possible reason for this is inaccuracy. If the speaker had learned the phrase as "going home" rather than "going to home" perhaps we would not have had the hesitation there. A possible explanation for the presence of this item here is the speaker's uncertainty and hesitation whether to use 'to home' or "home". The next example is a similar one as the hesitations are within the idea unit.

Grammatical Competence and Disfluency

The data analysis also revealed that speakers' structural inaccuracy also contributes to disfluency as it interferes with the flow of the conversation. The marked parts in the following extracts from the data show that the speakers' structural inaccuracy and monitoring their speech cause a local fluency problem:

researcher [v]	So what made you like English more?		
	0 [00:00.0]	1 [00:06.1]	
S1 [v]	eee so ee ((1,4s))the experimENTS of the •me in •ee social life with do you like tourists?		
	2 [00:08.8]	3 [00:13.5]	4 [00:16.3]
S1 [v]	••eee ••or in Metu with the other eee students ••from ••ee the other countries •when I		
	..	5 [00:16.5]	6 [00:21.0]
S1 [v]	ee spoke with them/ when I speak with them I eee ((1,9s))the I am in a very eee •		
	..	7 [00:26.9]	8 [00:28.1]
S1 [v]	•more happy mood I can say that •because I can ••eee ((1,1s))speak with them at least		
	9 [00:33.1]	10 [00:36.6]	
S1 [v]	••It's the most ••common.		

...

0 [00:00.0]	1 [00:01.9]	2 [00:04.2]	3 [00:08.4]
S1 [v] but my English •love my love is English is a big factor to select English.			

In a similar way S2 and S3 have speaking difficulty because of structural inaccuracy in the following data excerpts.

S2 is talking about a teaching experience when he was a student:

	..	9 [00:36.5]	10 [00:40.5]	
S2 [v]	short ••and erm I went to there and erm some practice/ I make the students some			
	..	11 [00:47.9]	12 [00:51.6]	13 [00:52.2] 14 [00:53.6]
researcher [v]	practice and ••erm keep eee ••silent ((laughs)) ((1,2s))silence silence			Hm hm. How did you
S2 [v]	..			
	..	15 [00:55.3]	16 [00:56.8]	
researcher [v]	keep them/How did you keep them silent?			

Structural problems do not only cause repetition and disfluency as in the above examples but they also cause confusion. In some cases the speaker's intended meaning could be totally lost as in the following example:

	0 [00:02.3]				1 [00:05.9]
researcher [v] S3 [v]	Ok •that's fine. So what was the last book that you have read? •••the last book				
	..	2 [00:12.4]	3 [00:12.4]	4 [00:21.6]	
researcher [v] S3 [v]	eee ((3,4s))which book ((4,5s))It had a eee • film •and •••Hannibal.				
	..	5 [00:22.8]	6 [00:24.8]	7 [00:24.7]	8 [00:25.5]
researcher [v] S3 [v]	Hannibal? Hm hm. Yes •it was Hannibal. Eee you know it's/it's/ ••it has a ••film				
	9 [00:30.1]	10 [00:30.7]	11 [00:32.9]		12 [00:38.5]
researcher [v] S3 [v]	Hm hm. ((1,1s))I read it ((1,6s))but ((1,1s)) many times eee passed.				

What the speaker wants to say here, as realized further on in the conversation, is he read the book a long time ago, however his “many times” is misunderstood by the researcher as if the speaker read the book many times. This is also a very good example for the “formulaic chunks” McCarthy (2005) refers to. If the speakers master the use of such phrases (such as “long time ago”), they would come out as single unit and may not cause any confusion nor disfluency.

Finally, the last example shows how S6 monitors her speech and comes up with what she thinks is the right form:

	0 [00:00.0]				
researcher [v]	What were some of the difficulties you experienced when you first started				
	..	1 [00:05.3]	2 [00:07.4]	3 [00:08.1]	4 [00:10.1] 5 [00:10.9]
researcher [v] S6 [v]	university? this university Yeah? Hmm. •••Dormitory life. Yes •••because er I				
	..	6 [00:14.7]	7 [00:19.8]	8 [00:20.5]	
researcher [v] S6 [v]	Hm hm have had I have lived ••in my/ with my family for many years and then				
	..	9 [00:23.9]	10 [00:26.7]		
S6 [v]	er it's a bad experience ((1,1s)) when I first came.				

Lexical Competence and Disfluency

Another challenge speakers face as far as their fluency is concerned is lexical competence. Some learners have difficulty in recalling the right vocabulary item at the right time and they tend to use a native language equivalent instead when their listener shares the same native tongue. In the first example below, the speaker cannot remember the word “verbal” and chooses to use its Turkish equivalent “sözel”, which would be totally meaningless to someone who does not know Turkish.

