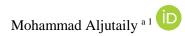


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# Prosodic correlates and pragmatic functions of the particle t<sup>c</sup>ayb in spoken Saudi Arabic



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#### **Abstract**

This study describes the prosodic and functional patterns of the particle  $t^c ayb^2$  in Spoken Saudi Arabic (SSA; the variety of Arabic spoken in Saudi Arabia) through phonetic and conversational analysis. This particle, literally meaning "good/well/okay," is one of the most common spoken particles used in SSA. Data were collected by recording four hours of oral spontaneous speech produced by five Saudi speakers. The findings reveal that, structurally, the particle  $t^c ayb$  can occur independently before questions and before negative and affirmative statements. Moreover, its meaning depends on its context and, sometimes, prosody. The particle is identified 109 times in the corpus, and consistently occupies an initial (i.e., turn-initial) but not a medial or final position. The results provide the pragmatic functions and the prosody of the particle  $t^c ayb$  as well as the participants' use frequency of such functions.  $t^c ayb$  conveys nine pragmatic functions in the data, which are listed in order from the most frequent (i.e., turn-taking marker) to the least frequent use (i.e., request for patience). From a phonetic perspective, the results show different patterns in the production of the particle  $t^c ayb$ ; it may show an almost flat contour with medium length, as in the functions representing (turn-taking, change and close topic); a sharp rising/falling contour with medium length, particularly with the functions conveying (reproach and refusal); or a high contour that decreases gradually with long duration, as found in the particle marking *Be patient* or *showing little/no importance*.

Keywords: Prosody; Saudi Arabic; t<sup>c</sup>ayb; Okey; Particle; Functional pattern; Pitch contour

# 1. Introduction

The focus on the description of linguistic forms and their functions is closely related to pragmatics, as both fields focus on the study of language use in real-world situations. One area of study in this field is the use of particles, such as English well, oh, and, now, so, I mean, and but (Schiffrin, 1987), as well as elements such as actually, still, anyway, and however (Lenk, 1998). According to Fraser (1990), the particle is defined as "a class of expressions, each of which signals how the speaker intends the basic message that follows to relate to the prior discourse" (p. 387). In other words, speakers tend

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<sup>&</sup>lt;sup>2</sup> The symbol /tf/ represents the voiceless alveolar emphatic stop in Arabic

to employ particles to indicate upcoming and previous utterances as a strategy for facilitating the communication among speakers. Some works label these particles differently, providing multiple terms that refer to the same notion. For instance, Anderson (2001) called them pragmatic markers, but they are variably labeled as discourse particles (Aijmer, 2002), discourse markers (Fraser, 1993), pragmatic particles (Ostman, 1995), and discourse operators (Redeker, 1991). Although various definitions of particles have been proposed, I attempt in this paper to adopt a specific definition for particles as defined by Nor (2012). Nor defined particles as short oral linguistic forms that are mostly used to mark the relation of an utterance to its immediate context. They have implied meaning rather than literal meaning, and both their meaning and their function depend on the contexts in which they are used (Andersen, 2001). In addition, Alrousan et al. (2020) stated that these particles "are usually used to facilitate the production of a coherent conversation and, more specifically, to make speakers' intentions clearer" (p. 130). I will reveal more details about particles in the subsequent sections.

However, to the best of my knowledge, no study has been conducted on the prosody of the Arabic particles/markers, particularly in Saudi Arabic. For instance, the particle  $t^cayb$ , which literally means "good" "well" or "okay" appears frequently in the Arabic discourse with several functions and prosodic patterns. Thus, the main goal of this study is first to investigate the pragmatic functions of the particle  $t^cayb$  in Spoken Saudi Arabic (SSA) and then to describe the inherent prosody of each token, representing different functions. In this study, I attempt to answer the following two research questions: (1) What are the prosodic and pragmatic functions of the Arabic particle  $t^cayb$  'good/well/okay' in Spoken Saudi Arabic? (2) Where does the particle  $t^cayb$  occur structurally in conversational discourse?

The structure of this paper is as follows. Section 1 provides a general overview of particles and sheds light on their various definitions, characteristics, and functions, and reviews some general previous work on particles. Section 2 describes the participants and methodology used for data collection, and Section 3 consists of data analysis and a discussion of the various pragmatic functions and the prosody of the particle  $t^cayb$ . Finally, in Section 4, I conclude by summarizing the main points, findings, and limitations of this paper.

#### 1.1 Overview of Particles/ Markers

Particles/markers are common in natural languages; however, they are employed differently in terms of their distribution and their frequency. They serve multiple purposes depending on their positions within the context (Schiffrin, 1987). Scholars agree that these particles link discourse elements but disagree regarding how they function. Al Kholani (2010) defined these particles as "linguistic clues that text producers use to guide the text-receivers' interpretation of their contribution in order to ensure a successful communicative act" (p. 2). Another definition comes from Fraser (1990), who defined them as "a class of expressions, each of which signals how the speaker intends the basic message that follows to relate to the prior discourse" (p. 387). Schiffrin (1987) defined them as linguistic expressions that are mainly employed in oral discourse to connect elements with each other (as cited in AlRousan, 2015, p. 35). Finally, Al-Harahsheh and Kanakri (2013) reported that these markers originate from lexical elements with clear semantic meanings, but when they function as discourse particles, the semantic meaning is propositionally empty and ambiguous. Moreover, Al-Harahsheh and Kanakri mentioned that the translation of particles is culturally specific because of their different semantic and pragmatic meanings within different discourse contexts. Furthermore, from a phonetic perspective, the particle carries specific prosodic features facilitating a specific discourse relation (Didirková et al., 2018). In other words, prosodic features, traditionally defined as "musical speech," are acoustic cues that often refer to the intonation of the speech and generally increase the comprehension of spoken language, enabling the listener to depend on the acoustic cue to obtain both the intended information and the pragmatic meanings of these particles (Vy et al., 2020).

# 1.2 Characteristics of Particles/ Markers

Particles have several characteristics. For instance, according to Schourup (1999), they are predominantly used in oral rather than written discourse. That is, particles have a direct relation to spoken language and occur more frequently in conversation, with specific intonational patterns (e.g., okay, well, anyway, and so on). They also link both adjacent and nonadjacent discourses. In other words, they could be outside or attached to the syntactic structure. In addition, particles can have multiple functions and can convey several prosodic and pragmatic functions in different contexts; for instance, one particle can function as a turn-taking marker or for reformulation or topic shift (Andersen, 2001). Furthermore, they are syntactically optional, as their elimination from their host sentence does not result in ungrammaticality. The following examples are based on Schourup (1999, p. 231):

- (1) The others are going to Stoke. *However*, I am going to Paris.
- (2) The others are going to Stoke. I am going to Paris.

Both utterances 1 and 2 are largely understood in the same way, and both are grammatical, although the particle *however* is removed from utterance 2. Finally, particles occur at boundaries, and primarily in the initial position. That is, they frequently occur in an initial discourse unit (Lenk, 1998). From a phonetic perspective, Lee et al. (2020) stated that particles/markers are often "reduced or unstressed compared to the 'standard' usage of the same word not as a marker" (p.1). Since the element  $t^cayb$  has all the above-mentioned features, it is considered a particle/marker, as we will see in detail later in this paper.

