PAUSING PRECEDING AND FOLLOWING à*/de* IN INFINITIVE PHRASES IN THE PRODUCTION OF NATIVE AND NON-NATIVE SPEAKERS OF FRENCH

Bilal Genc, Mustafa Mavasoglu & Erdogan Bada
University of Çukurova

Pausing strategies in speech of native and non-native speakers have been of significant interest for researchers since it was observed that the speech of both groups of speakers' pausing patterns do display considerable differences. Since English is a syllable timed language, pausing strategies of native English speakers and non-native speakers, especially those whose languages are not syllable timed, display considerable differences. This study was conducted with a specific focus on the à/de- infinitive phrases in French. The study reports on the audio recordings produced by native (NSF), and non-native (NNSF) speakers of French and aims to identify different silent pausing strategies as they were employed by these speakers. Both groups watched the French dubbed version of the animated cartoon, Scrooge, and then commented on its various themes. Considerable attention was given to pausing preceding (PP) and following (PF) the à/de particle in à/de- infinitive phrases.

The results display significant differences between pausing preceding and following à/de -infinitive phrases in the speech of native and non-native speaker groups. While pausing preceding à/de -infinitive phrases was observed to be significantly shorter than in the following position in the speech of native speaker group, in non-native speakers group there was no statistically significant difference between pausing in preceding and following positions. Not only does this observation, partly, justify the theory of principles and parameters (PPT) but also it may have significant implications for reading and speaking skills of French learners in particular, and L2 learners in general.

*Keywords***:** Pausing; Teaching speaking/reading; First language acquisition; Second language acquisition; Principles and parameters theory

INTRODUCTION

Due to its various functions (such as in revealing emotional state of the speaker, forming an utterance, employing irony or sarcasm, emphasizing, contrasting, or determining proficiency levels of language learners in speaking), prosody plays a significant role in structuring spoken language, and

it probably is this role which made narrative analysis, elicited or spontaneous, a topic of interest in various areas of social science studies. Narrative structures of texts such as dramas, novels, and poems have been analyzed by linguists focusing on literary texts, psychological research or even medical studies; however, not much research has been conducted with the aim to examine the relationship between pauses and thoughts. While linguists in the field of literary sciences have dealt with structure of narratives, language teaching researchers assigned their attention to how narratives are designed, what differences existed between spontaneous and planned narratives and/or between elicited and spontaneous narratives.

Studies on narratives provide us with significant valuable insights; for instance, the study of Wennerstrom (2001) conducted with the participation of native speakers of English and Japanese speakers of English revealed that the emotional function of intonation is not language-specific, but can instead be a resource in cross-cultural communication. Regardless the language background, thus, narratives may provide us with the opportunity to be able to observe commonalities in prosodic productions of the speech of both native and non-native speakers of a particular language, a characteristic which may be utilized in raising awareness of prosodic features of a foreign language.

In her study with Russian speakers of English, Riazantseva (2001), indicated that besides pausing pattern differences between different high and intermediate level learners, there is a difference in terms of pausing patterns between English and Russian. One of the significant characteristics of spontaneous or planned speech is the fact that there is either silent interval (empty pauses) or vocalizations (filled pauses) which do not add or change any meaning between utterances (Esposito, Marinaro and Palombo, 2004). Although without changing the meaning of words, these pauses are neither placed randomly nor are far from performing any function. Several studies have been conducted to investigate the rules underlying the placement of pauses and functions performed by those pauses. While some studies of pausing strategies have sought to find at which boundaries interlocutors give more pauses, what differences occur between spontaneous and read speech, and which different pausing strategies are employed by interlocutors (Hansson 1998; Bada, 2006; Bada & Genç, 2008), some others targeted to investigate how pauses mark the boundaries of narrative units (Esposito, Marinaro, & Palombo, 2004; Bada, 2006; Bada & Genç, 2008). For example, in Bada's (2006) study on pausing preceding and following 'that' in that clauses, pause times in reading were 0.242s in preceding and 0.033s in following positions. In Bada and Genc's (2008) study, the native speakers gave 0.087s in preceding positions and 0.160s pausing in following positions in their spontaneous speech production; in read speech, however, pause duration was 0.061s in preceding and 0.027s in following positions.

