Chapter 4

Prosodic and gestural marking of complement fronting in Maltese

Patrizia Paggio
University of Copenhagen and University of Malta

Luke Galea
University of Malta

Alexandra Vella
University of Malta

This paper deals with the use of complement fronting in a corpus of Maltese conversations. Four different kinds of constructions are distinguished based on the discourse status of the fronted complement: focus movement, topicalisation and two types of left dislocation. A discussion is carried out of the ways in which suprasegmental features, both in terms of prosody and gestures, underpin the discourse functions of the four construction types. Our findings show that a falling pitch accent is nearly always present on the fronted complement, and that there is a tendency for gestures to accompany this same complement. We also show that the four construction types can be ordered on the basis of suprasegmental complexity with focus movement as the least complex, followed by topicalisation, and finally both types of left dislocation as the most complex.

1 Introduction

Maltese is often characterised as a language in which word order is relatively free, and largely determined by information structure rather than grammar constraints. The option of placing a sentence complement sentence-initially, in other words fronting it, is one of the possibilities available to Maltese speakers to mark this complement with respect to its discourse and information structure status.
In this paper, we investigate the use of complement fronting in a corpus of Maltese conversations. Based on the different types of discourse status carried by the fronted complement in context, we posit four different kinds of constructions. We then analyse the prosodic contours of the examples as well as the gestures produced by the speakers in conjunction with the fronted complement. Our aim is to show how suprasegmental features, such as prosodic and gestural features, underpin the discourse functions of the four construction types.

To our knowledge, this is the first study of complement fronting in Maltese building on empirical multimodal data, in other words the first study using non-constructed data which allow us to study this phenomenon as it occurs in real conversations, and to include gestural features in the analysis.

It was in fact the availability of the conversational multimodal data, which will be described below, and the initial observation that gestures seemed to be very prominent in conjunction with fronted constituents in those data, which provided the motivation for this study. It is a generally accepted generalisation that hand gestures, when they occur, are temporally aligned with the main sentence accent (Kendon 1980; McNeill 1992; Loehr 2004; Alahverdzhieva & Lascarides 2010), which is in turn associated with sentence focus (Lambrecht 1994; Vallduví & Engdahl 1995). However, we are not aware of any previous attempt at enriching this body of work with knowledge of how gestures may be used in conjunction with complement fronting, and their relation to prosodic features in these constructions.

The structure of the paper is as follows. In §2 we define complement fronting and give an overview of the literature on relevant constructions mostly based on a discussion of English examples. Based on the literature, we distinguish a number of different constructions all involving complement fronting, i.e. topicalisation, focus movement, and two types of left dislocation. In §3 we give an account of previous studies of this phenomenon in Maltese, and explain how the examples discussed in these studies fit the different constructions we are considering. We then describe our data in §4, in particular how the data have been annotated from the point of view of prosody, gestures, and discourse status. We also provide some counts of the annotated categories for each annotation level. §5 presents the results, both in terms of quantitative analyses and qualitative discussions of chosen examples. The two different analysis methods serve different purposes. While frequency counts are presented to make generalisations about how different features are represented in the different constructions, qualitative descriptions and discussions of a choice of representative examples are intended to offer a more detailed understanding of the data. Finally, §6 contains the conclusion.
2 Complement fronting

Complement fronting is a syntactic mechanism whereby a non-subject constituent is placed sentence-initially out of its canonical position, and thereby acquires a special status in terms of the information structure of the sentence. An example from English is the song title in example (1a), where the fronted object is enclosed in square brackets, and the canonical object position is indicated by an underscore. The non-fronted counterpart of the same sentence is shown in (1b).

(1) a. [This one thing] I know ___.
   b. I know this one thing.