# 1.3 Particles/Markers Functions

The functions of the particle include both implicit and explicit pragmatic roles (Al-Harahsheh & Kanakri, 2013). Particles function differently and serve more than one purpose, depending on the positions in which they occur. Schiffrin (2001) justified their multifunctionality by stating that particles function "in cognitive, expressive, social and textual domains" (p. 54). That is, the multiple functions of particles consider the relationship between interlocutors and that between discourse units; thus, particles can have the functions of reformulation and indicating a topic shift or topic continuity (Al Kholani, 2010). Additionally, they function as filler and initiating utterances (Müller, 2005), indicating both old and new information, or for reformulation (i.e., repairing discourse) and expressing understanding and politeness (Brinton, 1996). The function of the particle can be language-specific, i.e., a specific particle in a specific language/variety may be understood only by the speakers of that language/variety, and what appears in one variety (i.e., a specific pragmatic function) may not necessarily appear in others.

# 1.3.1. The semantic and pragmatic functions of $t^{s}$ ayb in SSA

Particles are generally discussed at the pragmatic and semantic levels. At the pragmatic level, the particle  $t^cayb$  conveys various pragmatic functions depending on the context in which it appears. Its pragmatic meaning is implied beyond the literal/semantic meaning of the lexical item. The marker  $t^cayb$  can also be both local (linking two adjacent utterances) and global (indicating transition from one topic to another) (Al-Harahsheh & Kanakri, 2013). It may be used to indicate that the speaker is continuing his/her discourse utterance or as a way to change the subject or to start a question, among other functions, as we will see later in Section 3. At the semantic level, like most particles,  $t^cayb$  has a literal/semantic meaning; its lexical meaning is "good," although it has some possible other

translations in English, such as "okay" and "well". For instance, examples (3) and (4) both illustrate how the literal meaning of  $t^{s}ayb$  works as an adjective meaning "good":

(3) A) keif ħa:l-ik How are-you 2<sup>nd</sup> Sg.

"How are you?"

B) ?ana **t**'ayb al-ħam.du.lıllah I am **good/okay**. adj all praise is to Allah

"I am good/okay"

(4) A) wɪʃ ray-εk fɪ haða alkitab What think-you 2<sup>nd</sup> Sg of this book

"What do you think of this book?"

B) al-hagigah al-kitab **t**'ayb
In fact the-book **good**.adj

"In fact, the book is good"

The particle  $t^cayb$  serves literally as an adverb only in the following situation: when the addressee was not feeling well a few days ago, and someone is asking to find out if s/he feels better now, as in (5) below:

(5) A) kerf təħrs/taʃ.Sur ?al?a:n? How You-feeling now

"How are you feeling now?"

B) al-ħam.du.lıllah ?a -ħɪs ?inni **tfayb,** ?aħsan mɪn ?awwal all praise is to Allah I- feeling that **well,** adv better than before

"I am feeling well, better than before"

However, ungrammaticality will be produced if the particle  $t^cayb$  is used as an adverb in a situation other than that in (5), as illustrated in examples (6a) and (6b):

(6.a) \* ?a-Sətaqıd ?in.ni ?agra? t<sup>c</sup>ayb

I-think that.I read.Present well

"I think that I read well"

(6.b) \* hiya tı-ʃuf t<sup>ç</sup>ayb she F.Sg.Pres-see well

"She sees well"

It is evident that  $t^c ayb$  "good", when it serves literally as an adjective, can be used in different situations. It may be used as a common answer to "How are you?" or as a general adjective modifying a noun, as illustrated in example (4). Contrary to the literal meaning that functions as an adjective, the meaning that serves literally as an adverb is restricted in its occurrence, and its use as an adverb is rare and contextually constrained, as shown above in (5). Therefore, the use of  $t^c ayb$  with the lexical meaning "good" is more frequent than its use with the lexical meaning "well".

# 1.4. Overview of the Literature

The study of particles began in the 1970s; since that time, the particles/ markers have been the subject of extensive research in the field of pragmatics and discourse analysis in different languages, including Swedish (Hansson, 1999), French (Didirková et al., 2018), Japanese (Wang, 2011), English

(Fairhurst, 2013; Filip and Wales, 2003; Gaines, 2011; Matzen, 2004), and Canadians English (Tagliamonte, 2005). I first present the works by Filip and Wales (2003), Gaines (2011), and Fairhurst (2013) because their discussion of the particle okay in English is somewhat related to the present study's focus on the functions of the particle  $t^cayb$ , which literally means "good" and could also mean "okay." These works will help me compare the functions of the particle  $t^cayb$  with the functions of "okay" in these studies and determine similarities and differences in their functions. Moreover, such comparisons can also show how similar functions can support universalities that occur between the markers/particles and enhance our understanding of how particles are language- or culture-specific. In addition, the studies conducted by Filip and Wales (2003) and Gaines (2011) share with the present study the use of conversational analysis (CA) as a framework for the consideration of particles, which will provide useful insight into how to deal with the transcription of pauses and intonations in my analysis.

First, Filip and Wales (2003) investigated the English particles *okay*, *right* and *alright* and how they carry out the function of marking a shift in topic, spatial perspective, and phases in talk. They based their study on the analysis of data taken from a map elicitation task involving route-giving talk. They adopted conversational analysis (CA) for their study since it distinguishes the particles based on both their position and their prosodic features. Filip and Wales reported that these particles have various functions according to their position within the context. For instance, the particle *alright* could be used as a marker for interruption or to indicate that the next utterance would initiate new information; the particle *okay*, on contrast, is strongly associated with topic continuance and may also be used as a transition to another utterance. *Right* more frequently functions as a continuer with a connecting function.

The second study was conducted by Gaines (2011), who investigated the multiple functions of the discourse operator *okay* in one interactional event based on a police officer interview. He adopted conversational and discourse analysis for his study and considered the intonation associated with uses of *okay*. Gaines showed that *okay* "can be recruited to perform the interactive work of not only task management but also, in other instances, of solidarity overture and, in yet others, of confrontation" (p. 3291).

Third, Fairhurst (2013) studied the primary functions of the pragmatic particles *okay*, *anyway*, and *shame* that appear in the spoken version of South African English. Based on the International Corpus of English (ICE), Fairhurst reported that *okay* functions as a "conversation-management marker and a basic marker, as well as in its role in turn-taking" (p. 93); *anyway* can function as an interjection and a mitigation marker; and, finally, the marker *shame* functions as a solidarity marker, an interjection and an expression of sympathy.

As mentioned above, particles/markers occur frequently in spoken utterance (Matzen, 2004), and thus, understanding the context in which the particle appears in the discourse is crucial to recognizing its principal function. Most prior research analyzing particles/markers in languages has focused on understanding their main functions in the discourse, but studies have disregarded their prosodic features, a salient characteristic related to particles that is no less important than understanding their functional features. Despite the importance of investigating the role of prosodic features (e.g., length, pitch) in characterizing and identifying the particles, there is no prosodic study of the particles of Saudi Arabic. However, a few pertinent studies have been conducted on this topic in other world languages, such as Swedish, French and English.

Hansson (1999) investigated the prosodic cues of the Swedish particles men "but/and" and  $s\mathring{a}$  "so" in dialogue. In particular, the study focused on the indication of dialogue moves, such as returning to the previous topic or beginning a new topic, which results from the understanding of prosodic features

and target particles. His study relied mainly on 23 minutes of audio recordings of four spontaneous dialogues in Lund and Sweden. Of the tokens included in the analysis, 47 represented *men*, and 67 represented  $s\mathring{a}$ . Acoustically, these particles (i.e., *men* and  $s\mathring{a}$ ) were analyzed using the analysis program ESPS/waves to detect the F0 and compare the acoustic cues of these particles as both particles and as sentential tokens. The results demonstrated that the particles *men* and  $s\mathring{a}$  have significant differences and have high F0 compared to the F0 in *men* and  $s\mathring{a}$  as sentential structures. Furthermore, this study considered the measurements of pause duration that occurs before the turn-internal or turn-initial of *men* and  $s\mathring{a}$ . The results revealed that *men* and  $s\mathring{a}$  tended to have relatively long pauses compared to those signalling a phrase boundary, particularly in the case of a topic change. Moreover, these particles were measured as a whole. The main prosodic results showed that the particles (i.e., *men* and  $s\mathring{a}$ ) varied in their prosodic features, such that *men* and  $s\mathring{a}$  have the same prosodic cues as a particle, and *men* has the same prosodic cues  $s\mathring{a}$  as a sentential token.