	0 [00:00.0]	1 [00:02.9]
researcher [v]	There are other subjects why you have to choose English?	
S1 [v]	There is one ••eee in	
S1 [c]		
	2 [00:06.5]	3 [00:10.0]
S1 [v]	Turkish in sözel but I think it was very ••bad ••account of my ((1,3s)) next	
S1 [c]	tur: verbal	
	4 [00:16.2]	5 [00:20.2]
S1 [v]	years for the er education ••and I select a English •lesson but •er before the	
	6 [00:23.0]	7 [00:29.6]
S1 [v]	er ••first year of my high school at the prepare/prepares •years •I like English	
	8 [00:32.1]	9 [00:37.9]
S1 [v]	very much ••er the pre/ before the high school at the secondary school there is	
	10 [00:43.0]	
S1 [v]	no/ er ••there was no any English knowledge of m2006 because I have no/ •I have	
	11 [00:46.7]	12 [00:48.7]
S1 [v]	no English teacher ••with the secondary school.	

S2, below, chooses to use a Turkish word “gerçekleştirmek” for ‘realising one’s goals’

	0 [00:00.0]	1 [00:01.9]
S2 [v]	... ((1,1s))apart from this she er ••didn’t give me a chance to •speak in •her	
	2 [00:08.8]	3 [00:13.9] 4 [00:17.1] 5 [00:20.9]
researcher [v]	hm hm hm hm	
S2 [v]	lessons ••erm ((laughs)) that but I ••er ((1,6s)) insistently er study hard	
	6 [00:21.7]	7 [00:26.7] 8 [00:28.8] 9 [00:29.7]
researcher [v]	hm hm	
S2 [v]	then er ••to er/ ((1,5s))to have to ••I create my chance myself erm ••to	
S2 [c]		
	10 [00:35.8]	11 [00:38.2]
researcher [v]	to realise your ((unint.)) yeah?	
S2 [v]	••erm gerçekleştirmek? Yes.	
S2 [c]	tur: to fulfill	

Pronunciation and Disfluency

Another problem that contributes to disfluency and sometimes communication failure is the pronunciation mistakes, which are caused either by speakers’ monitoring their speech frequently or repeating what they say a few times.

In the following examples “loveyer” and “message” instead of “lawyer” and “massage” have almost no impact on fluency as it is a common mistake by Turkish learners of English and the meaning is clearly understood by the listener.

	0 [00:00.0]	1 [00:02.9]	
Researcher [v]	But you first said you had to choose English because you were not good in		
S1 [v]	Yes.		
	..	2 [00:03.4]	3 [00:03.8]
Researcher [v]	other subjects		
S1 [v]	if ((unint.)) / if I had the chance of Mathematic I didn't call that		
	4 [00:08.0]		5 [00:14.9]
S1 [v]	because I want to • a/ I wanted to be a loveyer or ee • • on the scientist		on the
S1 [c]	(lawyer)		
	..		6 [00:22.4]
S1 [v]	((1,5s)) like the other jobs not an ee especially a teacher		

The above extracts from the data exemplify why the participants in the study were perceived as disfluent by the researcher. Disfluent speakers were also observed to do a number of things in order to plan and organize their thoughts. Some of the speakers were seen to have a distracted look on their face as they were very busy planning what they were going to say. At such times, they had almost no eye contact with their listener and they were looking around, on the floor or top left or top right corner as they were planning what to say. They were also observed to be rolling their eyes for short periods of time. Non fluent speakers also seemed to be using their body language more frequently when they were stuck in the conversation either because of a lexical or a structural difficulty that they were experiencing. Hand gestures were seen to be quite intense and frequent at such times.

Discussion

The data analysis confirmed that Wood's and McCarthy's framework of fluency has a strong basis in that both pauses in conversation and formulaic chunks of high frequency had a big effect on speakers' fluency. As Wood (2006) very clearly indicated, everything regarding the pauses in conversation such as the frequency, length, location and overall distribution of the pauses affected fluency. Another point raised by Wood (2006) is that fluency very much depends on the length of pauses between the fluent runs; if the pauses are more frequent and longer then the speaker sounds non fluent and in a similar way if the fluent runs are more frequent and longer then they are fluent. The detailed analysis of the data revealed good examples of that (see the section on pauses).