The term topicalisation has often been used to refer to this construction at least in English, see e.g. Lambrecht (1994), based on the fact that the initial position in a sentence is often occupied by the sentence topic. However, in terms of information packaging this syntactic structure corresponds to at least two different constructions. One is topicalisation proper, in which the fronted complement indeed corresponds to the sentence topic, while the rest of the sentence predicates new information about the complement. The other is a different construction in which the fronted complement corresponds to the focus of the sentence rather than its topic. The latter construction has been called focus topicalisation (Gundel 1974), focus movement (Prince 1981), focus preposing (Vallduví 1992; Ward 1996), and linksrhematisierung (Stempel 1981). In addition to being different from the point of view of information packaging, in English the two constructions are also associated with different prosodic contours (Chafe 1976), in that topicalisation exhibits two focal accents, and focus movement only one. Compare sentences (2a) and (2b) below, where small caps have been added to the phrases that receive focal accent.

---

1The subject of a sentence can also be fronted in conjunction with left dislocation, as will be discussed further on. The same is also possible with subject extraction as in “This I hope will never happen”. The focus of this paper is, however, on complement fronting.

2We follow here Lambrecht (1994) and many others in understanding topic as that part of the sentence-presupposed information which the rest of the sentence predicates something about. According to the same framework, focus is defined as the non-presupposed, new part of the sentence.

3From here on, we will use the term focus movement to refer to the construction in which the fronted complement corresponds to the focus of the sentence. However, we are not hereby assuming a transformational approach, according to which the complement would be base-generated in one position and moved to the front.

4In (2b), small caps are exactly as in the original source. In (2a), on the contrary, they were added. Prince uses a graphical notation showing the FALL FALL contour characteristic of topicalisation constructions in English.
a. (Prince 1981: 251)
   \textit{Stardust memories I saw yesterday.}

b. (Lambrecht 1994: 295)
   \textit{Fifty-six hundred dollars we raised yesterday.}

The two constructions are also different in terms of their pragmatic function. The main pragmatic function of topicalised constructions in English is to mark a partially-ordered set relation, or \textit{poset} relation, between the denotation of the topicalised complement and a previously evoked discourse entity (Prince 1981). New information about this entity is predicated in the open proposition corresponding to the rest of the sentence. In (2a), for example, \textit{Stardust memories} is contrasted with other films and \textit{yesterday} contributes the new, focal information. In focus movement, on the other hand, the denotation of the fronted complement is discourse-new information, and it corresponds in fact to a new attribute assigned to an otherwise salient referent (here, the amount of money raised).

In addition to topicalisation and focus movement, a third construction type needs to be mentioned because it will be relevant to our discussion of complement fronting in Maltese. This is \textit{left dislocation}, which in English and other languages is distinguished from topicalisation and focus movement both in syntactic and pragmatic terms. Syntactically, the difference consists in the fact that the fronted constituent (often co-referential with the subject of the sentence), is resumed by a pronoun that occurs in the canonical position this constituent would have in the non-dislocated counterpart of the sentence. Even though left dislocation often involves the detachment of a subject, complement dislocation is also possible, as shown by the following example (coindexation indices are ours):

\begin{equation}
(3) \quad \text{Gregory & Michaelis 2001: 27}
\tag{3}
\text{[Smiley Burnette]}_i, \text{ I don’t remember if you were old enough to remember [him]}_i.
\end{equation}

According to some authors (Lambrecht 2001; Gregory & Michaelis 2001), the main pragmatic function of left dislocation is to promote a discourse-new referent to topic status. Since the initial position in a sentence, however, is ‘reserved’ for topical information, the expression denoting the discourse-new referent is detached from the rest of the sentence by means of syntactic as well as prosodic means. The rest of the sentence contains a pronoun that is coreferential with the dislocated constituent, and in fact if this constituent is dropped, the sentence is still well-formed. Geluykens (1992) describes left dislocation as an interactional device for introducing referents. In his analysis, the left dislocated expression is a
complete move which calls for acknowledgement from the listener, as shown by
the fact that it is often associated with a falling tone, and followed by a prosodic
boundary and a pause. However, another type of left dislocation has also been
described (Prince 1997; Geluykens 1992; Gregory & Michaelis 2001) where the
dislocated object involves a poset relation, similarly to what happens in topica-
sation constructions.