Didirková et al. (2018) examined the role of prosodic cues in the comprehension of French particles *te* 'and' and *alors* 'then' and their intended discourse relations in a natural corpus. Previous studies conducted on French particles have shown that the particles *te* and *alors* demonstrate different meanings and relations depending on their context. This study was based on 20 adult native speakers of French reading 64 sequences with the target particle in initial position, and the analysis was based on a total of 1280 recorded utterances. They confirmed the claims of Hansson (1999) regarding the importance of the role of intonation (F0) in detecting the meaning of particles/markers. Particles may have a specific intonation unit when conveying different interpretations, such as ending or opening a conversation or moving from one topic to another. The main results also showed that the silent pause duration that occurs before the particle *alors* tends to be longer in duration than the pause before *te*, specifically in the case of changing the topic or forming a new topic.

Matzen (2004) analyzed the relation between the prosody of the English particle so and its functions as occurring in the conversational English corpus. The particle so conveys several functions with several prosodic features, thereby enabling comparison between its prosodic patterns and functions (Schiffrin, 1987). His analysis was based on 50 tokens appearing in recorded conversations in different locations across the United States. He classified the particle so into four main categories. The first category serves to mark the main topic of the utterance, such as forming a new topic, returning to the topic after a short digression, and summarizing the main topic. The second category is used to end the speaker's turn. The third category comprises markers to obtain the needed information from another participant in the conversation. Finally, the fourth category is related to the particle's grammatical function, in which it is used either to obtain the results of or the reason for certain actions. In his prosodic analysis of the particle so, Matzen examined token length and classified it into three categories. The first category comprised short tokens with a length of less than 140 ms, the second category those that measured between 140 and 300 ms, and the third category those with durations longer than 300 ms. In addition, he examined the pitch trace that appeared in the spectrogram together with average F0 values at the beginning and end of the vowels in each token. The main results showed that there were variations in the prosody of so in each category. The length of the investigated tokens was long when the particle functioned to close a turn, medium when marking the main topic, and short/medium when marking a reason or results. The results for the pitch contour showed a flat/steady drop, a downward curve and a flat line for marking the main topic, closing a turn, and offering a reason or results, respectively.

Although several studies on particles in Arabic have focused on their use in written texts, such as Al Kohlani (2010), Hamza (2006) and Nasser Alsager et al. (2020), particles in spoken Arabic have not received extensive attention from a specifically prosodic perspective. However, a few studies do exist, including the study of Alrousan et al. (2020), who described the particle *bas* "but" in Jordanian

Spoken Arabic (an Arabic variety spoken in Jordan), and the study of Al-Harahshe and Kanakri (2013), who investigated the functions of particle  $t^{\varsigma}ayb$  "good/well/okay" and its cognate  $t^{\varsigma}abb$  in Jordanian Spoken Arabic. The findings revealed that the particle  $t^{\varsigma}ayb$  conveys different pragmatic functions in Jordanian Spoken Arabic, such as voicing an objection, expressing a challenge, signalling the end of an utterance, marking a new topic, sending a message to the interlocutor to be patient, and filling a gap. Their approach to their study has considerable overlap with mine and offers a clear picture of how particles/ markers are socially or language-specific. Both Arabic previous studies examined the particles from the pragmatic perspective without investigating their prosodic features. Therefore, the current study will fill the gap in Arabic literature by considering prosodic aspects of the particles that were not included in the previous Arabic studies.

# 2. Methodology

# 2.1. Participants and Procedures

The participants in the present study include four males and one female, all of whom are native speakers of Saudi Arabic, whose ages ranged between 23 and 35 at the time of data collection. All participants volunteered to participate in this study.

The data for this study were collected by recording the oral casual speech of these five Saudi participants produced in four one-hour sessions. In addition to these recordings, I also collected some data through personal observation of my family's utterances. Specifically, I located every utterance in which they used the particle  $t^cayb$  as a particle that marked functions.

Since the analysis considers the pragmatic function and the prosodic parameters of the particle  $t^cayb$ , its position in the utterance, and the situation in which it is used, I adopt phonetic analysis software (Praat) to measure the absolute word length of the particle  $t^cayb$  in milliseconds and classify them based on the categories (i.e., short, medium and long) as adopted in the work of Matzen (2004), as well as to measure and trace tonal pitch (F0) in the spectrogram. In addition, I employ conversational analysis (CA) as a framework for this study because it captures the intricacies of verbal interaction, and shows, for instance, how talk occurs and how turn-talking is distributed among participants. Furthermore, this approach enables me to consider variables such as intonation and pauses that occur with the particle  $t^cayb$ .

To identify the pragmatic function of the particle  $t^{\varsigma}avb$ , I begin the analysis by transcribing only the utterances that come before and after it. I determine whether the particle occurs at the beginning of a speaker's turn or after a pause by the same speaker. Additionally, by transcribing the utterances surrounding the particle  $t^{\varsigma}ayb$ , I can determine the environment, including both the extralinguistic situations and the linguistic contexts, in which it occurs. I consider three transcription features in the analysis. The first transcription feature is overlapping words, which are marked by square brackets (i.e., []) and placed between the utterances which overlap; this is done because this convention serves several main functions, such as turn-taking, introducing a protest, or expressing an objection. The second convention is the pause, which is marked by the following notations: a comma for a micropause, two dots (...) for a brief break, three dots (...) for a medium pause, or three dots followed by a number in single parentheses...(.7) for a long break. The pause convention directs me in defining turninitial position or utterance-initial position as produced by a speaker. The third feature is the transitional continuity, which is signaled by a comma (,), which indicates that the transitional continuity is understood as continuing; by a period (.), which indicates that the transitional continuity is understood as final; or by a question mark (?), which indicates that the transitional continuity is understood as an appeal.

In addition, this study considers prosodic features for the particle  $t^cayb$ . Before conducting the phonetic analysis, I removed any recorded token that had background noise from my data since such interference makes it difficult to determine any prosodic features. Then, the recording of the oral casual speech was submitted to Praat (software for speech analysis) to output spectrograms for each target token, since intonation plays a role in the interpretation of what the speaker means by the particle  $t^cayb$ . This approach is taken because, in some situations, the marker  $t^cayb$  occurs independently and thus conveys different meanings according to the speaker's intonation. The target acoustic parameters include the duration of each token in milliseconds (ms), the average F0 of the entire tokens of a specific function, and the overall pitch contour appearing in the spectrogram. In addition, the F0 at the outset and end of the token were measured. The analysis of the data is based on providing the pragmatic functions of the particle  $t^cayb$  and their prosodic features, as well as the participants' frequency of use of these functions. In the subsequent section, I explain the functions as offered in descending order from the most frequent function to the least frequent.