Pausing strategies are so multifaceted that various researchers have investigated different aspects in detail and in isolation. Megyesi and Gustafson-Capková (2005; 2002), for instance, found that while silent pauses in professional reading occurred mainly at sentence boundaries, in non-

professional reading most of the silent pauses occurred at phrase boundaries. Fant et al. (2003) investigated pauses in read speech and compared pausing times between novel reading and radio bulletins. While the average pausing time between sentences in radio bulletin was 0.530s; in novel reading, it was found to be 1.100s. Furthermore, Bada (2006) investigated the pausing differences preceding and following *that* in the use of "that clauses" of English native speakers and Turkish speakers majoring in English. As a result while pausing preceding that was measured to be much longer than in the following position in the production of native speaker group, it was observed to be just the opposite with the Turkish group. Van Donzel and Koopsman-Van Beinum (2005) point that not only in prepared speech but also in spontaneous speech, speakers use pausing strategies to structure the continuation of the discourse; speakers wait at certain points in order to determine the utterances to follow because the exact content in speech is not fixed as it is in reading texts. Quite interestingly, a study by Schönpflug (2008) revealed how pausing patterns in a story retell task provides us with insight about the cognitive development of children. Schönpflug's main claim is that "the idea that specific patterns of pauses are linked to specific cognitive processing in a plausible way is supported by measuring the mean pause length" (p.393). According to Schönpflug shorter time in oral text recall is a criterion for measuring to what extent a child is good at drawing inferences.

In this study, since there is not much research done on the prosodic structure of the French language with specific reference to infinitives, we specifically focused on pausing times preceding and following à/*de* in à/*de-infinitive* phrases in the speeches of native and Turkish speakers of French. French, like English is a member of the Indo-European Language Family, and as a head-first language, also places verbs and prepositions before complements. Thus, the *à/de* particle acts as the head of the *à/de*-infinitive phrases. According to the Head Parameter theory (a subset of PPT) a particular language consistently has the heads on the same side of the complements in all its phrases, whether head-first (or head-left, head-initial) or head-last (or head-right, head-final). Referring to the positions of heads in a particular language, the head parameter in PPT then argues that languages are categorized as either head-initial or head-final (Cook & Newson, 1996).

In their study on pausing patterns in infinitive phrases in read and spontaneous speech of native speakers of English, Bada & Genç (2008) found that pausing preceding "to" was significantly longer than in the following position in read speech and in spontaneous speech it was just the opposite. As a follow up to that study, this research focuses on intrasentential pausing regarding à/de-infinitives. Pause in this study, whether silent or filled, was treated as the duration between the coda and the onset of adjacent words, in particular the coda of the preceding word and the onset of "à/de*"* and the coda of "à/de" and the onset of the following word.

Regarding the pragmatic results of pausing studies, Oliveira (2002b) suggests that these kinds of studies can provide crucial insight into the structure of spontaneous narrative texts. Dealing with this feature, this study is

yet one important piece of research highlighting a particular prosodic characteristic of the French language.

RESEARCH QUESTIONS

In order to examine the prosodic differences between native and non-native speakers of French, in this study, we will seek responses to the following questions:

- Does length of a pause preceding à/*de* in à/*de-infinitive* phrases differ from a pause following à/*de* in the spontaneous speech of native and non-native speakers of French, and if so, is the difference statistically significant?
- What may be the potential reasons for any difference, if there is any, between pausing time preceding and following à/*de* in à/*de--infinitive* phrases?

DATA COLLECTION

Participants

In this study, there were two groups of speakers: native speakers of French (NSF) and non-native speakers of French (NNSF). In NSF, there were seventeen native speakers of French, seven males and ten females with 20-50 age range and all university graduates. The participants in this group were recruited in accordance with a convenience sampling model. While five of these participants were instructors at French teaching departments in two different universities in Turkey, the remaining were teachers of various fields in France and were reached through a colleague who, at the time of the study, was doing post-doctorate research in this country. In NNSF, there were 60 undergraduate students from the French Language Teaching Department of University of Çukurova (47 female and 13 male students). At the time of the study, all sixty Turkish participants were being trained as prospective French teachers.

Materials

The material used in this study is an animated cartoon, *Scrooge*. The participants were asked to watch and then comment on various themes in the cartoon. This cartoon was chosen due to its relatively small number of characters (Ebenezer Scrooge, Bob Cratchit -Scrooge's overworked employee- and the ghosts, being the major persona), and the relatively less complex plot. Thus, commenting on the themes in the movie proved easy not only for non-native speakers but also for the natives.

Procedure

The data investigated here stem from individual narratives of seventeen native speakers (NSF) and sixty non-native speakers of French (NNSF). Both groups watched the movie *Scrooge* and then each of them commented on the emerging points of the movie in the researchers' offices. Narratives from the NSF and NNSF were both digitally recorded and transcribed into standard orthography for analysis. While members of the NSF talked around ten minutes about the themes, NNSF members spent only 2-4 minutes for the task.