Lambrecht (2001) notes that a dislocated constituent may also be coindexed
with an affix in Romance, Bantu and, interestingly for the present study, Semitic
languages. He quotes the following example from Classical Arabic, in which the
clitic pronoun hu refers back to Halid in the initial sentence position (the glossing
of the example – including the separation into morphemes – is our adaptation
of the original to the conventions used here):

(4) Classical Arabic (Moutaouakil 1989: 109)
    Halid-un, qābal-tu-hu l-yawm-a
    Halid.NOM met.1SG>3SG the-day.ACC
    'Halid, I met him today.'

In Moutaouakil’s original account, the fronted complement is categorised as
being the theme, which the author describes as a predication-external pragmatic
function, to be distinguished from topic, which is predication-internal.

3 Complement fronting in Maltese

The literature on complement fronting in Maltese is relatively sparse. Borg &
Azzopardi-Alexander (2009) give an account of topicalisation, which they de-
scribe as a process whereby constituents are moved to the leftmost initial posi-
tion in the sentence, away from their canonical position. One of the examples
they give is in (5), where il-ġurdien ‘the mouse’ is fronted, as opposed to what
the same authors call “an unmarked reporting of the same situation” (p.72) in (6).
The fronted version of this example also shows the use of the pronominal clitic u
attached to the main verb, which agrees in number and gender with the fronted
object.

Maltese examples are glossed following the Leipzig glossing rules (https://www.eva.mpg.de/
lingua/resources/glossing-rules.php). Thus, '-' separates segmentable morphemes, but is also
used in Maltese writing, and therefore in the examples, to attach the definite article to the
relevant noun, '=' separates a clitic, including the definite article in the gloss (DEF), and '.'
is used to list non-segmentable meta-linguistic elements. A list of the abbreviations used is
provided at the end of this paper.
Il-ġurdien, il-qattus-a qabd-it=u.
DEF=mouse.SG.M DEF=cat.SG-F caught.3.PRF-3.SG.F=3.SG.M
‘As for the mouse, the cat caught it.’

Il-qattus-a qabd-et il-ġurdien.
DEF=cat.SG.F caught.3.PRF-3.SG.F DEF=mouse.SG.M
‘The cat caught the mouse.’

A number of examples are given in this work to illustrate that under certain conditions not only object complements, but also adverbials, prepositional complements, and even subjects can be fronted, and that chains of fronted constituents are also possible, as in (7).

Jien, I oħt=i, l-ittra,
I sister.SG.F=1.SG.Poss DEF=letter.SG.F
ktib-t=hie=l=ha lbierah.
wrote.PRF-1.SG=3.SG.F=INDR=3.SG.F yesterday
‘I, my sister, the letter, I wrote it to her yesterday.’

Crucially, the authors claim that this type of construction, which they call topicalisation, is characterised in Maltese by a specific prosodic contour, in that i) the fronted constituent constitutes its own tone group starting on a High pitch on the first stressed syllable and moving to a Low pitch on the last stressed syllable; ii) the rest of the sentence can receive an unmarked intonation pattern with nuclear stress on the last stressed syllable, or a contrastive intonation pattern with a nuclear stress placed elsewhere; iii) a pause may be observable between the two tone groups. In the case of multiple topicalisations, each topicalised constituent involves its own separate tone group.

In example (5), thus, it is argued that there are two distinct tone groups, and that as a consequence, the fronted object is separated from the remaining part of the sentence. In the second tone group, nuclear stress would either fall on the final verb in the unmarked case, or on il-qattusa ‘the cat’ in a contrastive focus reading of the subject.