Apart from the pauses, we have seen that whether the pauses were filled with hesitation markers (er, erm) or not also affected our perception of fluency. To Wood's argument, we could perhaps add the hesitation markers in a similar way and argue that hesitation markers and pauses share similar characteristics as long as fluency is concerned in terms of their frequency, location and overall distribution. Since pauses longer than 2-3 seconds are negatively perceived (Jefferson, 1989) whether they are

filled with hesitation markers or not, discourse markers have direct relevance to the perception of fluency as they hint to the listener that the flow of the conversation is not blocked but the speaker is trying to hold onto their turn by planning what they are going to say.

As for formulaic chunks, fluent participants were observed to use such phrases much more comfortably than the disfluent ones. In fact, how hesitations interfered with such formulaic chunks indicate the connection between hesitations and the acquisition of such phrases. Normally, phrases such as “to be honest”, “I don’t think ...” “I love X” would be spoken out as one chunk and not as separate items in conversations. However, these examples in the data were all interrupted by hesitation phenomena. If speakers have mastered these chunks, then, their planning markers or hesitations should either precede or follow such phrases and their mere presence within the middle of such phrases impairs fluency by distracting the listener. Wood’s (2006) research findings showed that the automatized use of lexical phrases decreases the impact of temporal variables as the more learners master lexical phrases the less we may see pauses and hesitations but longer fluent runs between pauses.

Another point the data analyses revealed is that there is a strong link between accuracy and fluency in conversation. Here, accuracy refers not only to structural correctness and accurate pronunciation but also to accurate use of lexical items i.e. remembering the right word at the right time. It was observed that accurate speakers had less difficulty in speaking out the idea units as one chunk whereas structural difficulties or pronunciation mistakes blocked the flow of the conversation and thus caused disfluency. Therefore, a more accurate speaker in terms of language forms and lexical items has a higher chance of being more fluent than someone who is not. It is also assumed that accuracy problems make the speakers more conscious of what they say and, thus they self-monitor their utterances and that causes a linking problem and their speech is realized as hesitant. In a way, poor grammar and vocabulary knowledge do not only cause local fluency problems when a specific language form or item cannot be used effectively or remembered on the spot, but they also negatively influence the speakers’ upcoming utterances as the more the speakers monitor their speaking, the more anxious they are about how they “perform” in conversation. There is yet, an additional disfluency effect when accuracy problems are present; inaccurate speakers keep repeating the wrong words or attempt to correct what they say and this does not only make the speakers themselves more conscious of how they are speaking but also distracts their listeners’ attention and they start noticing more about how the speaker speaks rather than what they say. Attention diverted away from the ‘meaning concern’ is bound to result in communication failure. As McCarthy (2005) states, interlocutors construct the meaning cooperatively across their turns and thus, not only the speaker but also the listener seems to have a role

in our perception of fluency. This was confirmed by Wolf (2008) who found out that the fluency of Japanese learners' of English "fluctuate in response to various kinds of listener backchannel responses" (p. 132).

The more in depth we look into fluency, the more we realize the depth of its complexity. Most of the fluency problems we have mentioned so far seem to affect one another. For example, speakers hesitate and pause more frequently when they have accuracy problems, as a result of which formulaic chunks are not realized as one single unit. This, in turn, affects the overall distribution of the pauses and the fluent runs. In a way, cause and effect distinction seems to be blurred when conversational fluency is in question. There are also psychological factors that affect fluency. Although such factors are beyond the scope of the present paper, the researcher's observations indicate that language competence both at a structural and lexical level do not always guarantee conversational fluency. Shyness and lack of confidence may also affect our conversational behavior. This is, in fact, another fuzzy cause and effect confusion, as it is not always clear whether the learners in the classroom do not feel competent in speaking because of accuracy problems or because they are not confident enough that is why they experience more fluency problems. Obviously, a more relaxed and an easygoing conversational attitude would help the mutual construction of meaning for both parties and fluency would not be a big challenge. Speakers who frequently monitor their speech, correct or go back and repeat, may be perceived more fluent and competent if they let go of their mistakes when the contextual clues make the meaning clear to their listener.

This study aimed at understanding and analyzing the construct of fluency in nonnative English data so that we can help nonnative learners of English build their fluency skills by teaching them conversational strategies to get the conversation going when they experience fluency related communication problems.