DATA ANALYSIS

The instrument utilized in the study is *GoldWave Version 4.26*, a comprehensive digital audio editor. This software was utilized in the data analysis which was actualized in two stages: (1) in order to conduct a more reliable analysis, the recordings were digitized by means of *GoldWave*, with the help of which approximant length of time participants spent speaking was measured. Then, analysis of the length of pauses preceding and following *to* was carried out. *GoldWave* can display amplitude, time-wave forms and create spectrograms. By means of the parallel analysis of the spectrograms, the time-wave forms, and the transcripts, it was possible to establish the length of the stretches of pausing in milliseconds. And, (2) the measurements were fed into a statistical analysis program known as SPSS (Statistical Package for the Social Sciences) for means and means comparisons. The results emerging from this research are presented in tabular forms.

Native speakers of French (NSF)

As mentioned above, seventeen native speakers of French participated in this study, and in the elicited 17 narratives, the number of *à/de*-infinitives was 98. Below are presented some of the analyzed sentences with pause locations where "……" indicates a long and "…" a short pause:

1. Y a Donald qui est le neveu de Picsou ..de Scrooge qui donc va lui va l'inviter …à ……venir à manger à noël
2. il commence …à……donner de l'argent à des personnes qui font la quête dans la rue pour les pauvres
3. Scrooge prend peur en écoutant le serment du fantôme qui lui raconte qu'il ne se décide..., que s'il ne se décide pas …à……changer son comportement il finira sa vie sans amis

In order to see whether there was a significant difference between the means of pausing times preceding and following *à/de*, we have conducted a t-test: a value of $p \leq 0.05$ was considered statistically significant. The means of two variables, pausing times preceding and following *to*, were compared. The results of this can be observed in Table 1, in which 'N' stands for number of occurrences of à*/de--infinitive* phrases, '$\overline{X}$' for means of preceding and

following pausing, 's' for seconds, 'SD' for standard deviation, 'Df' for degree of freedom, 't' for t-test value, and 'p' for probability indicating significance.

Table 1: T-test result for pausing times preceding and following à/de+infinitives in native speakers productions

Pausing time	*N*	$\bar{X}$ *s*	*SD*	*Df*	*t*	*p*
PP	98	0.1447	0.281	194	2.535	0.012
PF	98	0.3743	0.850			

As can be observed from Table 1, the mean pausing time preceding *à/de* was measured to be 0.1447s and the following time 0.3743s. The t-test result for both measurements, p=0.012, reveals a statistically significant difference, which can be interpreted as that native speakers, mostly subconsciously, spend more pausing time following à*/de* because they subconsciously know that if they pause after a head noun they will have time to prepare new language material to produce for the listener, who, logged to the speech, would surely expect upcoming utterances.

Non- native speakers of French (NNSF)

Contrasted with the measurements related to the spontaneous speech in Table 2, we can observe a rather different picture emerging in the non-native speaker group's language production. In the narratives of the sixty Turkish participants in this group, we observed only 28 occurrences of à*/de*-infinitive phrases. From Table 2 below, we can observe that in all occurrences of à*/de* in à*/de*-infinitive phrases in the elicited narratives, there was only a slight difference between pausing times preceding and following à*/de*.

Table 2: T-test result for PP and PF *to- infinitives* in the speech of NNSF

Pausing time	*N*	$\bar{X}$ *s*	*SD*	*Df*	*t*	*p*
PP	28	0.352	0.493	54	0.093	0.926
PF	28	0.366	0.586			

In Table 2, we can observe that the mean of PP length is 0.352s, while that of PF is 0.366s. The t-test result for both measurements, p=0.926, does not yield a statistically significant difference. Below are presented some of the analyzed sentences with pause locations in spontaneous speech:

4. Mais ..après ..cette nuit, ..il ..il décidait **...**de **...**aider
5. il commençait **...**à **...**aider les others
6. ils essayaient **...**de**...** changer son pensée ..pen ..idée

Beside the striking difference between the frequency in à/*de*-infinitive in the speech of native and non-native speaker groups, some immediate questions may arise in the mind of the reader: for instance, why was there a significant difference between pausing preceding and following times, in native speakers' productions, and why was this difference rather slight in the non-native speakers' productions, or why do the following times in native speaker group and non-native speaker group reveal a slight difference. In the rest of the study, we will discuss the factors that account for the differences mentioned in these questions.

Why was there a significant difference between pausing preceding and following times in native speakers' productions?

French, being a head-initial language allows prepositions to be employed in head positions of phrases. This characteristic of PPT asserts itself in prosodic features of French as well. We were able to observe that pausing strategies implemented by native speakers of French were clearly in line with this principle. Speakers of this language produced pauses in spontaneous speech enabling the *à/de* particle to act as head of infinitive phrases for some very valid reasons of an oral language production strategy, that is producing new utterances.