An additional piece of evidence is given to support the idea that the fronted constituent is somehow detached, or, as the authors put it, “not strictly speaking in a grammatical relation to the rest of the sentence” (Borg & Azzopardi-Alexander 2009: 73), namely the fact that the object marker lil ‘to’, which is normally
 obligatory with person names functioning as objects, is no longer obligatory if a person name is fronted. Finally, the authors claim that, when an object is fronted, the main verb has to bear a pronominal clitic co-referential with this object.

In other words, the definition of topicalisation they propose is based on syntactic and prosodic characteristics all pointing to the fact that the fronted constituent does not belong to the main sentence predication. These characteristics, however, rather seem to correspond to those mentioned earlier in our account of left dislocation. As far as the discourse status of the fronted constituent is concerned, the authors seem to assume that it always expresses given information, while the rest of the sentence predicates something new about the fronted element. In other words, a fronted constituent in Maltese, in this account, always seems to correspond to a topic, and fronting of one or more constituents thus seems never to involve focus movement.

In an earlier work on word order in Maltese, Fabri & Borg (2002) investigate which order combinations of S, V, and O are grammatically possible in Maltese in contexts where each of the three constituents is either the focus, the topic, or a contrastive focus. In general, it is not clear whether, according to Fabri and Borg, one can assume a canonical, or unmarked word order for Maltese. Clearly, however, not all word orders are possible in all discourse contexts. For our purposes, the two orders OSV and OVS, both involving object fronting, are interesting. Unfortunately, the authors do not provide naturally occurring examples to illustrate the different contexts, but from the tables in which their claims are summarised, it would seem that in both OSV and OVS the object can be focus or topic depending on the prosody.

Vella (1995) also examines the different word order possibilities in Maltese with respect to their prosody. In this early work, and in contrast to Fabri & Borg (2002), she restricts her analysis to structures not involving cliticisation, attempting, in so doing, to come up with a phonological explanation for the word order possibilities in Maltese. Vella invokes the notion of focus and the related assignment of [+focus] (Vella 1995; 2009) suggesting that the latter results from speakers’ manipulation of semantic material in different discourse contexts. She follows Gussenhoven (1983)’s use of the term variable to refer to the material to which speakers obligatorily assign [+focus], and the term background to refer to that stretch of speech assigned [-focus]. Gussenhoven (1983: 283) provides the following formulation: “[+focus] makes the speaker’s declared contribution to the conversation whilst [-focus] constitutes his cognitive starting point”. Apart from a brief reference to left dislocation in Vella (1995) Vella does not attempt to distinguish between different types of complement fronting (topicalisation, focus
movement or left dislocation) as elaborated in the literature. Nevertheless her examples, especially the constructed ones, appear to fit better into the category involving focus movement than into either of the two other categories. The Map Task data examples in Vella (2003; 2009) are similarly used to illustrate different instances involving focus movement resulting from a variety of conditions such as changes in word order, cliticisation, negation and the presence of indefinite pronouns, all of which appear to trigger the assignment of [+focus] to the variable. In terms of prosody, the clear conclusion of all of Vella’s work is that statements\(^6\) involving focus movement and therefore an early [+focus], are characterised prosodically by a falling pitch accent. This falling pitch accent is followed by a movement involving a slight rise, which she analyses as a sequence consisting of a phrase accent linked to a secondary prominence and a boundary tone rising to the edge of the phrase.

Left dislocation in Maltese is discussed in Bezzina (2015), who examines the different properties of left dislocation examples in spoken data. Interestingly for our discussion, Bezzina refers to the examples in Borg & Azzopardi-Alexander (2009) as examples of left dislocation, even though the authors use the term topicalisation. She claims that the general purpose of the construction is that of promoting new referents to topic status, and notes that the dislocated constituent is perceived as detached from the rest of the sentence. Her main interest is in the way the degree of formality of the data affects the construction. She shows, in fact, that a formal style may allow for syntactically rather complex dislocated elements.