The analysis of the data and the disfluency markers indicate the areas that should be improved for conversational fluency. These, could also be treated as the effects of disfluency, as stated above, causes and the effects of disfluency seem to be blurred. Therefore, it could be helpful to acknowledge the causes of disfluency but misleading to build our learners' strategies on them. It could be more helpful to focus on what makes someone fluent in conversation. The data also shows what kind of conversational strategies fluent speakers employ and these could be taught to nonnative speakers. Courses on speaking skills or oral communication skills should not only raise our learners' awareness on fluency matters but should also focus on teaching conversational strategies to make their interactions run more smoothly. In this connection, analyzing the participant's conversations in this study showed that fluent speakers:

- filled the pauses with either hesitation or discourse markers
- displayed hesitations and hedges either that either preceded or followed formulaic chunks
- uttered formulaic chunks as single items
- displayed planning function with their hedges or discourse markers when asked a question
- were observed to repeat a part of the question to gain time as they were planning what they were going to say
- had more eye contact than disfluent speakers
- seemed to be less conscious of what they were saying and let go of their mistakes

The review of the literature on fluency research and the data analyses revealed that fluency and nonfluency in a conversation could be related to a number of factors. To sum up the causes and effects of disfluency in conversation, based on both the literature review and the data analyses we could draw the following figure in which A, B, C and their components are both the causes and effects of disfluency whereas D is the effect of fluency.

A. Conversational Strategies/Discourse Strategies

1. Temporal variables
 - a. Long, untimely, unfilled, frequent and mislocated pauses
 - b. Long and untimely hesitations
 - c. Short fluent runs
2. Lack of discourse markers
3. Lack of back-channeling and listener involvement

B. Language proficiency

1. Phonological problems (pronunciation and linking)
2. Lexico-grammatical problems
3. Lack of formulaic chunks

C. Psychological factors

1. anxiety
2. shyness
3. lack of confidence

D. Non-verbal clues

1. lack of eye contact
2. excessive use of hands and gestures

Figure 1. Causes and effects of disfluency in conversation.

Conclusion

The construct of fluency as discussed above is a complex one on its own and its development is a very challenging goal in an EFL classroom. As [Riggenbach \(1991\)](#) puts forward “in order for there to be fluency it appears that many conditions have to be met” – a certain level of proficiency in grammar, pronunciation and vocabulary to mention a few. After analyzing non-native speakers’ fluency and disfluency, [Riggenbach \(1991\)](#) concludes that an initial model of non-native speaker fluency should include frequency, placement and degree of chunking, and type of filled and unfilled pauses, rate of speech and finally frequency and function of repair.

Yet, by detecting the problem and investigating students' needs, weaknesses, likes and dislikes every EFL teacher can create an effective fluency development program unique for their own students. What we should remember, as we attempt to make our students fluent in English, though, is the changing needs of our society and thus the changing needs of people learning English. In our present day, we depart from native speaker norms of language proficiency and culture and use English for a variety of purposes with, most of the time, non-native speakers as ourselves. In this connection, as [Brown \(2003\)](#) suggests we should all 'expand' our views of language accuracy and fluency, and set realistic goals for our students; if it is fluency that we want to develop, then, we should focus more on appropriateness rather than accuracy especially at times when minor language mistakes do not interfere with communication.

In an expanded view of fluency we should not separate the construct from overall proficiency in spoken language or communicative competence as [Chambers \(1997\)](#) argues, because the very reason for analyzing the construct of fluency is to help learners improve their overall communication skills.

The role of the teacher in developing fluency in any language classroom, needless to say, is very significant as teachers often discourage their students and impair their confidence in speaking because of their teacherly and untimely urge to correct mistakes. Taking the possible anxiety of any speech performance in a foreign language into consideration, how and when of correcting language mistakes in the foreign language classroom is of crucial importance. Often, the best time to do that would be the end of the speaking lesson when all the mistakes of the day could be listed on the board without nominating the owners.

Ideas for Further Research

This study attempted to examine fluency and disfluency in non-native conversational English and aimed to improve non-native speakers' fluency. The limitations of the study were, first of all, the interviews' not being truly conversational as they were part of the evaluation process. Furthermore, there was the anxiety factor, as the participants were being evaluated with respect to their speaking ability, which might have affected their overall performance and fluency. Apart from that, the findings of the study only may shed light on the fluency and disfluency of the ten Turkish speakers of English at upper-intermediate level and who are planning to become teachers of English. Fluency can also be examined from different perspectives such as comparative studies of fluency could be illuminating to see how pause patterning in mother tongue influences temporal variables causing disfluency in a foreign language. Another point of interest would be to investigate whether fluency and disfluency markers are universal across the languages or language specific. Yet, another fruitful area to examine could be the impact of cultural factors on fluency in terms of tolerance of lengthy pauses, the expected listener involvement in conversations and acceptable overlaps and interruptions in conversations, all of which

show variations across languages. In short, in order to improve foreign language learners' fluency not only what makes them fluent but also what makes them disfluent in both languages should be examined. Finally, language practitioners should remember that a keen interest or focus on fluency for the sake of fluency will not get us anywhere but we should aim at improving our learners' fluency skills in order to improve their overall oral proficiency so that we can avoid communication failures.

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