# 3. Findings and Discussion

As mentioned earlier, the main objective of this study is to examine the wide variety of prosodic and functional patterns of the particle  $t^{\varsigma}ayb$  in Spoken Saudi Arabic. Thus, in this section, I present the results of this study to answer the following research questions: 1) What are the prosodic and pragmatic functions of the Arabic particle  $t^{\varsigma}ayb$  "good/well/okay" in Spoken Saudi Arabic? and 2) Where does the particle  $t^{\varsigma}ayb$  occur structurally in conversational discourse? I first illustrate (see Table 1) the overall distribution of all of the  $t^{\varsigma}ayb$  tokens across the pragmatic functions. Then, I present the various distributions of the major pragmatic functions of the particle  $t^{\varsigma}ayb$  and discuss them through elucidative examples. After discussing the pragmatic function, I scrutinize the prosodic features for each token in the corpus. The corpus yielded nine pragmatic functions for the particle  $t^{\varsigma}ayb$ . Table 1 illustrates the number of tokens for each function as they appeared in the data and the percentage of occurrence for each function for the particle  $t^{\varsigma}ayb$  ordered from the most frequent function to the least frequent.

Sending message to be patien Closing a conversation/topic Signaling a transition from Introducing a refusal to a Introducing advice or a Introducing a reproach Signalling little or no Marking continuity Turn-taking suggestion importance request Total 19 17 12 9 5 2 31 8 6 t'ayb 109 (28%)(17.5%)(15.5%)(11%)(8.5%)(7%)(5.5%)(5%)(2%)

**Table 1.** Total number of functions for the particle  $t^{\varsigma}ayb$ 

The table demonstrates the 109 tokens under investigation, and their resulting patterns are discussed by function in this section. I support the multifunctionality of this particle by providing some illustrative examples taken from the corpus together with Praat window of the visible pitch contour of

the intonation, which are specified alphabetically: (A) for the speaker and (B) for the listener. The original utterance is italicized, whereas its English translation is given between quotation marks (i.e., "")

The first function is to mark a turn-taking. Turn-taking is a way to organize the dialogue by exchanging the role of speech between the speaker and listener. SSA speakers usually involves the particle  $t^cayb$  in their initial utterance to take a turn. This usage is clearly illustrated in example (7) below:

- (7) A al-məshakil haði rah yisaledzha almudarrib aw al?idarah?
  - "The problem here will be solved by the coach or the administration?"
  - **B** laa mu fart<sup>()</sup> (.) ?ana ?aðkor lak robbama almudarrıb aw alla\(\si\) ibin (..) kullaha satuħal fi al-mustaqbal, [?atwaqa\(\si\)]
    - "No, it is not necessary(.) perhaps the coach or the player (..) all the problems will be solved in the future, [I guess.]
  - **A-**[t<sup>c</sup>ayb] almudarrıb yuStabar min ?afd<sup>c</sup>al almudarrıbin fi al
    - dawri, hal titwaqaς yuħaqiq ʔakθar min bot<sup>ç</sup>ulah?
    - "[Okay], the coach is considered one of the best coaches in the league, do you think that he can win more than championships"

As shown in example (7), Speaker B tried to complete his speech, but Speaker A interrupted him by incorporating the particle  $t^cayb$  initially to reinforce the turn transition/turn-taking. The same result occurred in the study of Fairhurst (2013), in which the English speakers tended to use the particle okay to take the floor. Moreover, the current results confirm the assertion of Al-Harahsheh and Kanakri (2013) that the functions/meanings of this particle are language-specific, as the particle  $t^cayb$  does not functioned as a turn-taking marker in Jordanian Spoken Arabic but does occupy that role in SSA. From an acoustic perspective, the particle  $t^cayb$  functioning as a turn-taking marker measures 260 milliseconds with medium length, as categorized in Matzen (2004), and has a flat pitch contour with an average F0 of 131 Hz overall, 130 Hz at the beginning and 133 Hz at the end of the token, as illustrated in Figure 1

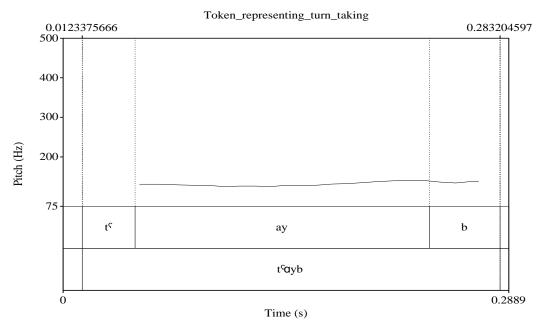


Figure 1. Pitch contour for the particle representing turn-taking

Figure 1 displays a flat pitch contour over the entire particle to signal turn-taking, without any significant raising or falling in the F0 measurements, suggesting that the speaker used a neutral tone to take his turn in the conversation.

The second pragmatic function for the particle  $t^cayb$  is to mark a request for continuity, in which the interlocutor encourages the previous interlocutor to continue his/her speech. Consistent with findings of other investigations of the functions of okay (for example, Filip &Wales, 2003; Beach, 1993), I similarly found that speakers (8b) and (9a) used the particle  $t^cayb$  "okay" as a mark of continuation meaning "what else" or "go ahead," especially when it occurred independently. This usage is clearly shown in examples (8) and (9):

(8) **A**- Salasan tenqabel fi wad sa?ef wazarat al-Samal al-dʒadidah, lazim yes ir maSak sanatin xebrah wa luyah endʒelizyah(.)

"In order to get one of the new jobs at the Ministry of Labor, you must have at least two years' experience and English language (.)"

B-  $t^{\varsigma}ayb$ .

"Okav".

**A-** wa kaðalek lazim yes<sup>s</sup>ir masak BA fi ?edarat al-?asmal.

"Also, you must have a bachelor's degree in Business Administration"

The interlocutors in example (8) were discussing getting a job at the Ministry of Labor. Speaker B asked Speaker A about the requirements for new jobs being offered at the ministry. Here, Speaker A attempted to provide the requirements in his first utterance but provided incomplete information. Thus, Speaker B tried to elicit what, if any, other requirements were required for hiring; in this utterance, he used the particle  $t^cayb$  separately as an independent utterance, with special prosody/intonation to mean "what else." This particle is clearly used to encourage Speaker A to continue providing the other requirements that failed to emerge in his initial utterance. The same function is employed in example (9) below, in which Speaker A asked Speaker B about some information needed to obtain a driving license. In this situation, Speaker B began listing some procedures for obtaining the license, and then he stopped talking to take a phone call. After finishing the call, Speaker A used the particle  $t^cayb$  as a signal or reminder for Speaker B to continue his speech and complete the point that he had mentioned in his first utterance.

(9) **A**- kif istaxradzt ruxs<sup>c</sup>atek? hal tahtadz waqt  $ka\theta ir$ ?

"How did you get your driving license? Does it take long?"

**B-** ?awal fay? sawitoh, t<sup>c</sup>abast namoðadz I-94, basdin s<sup>c</sup>awwart nosxah mm I-20 wa al- dʒawaz,

"The first thing I did, was to print my I-94 form, then I copied my I-20 and passport" (The speaker stopped talking to take a phone call for a minute)

A- t'ayb.

"Okay"

**B**- ba\$din ?extabart al-kitabah θυm al-qeyadah

"Then I got a written test followed by driving test"

The prosodic/phonetic features of the particle  $t^cayb$  can also signal continuity. The results of this study confirm the arguments of Hansson (1999) and Didirková et al. (2018), in which the particles varied in their prosodic features and could have specific intonation units when conveying different

interpretations. Along these lines, unlike the particle indicating turn-taking, the particle indicating continuity measures 338 milliseconds, which is categorized as long, and has a pitch contour with an average F0 of 109 Hz overall, 121 Hz at the beginning and 140 Hz at the end of the token, as illustrated below in Figure 2.