At least two of the characteristics noted by Borg & Azzopardi-Alexander (2009) with respect to the constructions they refer to as instances of topicalisation – which Bezzina (2015) refers to as examples of left dislocation – do not seem to occur in the focus movement examples which feature in Vella’s work. These are separation into different tone groups by means of a pause and the accompanying, also separate, falling intonational movements.\(^7\) The focus movement examples described by Vella, by contrast, involve a falling pitch accent only on the [+fo-

---

\(^6\) A parallel construction has been described to occur in questions having an early [+focus]. In this case, a rising pitch accent is followed by an upstepping phrase accent linked to a secondary prominence and a boundary tone which continues on a level high to the edge of the phrase.

\(^7\) It is worth noting that the ‘chains of fronted constituents’ noted by Borg and Azzopardi-Alexander (2009) in their examples are mirrored by a similar effect noted in particular in Vella’s (2003) work. This is the possibility of ‘tone copying’ as described by Grice et al. (2000) in the case of phrase accents. This phenomenon involves a pitch accent assigned to an early [+focus] element being followed by not one, but many, phrase accent and boundary tone sequences (see examples in 2003: 1778).
Prosodic and gestural marking of complement fronting in Maltese

cus] element; any post-focal elements usually involve a slight rise consisting of the phrase and boundary tone sequence mentioned earlier.

To sum up, previous studies of complement fronting in Maltese provide evidence for the fact that any of the constructions described in the previous section, i.e. topicalisation, left dislocation, and focus movement, may be at play when a complement is fronted. However, to our knowledge no systematic data-driven account has been given so far of what distinguishes these constructions in terms of their syntax, the discourse status of the fronted constituent, and the suprasegmental features associated with them. It is the aim of this article to fill this gap by proposing such an account based on multimodal data, in other words spoken language data and accompanying gestural behaviour. We will be concerned with complement fronting as exemplified in (8), to be compared with the non-fronted counterpart in (9). We will, on the other hand, not be concerned with examples involving fronting of adverbials, or subject fronting.

(8) MAMCO: 19_g_148
il-Baileys in-hobb ukoll
DEF=Baileys-SG.M 1-love.IPFV.SG as.well
‘Baileys I like as well.’

(9) in-hobb il-Baileys ukoll
1-love.IPFV.SG DEF=Baileys-SG.M as.well
‘I like Baileys as well.’

4 Corpus data

The data described in this paper were taken from the multimodal corpus of Maltese MAMCO (Paggio & Vella 2014). This corpus is made up of twelve video-recorded first encounter conversations. Twelve speakers (six males, six females) participated in two sets of recordings, all of which were made in Malta. At the time of recording, all speakers were students at the University of Malta. All speakers were Maltese dominant speakers and had not met prior to the experiment. They were instructed to get to know each other. The setup for the collection of this corpus was the same as was previously used for the Nordic multimodal corpus of first meeting dialogues NOMCO (Paggio et al. 2010), and involves pairs of speakers standing in a studio conversing freely for about 5 minutes.

In this study, our focus is on constructions displaying complement fronting. In particular, we investigate what prosodic contours are associated with the constructions, whether the fronted complement in these examples is accompanied
by hand gestures, and what the discourse status of the fronted complement is. A total of 36 examples involving complement fronting were selected manually from the 24 dialogue recordings. Some of the examples contain a clitic pronoun coreferential with the fronted complement, others don’t. In (10) and (11) we show two examples: in the former, the clitic h refers to and agrees with the fronted complement.\(^8\) In the latter, the fronted element *second year* involves a code-switch into English of a structure which, in Maltese, would have been a prepositional phrase *fit-tieni sena* ‘in the second year’: no clitic is involved (and none would have been involved had there been no code-switch).