When we look at the results of Bada and Genc's study (2008) we see that like French native speakers, native speakers of English did also display more pausing time following 'to' in to-infinitives. While preceding pausing time was 0.087s in spontaneous English speech, it was 0.1447 in French and following pausing times were 0.160s and 0.3743s, respectively. Pausing patterns of both languages, at least in this respect, may be bearing resemblances due to the head-initial feature common to these languages.

Why was there only a slight difference in non-native speakers' productions (0.008s difference between preceding and following times)?

It is expected that the speech of non-native speakers of any language may exhibit pronunciation characteristics that result from such speakers' imperfectly learning the pronunciation of the language. Yet, this fact cannot account for the slight difference between preceding and following times in the non-native speaker groups, nor can we argue that since those participants do not have a native-like fluency, their pausing patterns are different from those of native speakers.

From the perspective of Principles and Parameters Theory (PPT), it could be argued that the participants of the study seem not to have reset their head parameter thoroughly. They could not form chunks in the natural flow of speech and that their pausing time preceding and following head reveals one of the discrepancies between native and non-native speakers. Apparently, focused on correct spelling and pronunciation, members of the non-native

speaker group gave almost equal pauses in preceding and following the words, thereby failing to reveal the chunks through pausing times.

Why do the following times in native speaker group and non-native speaker group reveal again a slight difference?

Beside errors in syntax, pronunciation and usage, fluency in non-native speaker talk is yet an aspect which varies between native and non-native talk. The non-native participants in this study revealed almost a native-like tendency in fluency in terms of pausing time following à*/de* in infinitive phrases. We believe this finding alone is quite promising for the future success of non-native participants in acquiring French in that at least they displayed native- like qualities, at least in terms of pausing time in the following position.

These findings may have some important implications for French Language learners. As is seen from the data above, observing pauses in the natural flow of speech was not an easy task for the non-native speakers. To overcome this difficulty, Bada and Genç (2008) offer a twofold solution: a) in speaking classes: extensive exposure to authentic aural materials, and while doing so, focusing on pausing may prove greatly beneficial for language learners, b) in reading classes: instructors can select shorter reading texts, and having taught the students about the phrase structure of English, may use these texts for determining lexical/syntactic chunks and thus raise awareness about these chunks. Schmitt (2000) draws our attention to the importance of lexical chunks because they form integrity within themselves whereby serve as the most efficient means to carry out language functions.

We believe that not only do speakers systematically signal the end of a narrative section by producing a pause of long duration (Oliveira, 2002b), but they also quite subconsciously signal the end of chunks through intrasentential pauses. To acquire a native like proficiency in speaking, we could get the students to practice such chunks.

Regarding native like fluency in terms of pause within phrases Bada (2006) advises that be introduced early on to L2 authentic material recorded from news broadcasts, speeches, interviews and story-telling sessions in children's programs with a special emphasis on pauses between phrases, and secondly sentences in grammar books be broken into phrase structures not only for pure linguistic analysis but also for fluency training and appropriate pausing practices.

LIMITATIONS

As most studies, this study has some limitations. First, while we observed 98 occurrences of à*/de*-infinitives in the narratives of NSF, in the narratives of sixty NNSF this figure was only 28. Although the fact that

members of the native group talked much longer than the non-native group may partially account for this discrepancy between figures, we believe that further studies should be conducted to explain the relatively few usages of infinitives by non-native speakers.

Another drawback that could be attributed to the study is the fact that beginning and end points of pausing may not be of exact precision. This is due to the fact that the software utilized produces a sound graph of each reading for each participant, and on the graph, beginning and end of pauses are determined manually by the listener as the sound file is played; and between two points, a measurement is automatically calculated by the software.

The amount of time spent in the task also seems to be another limitation in this study: that while members of the native speaker group talked around ten minutes, the non-natives produced speech up to only 2-4 minutes, which may prove to be another drawback for this study. And also, the discrepancy between the number of both native and non-native groups may be perceived as a drawback.

CONCLUSION

In this study, we have attempted to investigate whether there was significant discrepancy between pausing time preceding and following à*/de* in à*/de*-infinitives both in the speech of native and non-native speakers of French. The fact that native speakers of French produced shorter pauses preceding the à*/de* particle and longer pauses in the following position, and that non-native speakers produced almost equal pause duration can be interpreted in two ways: on one hand, this provided yet another justification for PPT, and on the other, it signaled another aspect which should be improved in speech fluency for non-native speakers.

Yet, the observed similarity between the means of pauses following à*/de* in native and non-native speaker groups may point to the extent of development in the interlanguage of non-native speakers. Thereby, this study may prove to be a useful criterion in helping to develop some idea of non-native speakers' interlanguage evolvement in terms of prosody.

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