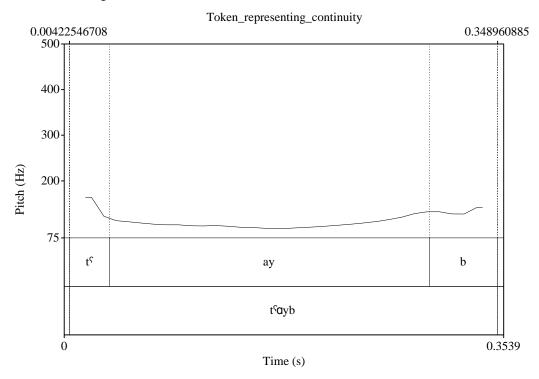


Figure 2. Pitch contour for the particle representing continuity

As shown in Figure 2, the particle  $t^cayb$  to signal continuity shows a relatively flat contour with slightly elevated intonation at the end compared to the previous particle, which functioned as a turntaking marker and had a flat/level contour.

The third pragmatic function of the particle  $t^cayb$  is to introduce advice and/or a suggestion, as illustrated in examples (10) and (11) below, respectively:

- (10) A- fini s<sup>c</sup>udaς mustamer min ?ams, dʒarrabt ?akθar min musakken wala fad.
  "I have had a headache since last night, I tried two different pain killers and both are not powerful"
  - **B-** *t*<sup>\*</sup>*ayb lif maturuħ lel seyadah wtaxalih yefaxes al-marad*?

    "Okay, why don't you see the doctor and let him diagnose the illness?"
  - **A-** al-doktur Sət<sup>s</sup>ani mawSed baSd ?asbuS.

"The doctor gave me an appointment after one week"

In this example, Speaker A expresses his suffering from a headache, and speaker B introduces his utterance with the particle  $t^cayb$ , followed by some advice to see the doctor.

(11) **A**- bes<sup>s</sup>araħah ?ana meħtar (.) fi tasdʒil al-mawad lelfas<sup>s</sup>l al-dʒai (..) fih madatein dʒadidah wa la ?a\$ref hal hm mumte\$at aw la?

"In fact, I am confused about course registration (.) there will be two new courses next semester, and I have to choose one of them, but I have no idea which one is more interesting"

**B-** t<sup>s</sup>ayb, lif matesadzel kelhun witsawy ħaðf le?eħdahin.

"Okay/well", why do not you register for them, and before the deadline drop either one."

Example (11) illustrates that Speaker A was confused about course registration and was deliberating which of two upcoming courses to select. However, he had no idea of their requirements. Speaker B initiated his utterance with the particle  $t^cayb$ , followed by a suggestion to register for both courses and decide later which one to drop. Similar to the particle that functioned as a turn-taking marker, the particle signaling a suggestion is categorized as having medium length, with a length of 184 ms and a varying pitch contour as illustrated in Figure 3.

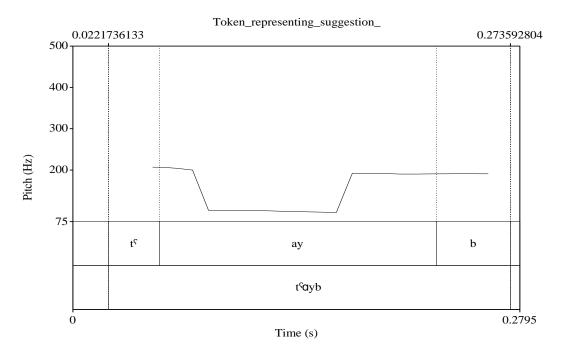


Figure 3. Pitch contour for the particle representing suggestion

Unlike Figures 1 and 2, the Figure 3 demonstrates varying contour levels. The particle starts at a high pitch (206 Hz), followed by a sharp fall and rise, and then demonstrates low pitch (190 Hz) at the end of the token. I argue that this function (i.e., suggestion) demonstrates different levels of intonational contour because the speaker tends to use a specific melody and euphony in his/her utterance to prompt the listener to pay attention to the advice or suggestion offered. Therefore, incorporating such a melody when conveying a suggestion contributes to the sharp fall and rise observed in the contour.

The fourth pragmatic function of  $t^cayb$  is to signal a transition from one topic to another. Therefore, Alrousan et al. (2020) stated that speakers incorporate a change of topic within the conversational process, and both speaker and addressee have presuppositions regarding the information to be delivered and employ different methods to fulfil the communicative intentions of their speech. The following utterances illustrate this function:

- (12) **A** -al-nady yaħtadʒ ʔıla taʕawon muʃtarak bayn al-jumhu:r wa al-ʔedarah, "The club needs mutual cooperation between the audience and administration"
  - **B-** t<sup>s</sup>ayb xallina nitkallam san mawd<sup>s</sup>us al-lasib Mura, hal tatafiq mas qarar alnadi bemusaqabateh?

"Okay/well", let's talk about the player Mora, do you think that he deserved the

punishment?"

- **A-** *?ana ma ?asref qad yatuh bad abt ?*.

  "I do not have any idea about his issue"
- (13) **A** ħenna xaserna mos dsm mobarayatəna besəbab kaθrat al-ʔes sabat fi al-fariq "We lost most of our games because of many injuries that exist in the team"
  - **B-** t<sup>c</sup>ayb, bannesbah lel dʒaneb al-?estiθmary, hal al-nnady yabħaθ San Soqud kabi:rah?

"Okay, with regard to the investment, do you think that the club will look for great contracts?"

The scenarios demonstrated in examples (12) and (13) occur when the interlocutors have already discussed a specific topic in more detail and have covered sufficient information. The speaker usually tends to change the topic by initiating her/his utterance with the particle  $t^{\varsigma}ayb$ , as illustrated in both of B's utterances in examples (12) and (13). This function is similar to that of the equivalent English particle in which the particle, okay, which is employed to introduce a new topic. Moreover, the current result is consistent with the findings by Al-Harahshe and Kanakri (2013), who show that the function of the particle  $t^{\varsigma}abb$  (the Jordanian Arabic cognate of the particle  $t^{\varsigma}ayb$ ) is to shift to a new topic. They illustrate this with the following example, which is based on Al-Harahshe and Kanakri (2013, p. 200):

(14) t<sup>c</sup>abb, ?assu?al ?iθθani

"Okay, the second question?"

Example (14) illustrates the use of  $t^{\varsigma}abb$  to shift to a new topic. The interlocutors discussed some questions and moved from one to another by employing the particle  $t^{\varsigma}abb$ . The same functional result also occurs in English, with the particle so at the initial utterance serving to introduce a new topic with a flat/steady drop pitch contour and long duration (Matzen, 2004). However, the acoustic results of the current study contradict Matzen's findings, particularly regarding the length of the particle and its pitch contour. This discrepancy comes from the phonological perspective: the English particle so, when introducing a new topic, has an open syllable structure, whereas its Arabic equivalent  $t^{\varsigma}ayb$  has a closed syllable structure. The current results showed that the length of the particle  $t^{\varsigma}ayb$  marking introduction of a new topic measured 152 ms, which is the shortest length within the current corpus. I believe that this short duration is also due to how Saudi Arabic speakers produce the particle  $t^{\varsigma}ayb$  more quickly than the other tokens, particularly when marking the introduction of a new topic. Regarding the pitch contour, the particle  $t^{\varsigma}ayb$  for introducing a new topic has a flat contour, as illustrated in Figure 4.