(10) MAMCO: 20_g_165

\begin{verbatim}
it-tequila j-rid j-koll-i burdata ghali=h
DEF=tequila.SG.M 1-want 1-have-1SG mood for=3.SG.M
\end{verbatim}

‘Tequila I need to be in the mood for it.’

(11) MAMCO: 10_f_31

\begin{verbatim}
second year ghad-ni
second year still-1SG
\end{verbatim}

‘In my second year, I am.’

A first summary of the data showing the distribution of clitics and gestures is provided in Table 1.

<table>
<thead>
<tr>
<th>fronted complement with gesture</th>
<th>without gesture</th>
</tr>
</thead>
<tbody>
<tr>
<td>with clitic</td>
<td>11</td>
</tr>
<tr>
<td>without clitic</td>
<td>16</td>
</tr>
<tr>
<td>total</td>
<td>27</td>
</tr>
</tbody>
</table>

The sound files were transcribed and annotated in PRAAT (Boersma & Weenink 2009). Gestures, where present, were annotated using the ANVIL tool for multimodal annotation (Kipp 2004). In addition, the examples were also coded in a separate text file with categories referring to the discourse status of the various referents. Transcriptions and annotations are described in detail in what follows.

---

\(^8\)Note that in example (10) the speaker treats *tequila* as a masculine noun, probably associating it with the masculine *drink*, even though the ‘correct’ grammatical gender is feminine.
4 Prosodic and gestural marking of complement fronting in Maltese

The annotated data can be obtained through the authors. A complete list of the examples from the corpus is included at the end of this paper together with their semi-literal translation.

4.1 Annotation of prosody

The main purpose of the annotation and subsequent analysis of the prosody of the selected structures was to test the claims advanced in Borg & Azzopardi-Alexander (2009) about the prosodic characteristics of fronted complements in Maltese, and at the same time to explore the question whether different constructions might be distinguished in Maltese based on their different intonation patterns, as is the case for topicalisation vs focus movement in English.

The annotation was carried out following Vella (1995; 2003; 2009). It is couched in the Autosegmental-Metrical framework of Intonational Phonology, see e.g. Pierrehumbert (1980) and Ladd (2008). It involved the identification of tunes consisting of sequences of pitch or phrase accent and boundary tones. Tones can be H(igh) or L(low). Pitch accent tones are those associated with prominent syllables having nuclear status and are marked by means of an asterisk, *⁹. Phrase accent tones are those having a secondary association of the sort described by Grice et al. (2000: 180) as tones which “resemble ordinary pitch accents, but do not signal focus or prominence in the same way [as ordinary pitch accents] reflecting their essentially peripheral nature”. These are marked by means of a hyphen, -, following the relevant tone. Boundary tones are marked as p or i depending on whether they are associated with a phonological phrase boundary or an intonational phrase boundary.

In the prosodic annotation of example (12), for instance, corresponding to (11) discussed earlier, we see a falling tune H*+L starting on the accented syllable *se of the fronted complement *second year, and falling to the edge of the phonological phrase (Lp). In instances where a boundary target might be expected but where its realisation may be difficult to determine or tease out as a separate tonal target (separate in this case from the following L phrase accent), parentheses are used. This is the case here. The fall is followed by a phrase accent L- on the accented syllable of ghadni rising slightly to the boundary at the edge of the intonational phrase Hi. In the textual rendering of this and the succeeding examples, the syllable carrying the sentence accent is shown in small caps and preceded by

⁹Tones can also be associated with prominent syllables which are prenuclear, hence H*. An instance of this can be found on nies in the second, w(eak)-branching of the two phonological phrases in example (16): nuclear prominence in this example falls on In*gliż in the first phonological phrase within the intonational phrase.
an asterisk, whilst any syllables carrying a secondary accent in postnuclear position are shown in small caps without additional marking. Boundaries are shown by means of a bar, ‘|’, and are indicated even in the absence of a physical break. A list of the symbols used in the annotation is provided at the end of this paper.

(12)  

**Second** year | **GĦAD** ni |
H*+L (Lp) L- Hi

Figure 1 displays the PRAAT screen dump corresponding to the same example.

Figure 1: PRAAT screen dump showing the prosodic annotation of the example *Second year għadni*.

Counts of the various prosodic patterns found in the corpus are shown in Table 2. The majority of our examples (i.e. 27/36, or 75%) have one nuclear pitch accent on the fronted complement. The remaining examples (i.e. 9/36, or 25%) have two or three nuclear pitch accents, the first of which is also on the fronted complement. The second nuclear pitch accent (and the third in the one example involving three consecutive pitch accents) is on a following element in the rest of the utterance, either within the same intonational phrase (although a separate phonological phrase), or in a separate intonational phrase. The nuclear pitch accent on the fronted complement in all except one example is followed by the phrase accent and boundary tone sequence, L- Hi. Such a pattern is described by Vella (2009: 51), who states that a nuclear pitch accent is “followed by a L phrase accent linked to the stressed syllable closest to the edge of the intonational phrase and a final Hi boundary tone”. A yes-no question is involved in one of the examples, shown in (13).
4 Prosodic and gestural marking of complement fronting in Maltese

Table 2: Frequency counts of different combinations of one or more nuclear pitch accent (fall or rise) and post-nuclear phrase accent + boundary sequences

<table>
<thead>
<tr>
<th>Nuclear pitch accent type</th>
<th>Post-nuclear phrase accent + boundary sequence type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>L-Hi</td>
</tr>
<tr>
<td>H*+L (Lp)</td>
<td>15</td>
</tr>
<tr>
<td>H*+L (Lp)</td>
<td>1</td>
</tr>
<tr>
<td>Total Fall</td>
<td>35</td>
</tr>
<tr>
<td>Rise</td>
<td>L+H-Hi</td>
</tr>
<tr>
<td>L* H</td>
<td>1</td>
</tr>
<tr>
<td>Total Rise</td>
<td>1</td>
</tr>
<tr>
<td>Grand total</td>
<td>36</td>
</tr>
</tbody>
</table>

(13) MAMCO: 23_f_22

*l-universita’ qiegħed inti?*

DEF=university.SG.F stay3.SG you

‘The university do you attend (it)?’

Yes-no questions in Maltese have a different tonal structure as compared to statements, see Vella (1995; 2009: 51). The fronted complement in the question carries a nuclear pitch accent (just as statements do). However, the nuclear pitch accent in this case is rising (i.e. L* Hp) rather than falling (i.e. H*+L). In post-nuclear position, the phrase accent and boundary tone sequence is L+H- Hi. The prosodic annotation of the example is shown in (14).

(14) l-universi ‘TA’ | qiegħed inti?

L* Hp L+H- Hi

To sum up, there is a clear tendency in our data for fronted complements to carry their own nuclear falling pitch accent. The tendency for the intonation of elements which follow the fronted complement to carry the phrase accent and boundary tone sequence L- Hi described for example (12) is also clear. Only a
very small number of examples in the data analysed, in fact, involve more than one falling pitch accent.

4.2 Annotation of hand gestures

In this study, hand gestures are considered to be suprasegmental features on a par with prosodic features. There are good reasons for this assumption. There is large agreement in the literature that hand gesture strokes are temporally aligned (or slightly precede) the main sentence accent (Kendon 1980; Bolinger 1986; McNeill 1992; Alahverdzhieva & Lascarides 2010), and it has been observed and verified on annotated multimodal data (Loehr 2004; 2007) that gesture phrases are temporally coordinated with intermediate phrases in the sense of Pierrehumbert (1980). In an empirical study of German data (276 examples), Ebert et al. (2011) find that gesture strokes tend to precede sentence accent by 0.36s on average, in other words they confirm what seems to be generally acknowledged in the literature. However, the authors of this study make the claim that whatever alignment is observed between gesture phrases and intonationally motivated structures is a by-product of an interdependence between gestures and focus phrases, which in turn is motivated by information structure. They do find evidence to confirm this claim, since they observe that the onsets of gesture phrases in their data align with new-information foci with a time lag of only 0.31s on average (and a small standard deviation). The same kind of temporal interdependence is not found, on the other hand, between gesture phrases and contrastive focus phrases.