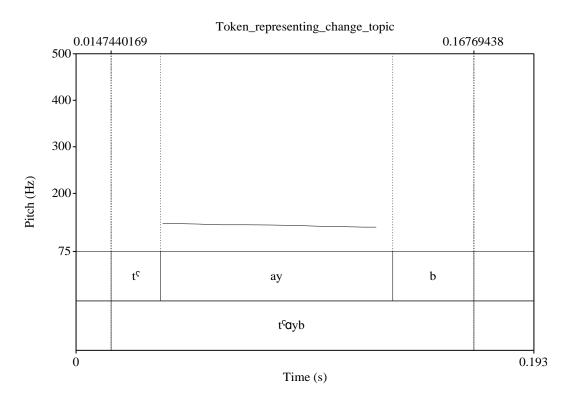


Figure 4. Pitch contour for the particle representing change topic

Figure 4 demonstrates that the contour remains static across the token, with an average value of F0 (131 Hz). The beginning and end F0 measurements of the token are also close, as the pitch starts at 134 Hz and ends at 127 Hz.

The fifth pragmatic function of the particle  $t^c ayb$  is to close a conversation/topic, particularly if it is followed by the word  $2 \int u f dk$  gerib "I'll see you soon" or  $xala:s^c$  "done," as in the example (15):

(15) **A**-wif rayukəm bət<sup>s</sup>alsat fawi youm al-sabt

"How about having a barbeque on Saturday?"

**B**- dzamil(.) Pana fad<sup>s</sup>y wa ma\$ndy foyol

"Nice (.) to me I am free and I will not have any work"

C- fəkrah zeinah, ?ana ma\u00a8kom

"Nice idea, me too, I go with this idea"

A- t'ayb xala:s'

"Okay done"

Closing or ending a topic involves a specific strategy that depends on the context. Participants tend to close the topic after reaching an agreement on something. In this example, the interlocutors A, B, and C were planning to have a picnic; Speaker A specified the day, and both Speaker B and Speaker C agreed. After that, Speaker A ended the conversation or the topic with the particle  $t^{\varsigma}ayb$  accompanied by the word  $xala:s^{\varsigma}$  'done'. This usage is consistent with the results by Al-Harahshe and Kanakri (2013), who demonstrated a similar function of the particle  $t^{\varsigma}ayb$  in Jordanian Arabic, particularly for marking the end of the discourse/topic, specifically when the particle is followed by the expression  $\beta$  inshallah "by Allah's will," as shown in the following example as based on Al-Harahshe and Kanakri (2013, p. 201):

(16) t<sup>s</sup>ayb, ?inshallah xeir, Allah ywaffigak

Ok, by Allah's will good Allah help-you

"OK, may Allah make is smooth, May Allah help you!"

An equivalent function is also found by Filip and Wales (2003, p. 439), where the marker *okay* functions to end/close the conversation, as shown below:

(17) *IF*:... we're going right now we're going back across the page in the opposite direction [undernea-]

*IG*: [no we're not] we're heading due n- south.

IF: oh awright [okay.]

The previous example is taken from Filip and Wales (2003) and shows that the second utterance of (IF) ends with *okay* "where the *oh awright* receives the information and the *okay* closes the sequence" (p. 439). Figure 5 below illustrates the particle  $t^c$ ayb used to mark to close of a conversation/topic, whose pitch contour that is very similar to the particle  $t^c$ ayb above, which functions to mark turntaking and change of topic.

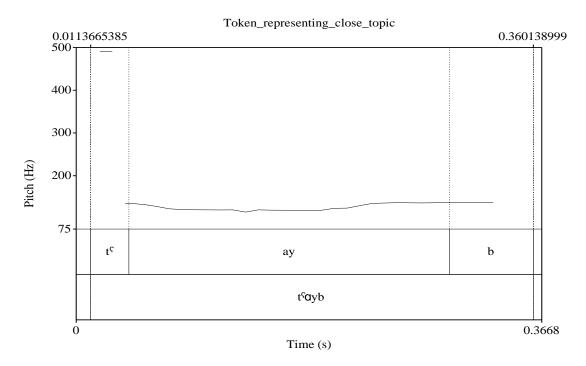


Figure 5. Pitch contour for the particle representing close topic

Acoustically, it is clear from Figure 5 that the pitch contour of the particle  $t^cayb$  signaling the close of a conversation/topic remains steady, with little change in the pitch across the token. The particle  $t^cayb$  measures 317 ms with medium length as categorized in Matzen (2004) and has a nearly flat pitch contour, with an average F0 of 127 Hz across the token and similar beginning (135 Hz) and ending (136 Hz) F0 measurements.

The sixth pragmatic function of the particle  $t^{\varsigma}ayb$  is to introduce a reproach, which is clearly shown in example (18) below:

(18) **A**- al-masðrah trani ?ətefagt mas al-sharekah yenadsfun al-beit youm al-dʒomsah le?ani ma dareit ?enk sazem ?assdeqaek.

"Forgive me please, I contacted the company to clean the house on this Friday,

because I did not know that you have invited your friends"

**B-** t<sup>c</sup>ayb, lif makallamt Salai gabel ma tetifeg maShom (..) nesit Pani saken maSk.

"Ok, why didn't you call me before contracting them (..) you forgot that I am your roommate"

The scenario demonstrated in example (18) occurred between two roommates. Speaker A scheduled an appointment with a cleaning service without consulting his roommate. Unfortunately, Speaker A scheduled this appointment on the same day as Speaker B's party. Speaker A tried to apologize for his behaviour, but Speaker B began his utterance by initiating the particle  $t^c$  followed by a reproach, as illustrated above in example (18b). This particle's prosodic features have the highest pitch contour in the current corpus, as shown in Figure 6.

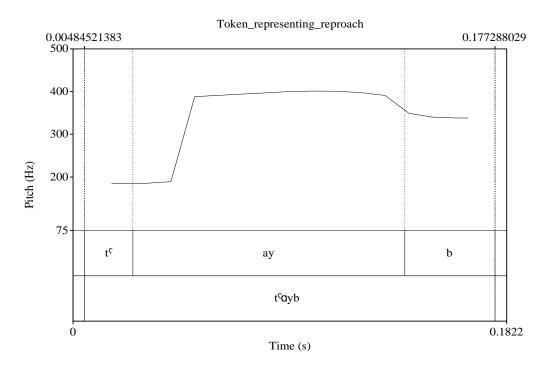


Figure 6. Pitch contour for the particle representing reproach

Acoustically, the particle  $t^cayb$  used to introduce a reproach, demonstrates the second-shortest duration in the corpus, measuring 161 ms. The pitch contour begins with low intonation at the beginning (184 Hz), followed by a sharp rise with high intonation at the end of the contour (338 Hz). This shift is expected due to the change in the speaker's voice when expressing blame or reproach. According to Johnstone (2017), "most acoustic changes measured have been explainable as resulting from the level of physiological arousal characteristic of different emotions" (p. 3). Therefore, we expect to observe changes in the F0 level as shown above in Figure 6.

The seventh pragmatic function is to introduce a refusal of a request, as shown in example (19):

- (19) **A** tagdar tedʒib li ba $\S d^{\varsigma}$  al-?yrad $^{\varsigma}$  men al-walmart?
  - "Can you bring this shopping list from Wal-Mart?"
  - **B-** t<sup>c</sup>ayb ma tefufinn mafyul ?akteb al-wadzeb.
    - "OK, don't you see me doing the homework?"

In example (19), the second speaker, Speaker B, refused to accept the previous request by initiating his utterance with the particle  $t^{\varsigma}ayb$ , followed by a justification of why he was not planning to go to Wal-

Mart. Here, the particle  $t^cayb$  and the following statement were produced with a special use of tonal contour, as seen in Figure 7.

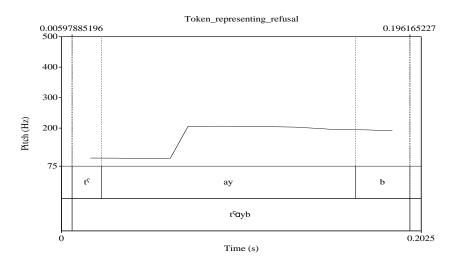


Figure 7. Pitch contour for the particle representing refusal

Similar to the majority of the investigated tokens, the particle  $t^cayb$  introducing a refusal was classified as medium length, with a measurement of 185 ms and an average F0 of 171 Hz overall. In addition, this particle has a similar trend of pitch contour to that of the particle representing a reproach; the pitch contour begins with a low F0 (101 Hz), followed by a sharp rise with a static level of high intonation at the end of the contour (190 Hz). I believe that the sharp rise reflects the speaker's emotionality in refusing the request.

The eighth pragmatic function of the particle  $t^sayb$  is to signal that something is of little or no importance. It is used alone with a specific intonation contour to show that what has been said by the previous speaker is of little or no importance. Consider the following examples:

(20) **A**-  $\mbox{\it Pas}^{\varsigma}$ arahəh  $\mbox{\it Penny muhbat}^{\varsigma}$  le $\mbox{\it Pnni ma Pamdani Parsel muqademat bah}\theta i$ 

lelmu?tamər

"In fact, I am so frustrated because I could not catch the abstract submission deadline for the conference"

 $B-t^{\varsigma}avb.$ 

"So what"

A- yasni raħat salai al-furssah

"I mean I missed this great opportunity"

**B**- qaddem Sala yeiruh al-fas sl al-dzai wa Pensa ally raħ

"Forget it and apply to a different conference next semester"

As example (20) shows, Speaker A tried to express his feelings of frustration because he missed the deadline to submit an abstract for a conference. Speaker B considered missing the deadline for abstract submission an unimportant and thus responded by using the particle  $t^cayb$  separately with a specific intonation contour to mean "so what," and thereby sending the message to Speaker A that missing the conference is unworthy of much attention. Unlike all the other functions, the particle  $t^cayb$  marking that an interlocutor's utterance has little or no importance measured 421 ms, making it the longest token in the current corpus, and demonstrated a low-fall intonation as shown in Figure 8.

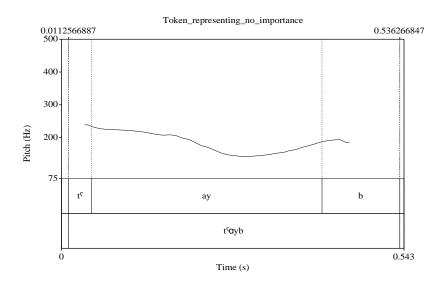


Figure 8. Pitch contour for the particle representing little/no importance

Figure 8 illustrates the average value of the entire pitch contour for the token (185 Hz). The particle  $t^cayb$  that marks little or no importance has somewhat different prosodic features from the particles described above. As described previously, the prosodic features of the functions that mark turn-taking, continuity, change of topic, and close of topic demonstrate relatively flat contours, and the functions representing reproach, refusal, and suggestion display sharp rising and falling contours across the tokens. However, as shown in Figure 8, the pitch of this particle function begins at a high intonation (238 Hz) and then, beginning approximately midway, gradually decreases until ending at 193 Hz.

The final pragmatic function is to send a message to the speaker to be patient, as in the following examples (21 and 22):

(21) A -bsersah ?eða betruħ betruħ mesəy lel matssam.

"If you want to go with me to the restaurant, be in a hurry"

B- t<sup>s</sup>ayb, t<sup>s</sup>ayb həðani ?abas ferrabi

"Okay, okay I am wearing my socks"

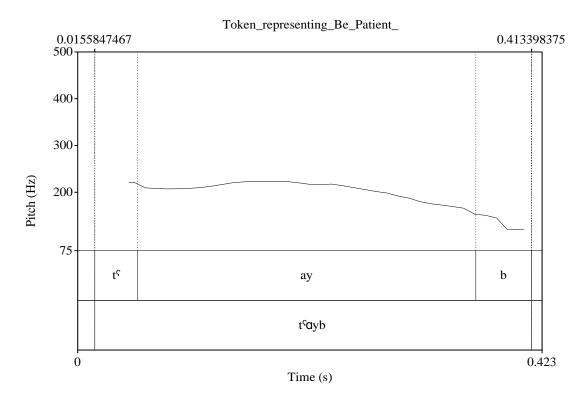
Example (21) exhibits that the particle  $t^{\varsigma}ayb$ , uttered by Speaker B, was used to send a message to Speaker A asking him for patience. Here, the utterance following the particle  $t^{\varsigma}ayb$  (i.e., wearing the socks) explaining to Speaker A why he should be patient. Moreover, the particle  $t^{\varsigma}ayb$  can mean "hold on/wait" and can appear alone as a response to someone who is knocking at the door. Although the particle  $t^{\varsigma}ayb$  appeared separately in this context, it still carries a clear meaning/function.

(22) (A knock at the door) and Speaker B answered by saying:

# B- t<sup>c</sup>ayb

"Okay" wait I am coming to you

The particle  $t^c ayb$  has a specific intonation contour that allows it to convey the meaning "hold on." In this case, the token measured 367 ms and is classified as long, with a steadily decreasing F0, as shown in Figure 9.



**Figure 9.** Pitch contour for the particle representing Be patient

The average pitch value for the token measured 196 Hz, with an overall steady downward intonation. Thus, it is somewhat similar to the token representing the (little/no importance) function in its gradual decrease across the prosodic contour. The pitch contour begins at 220 Hz, gradually decreases, and ends with low intonation (142 Hz).

With regard to research question #2 inquiring how the particle  $t^cayb$  occurs structurally in the corpus of SSA, the results of the current corpus demonstrate the following structures.

- **a.** Before questions, as illustrated in example (23):
- (23) **t**<sup>s</sup>**ayb**, wef ?asawwy ?eða ħesabi mu\$allaq?

"Ok, what should I do if my account was suspended"

This result is consistent with the findings revealed by Beach (1993, p. 334):

Marlene: How are you,

Bonnie: I'm fi:ne,

Marlene: Okay..hh D' you have Marina's telephone number?

In her second utterance, Marlene moved directly to the business of the call with the marker *okay*, followed by a question, as found in SSA.

- **b.** Alone, as a response to someone is knocking at the door, with  $t^sayb$  meaning "hold on/wait, I am coming to open the door for you."
- **c.** Before a negative statement, as shown in example (24):
  - (24) **t**<sup>c</sup>**avb** ma tefufinn mafyul ?akteb al-wadzeb.
    - "OK, you are not looking at me doing the homework"
- **d.** Before an affirmative statement, as shown in example (25):
  - (25) t<sup>s</sup>ayb almudarrıb yuStabar min ?afd<sup>s</sup>al almudarrıbin fi al-dawri,
    - "Ok, the coach is considered one of the best coaches in the league"

According to the results of the data presented above, it is clear that the particle  $t^cayb$  consistently occurs at the beginning of a speaker's turn (i.e., turn-initial). The particle  $t^cayb$  appears 109 times in the corpus and always occupies an initial position. Schiffrin (1987) stated that discourse particles glean their meanings from their context, and context plays a significant role in the interpretation of the particle  $t^cayb$ . In other words, the particle  $t^cayb$  depends mainly on the context in which it occurs, and it could introduce, for instance, a reproach, a request, a refusal, or a suggestion. In addition to the context, the prosody (e.g., intonation) contributes to the meanings of the particle  $t^cayb$  and confirms the argument of Didirkova et al. (2018) and Hansson (1999) that intonation plays an important role in detecting the meaning of the particle/marker. For instance, the particle  $t^cayb$  can have a meaning on its own and may appear separately, relying on a rising or falling intonation contour, as shown above in examples (8), (9), (20) and (22). Fung and Carter (2007) confirmed that the discourse particles can be an independent tonal unit and can be recognized by prosody.

Figure 10 and Table 2 below summarize the overall percentages for each function of the particle  $t^c ayb$  in SSA as well as their acoustic values and shows the trends over the corpus in a visually accessible way.

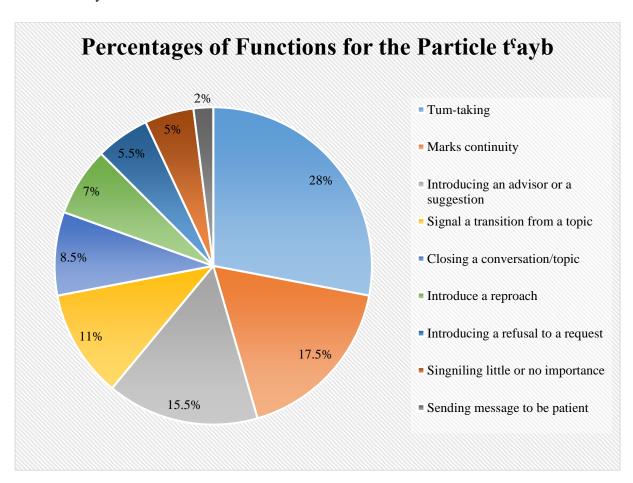


Figure 10. Percentage of Functions for the Particle t<sup>c</sup>ayb in SSA

**Table 2.** Summary of the Prosodic Results and Acoustic Measurements of the Particle t<sup>c</sup>ayb

Functional Category	Length of the token	Pitch contour	Average F0 of the token	F0 at the beginning	F0 at the end
Turn-taking	260 ms	Steady/ flat	131 Hz	130 Hz	133 Hz

Changing a topic	152 ms	Steady/flat	131 Hz	134 Hz	127 Hz
Closing a topic	317 ms	Steady/flat	127 Hz	135 Hz	136 Hz
Continuity	338 ms	Relatively flat	109 Hz	121 Hz	140 Hz
		with slight			
		rising at the			
		end			
Reproach	161 ms	Sharp rising	343 Hz	184 Hz	338 Hz
Refusal to a request	185 ms	Sharp rising	171 Hz	101 Hz	190 Hz
Advising/suggestion	184 ms	Sharp falling	153 Hz	206 Hz	190 Hz
		& rising with			
		slight falling at			
		the end			
Marking no importance	421 ms	High,	185 Hz	238 Hz	193 Hz
		decreasing			
		gradually at			
		the end			
Being patient	367	High,	196 Hz	220 Hz	142 Hz
		decreasing			
		gradually at			
		the end			

Again, the results are in the agreement with previous arguments in the literature (e.g., Didirková et al., 2018; Hansson, 1999), and prosody is shown to be a useful tool for analyzing the particles in utterances. The particle  $t^cayb$  varies in its prosodic features and may have specific intonation units when conveying different interpretations. Therefore, it is clear that not every pragmatic function contains a unique value or prosodic feature, and there exist certain variations in their length values and pitch contours. There are several factors behind these variations, including the context of the discourse and the speed of a speaker's speech (Matzen, 2004).

The results revealed that the prosodic/pitch contour has different patterns, as illustrated in the aforementioned figures. Generally, a particle obtains high F0/intonation compared to the standard usage of the same word (Hansson, 1999). The prosodic/pitch contour in the current study can be classified into three categories. In the first category, the pitch contour remains nearly static, particularly with the particle  $t^c$ ayb functioning to indicate turn-taking, change the topic, close a topic, or indicate continuity. The second category is related to the pitch contour, which does not remain on the same level and travels with sharp rises or falls or both and can be linked with the functions representing reproach, refusal and suggestion. In the third category, the pitch contour begins with a high intonation and then decreases gradually across the token; this contour is found in the particles functioning to indicate that an utterance has little or no importance or to request the speaker to be patient.

In addition, the duration of particles in the world languages varies in length, and each function may also vary in length (Matzen, 2004). Thus, it is evident that the long duration of the particle  $t^cayb$  that represents the functions of *being patient*, *showing little/no importance*, and *introducing continuity* differs from all the other functions. In most cases, the majority of the tokens were classified as of medium length.

# 4. Conclusion

This study investigated the prosody and functions of the particle  $t^{\varsigma}ayb$  in Spoken Saudi Arabic. The findings reveal that the particle  $t^{\varsigma}ayb$  can occur independently, before questions and before negative and affirmative statements. Moreover, analysis revealed that the particle  $t^{\varsigma}ayb$  conveys nine pragmatic functions. It may serve to introduce a reproach, refuse a request, or offer a suggestion or advice. Furthermore, it may be used as a marker of turn taking, transition from one topic to another, continuation, closing a conversation, sending a message to be patient, or indicating that an utterance by the previous speaker lack importance. The meaning of the particle  $t^{\varsigma}ayb$ , as for most other particles/markers, depends on the context in which it is used and, on its prosody, particularly if it occurs independently.

Acoustically, the particle  $t^cayb$  may have a steady/flat contour with medium length for the functions representing turn-taking, change of topic and close of topic; a sharp rising contour with medium length, particularly with the functions conveying reproach and refusal; or a high contour that decreases gradually at the end with long duration, particularly with the functions requesting patience or indicating that an utterance is of little/no importance. Moreover, most of the meanings of the particle  $t^cayb$  rely mainly on mutual knowledge of Arabic. This assumption is confirmed by Al-Harahsheh and Kanakri's (2013)'s assertion that the functions/meanings of particles are language-specific. Thus, nonnative speakers of Arabic may encounter difficulty in understanding the functions of the particle  $t^cayb$ .

This study provides insight into the fields of pragmatics and phonetics. We hope that the results obtained in this study will assist Arab linguists, particularly those interested in modern linguistics, in recognizing some of the prosodic features of Arabic particles of SSA that native Saudi Arabic speakers usually employ in their utterance.

Finally, there are some limitations of the current study that I will consider in future research. First, there is a need to expand the number of investigated tokens to obtain more precise, comprehensive and generalized features representing the intonation patterns of the particles in Saudi Arabic. The entire corpus, which was extracted from five speakers with a total of four hours of recorded speech, provided us with only 109 tokens distributed unevenly across the pragmatic functions. Therefore, investigating a longer corpus may provide us with more pragmatic functions for the target particle other than the nine discovered in the current study and will also provide a clear and generalized description of the prosodic patterns in SSA.

Moreover, there is a need to control the context and participants' dialects. The study lacks inferential statistics for the variations of the acoustic values investigated in this study for two reasons: first, because the corpus was too small for statistical tests, and second, because the corpus was acquired in different contexts from participants who speak different Saudi dialects, which in turn caused the emergence of phonetic value variations that are difficult to control. Therefore, we cannot obtain reliable statistical results.

# Acknowledgements

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