To our knowledge, no one has investigated whether hand gestures play a role in conjunction with complement fronting. Since we have seen that fronted complements in Maltese are accompanied by pitch accents, we would expect that hand gestures, if present, would be likely to align with them. However, finding that hand gestures are coordinated with fronted complements would seem to contradict Ebert et al. (2011)’s claim that gesture phrases align with focus phrases in that fronted complements, as we have seen, do not necessarily correspond to sentence foci. In fact, a first look at the data gave us the impression that there was a tendency for fronted complements to be accompanied by gestures. The goal of the gesture annotation was to verify this expectation in a systematic way and to provide a new perspective from which to look at the relation between gestures and discourse structure.

For each of the examples under discussion, if a hand gesture by the speaker overlaps the fronted complement, this hand gesture was annotated as a temporal element associated with the corresponding video frames. The annotation procedure and the labels used to annotate gestures are taken from the MUMIN coding
scheme (Allwood et al. 2007), an annotation scheme for multimodal behaviour which provides attributes for the annotation of shape, dynamics and function of head movements, facial expressions, hand gestures, and body posture. The scheme has been successfully used to code multimodal behaviour in several languages, e.g. in the NOMCO project, which has developed annotated conversational data for Danish, Swedish, Finnish and Estonian (Paggio et al. 2010; Paggio & Navarretta 2017).

According to what the MUMIN scheme prescribes, we do not explicitly mark gesture strokes, which we understand as the most dynamic parts of the gestures, nor do we mark the internal structure of a gesture in terms of its preparation, prestroke hold, stroke, and retraction (see e.g. McNeill 1992). Instead, we create temporal elements in the annotation that correspond to the whole duration of the gesture from the beginning of the movement to its completion. In a series of gestures, we follow Kipp (2004)’s recipe to distinguish the various gestures: essentially, we draw a boundary every time a gesture changes direction and velocity, and a new stroke is visible.
Only two types of attributes were selected from the MUMIN scheme and annotated in our data. There are attributes that indicate which hand was used as well as whether the hands in a two-handed gesture are used symmetrically, and others that specify the semiotic type of the gesture. They are shown in Table 3.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handedness</td>
<td>BothHandsAsymmetric, BothHandsSymmetric</td>
</tr>
<tr>
<td></td>
<td>RightSingleHand, LeftSingleHand</td>
</tr>
<tr>
<td>Semiotic type</td>
<td>Symbolic, Iconic, Deictic, IndexicalNonDeictic</td>
</tr>
</tbody>
</table>

Whilst the handedness features should be self-explanatory, the semiotic ones deserve some comment. Symbolic is used to annotate conventional emblematic gestures; iconic is used for gestures that express the content of their object by similarity – either in a concrete or an abstract way; deictic is used for hand gestures that identify an object spatially; finally IndexicalNonDeictic is used for batonic gestures, or beats. We have not yet analysed how the two sets of attributes are used in the data: in future, we intend to investigate whether semiotic type interacts in systematic ways with discourse features of the associated referents.

The gesture annotation of an example discussed previously, see (12), is illustrated in Figure 2. The video frame shows the point of maximal extension of the hand gesture performed by the speaker on the right. Below the frame is a section of the ANVIL annotation board displaying the word transcription, the prosodic annotation, the English translation, and the hand gesture element, which is linked to the words second year. The gesture is categorised as a LeftSingleHand one, and the annotation also contains the semiotic feature Symbolic (not visible in the figure), which is reserved for conventionalised, emblematic gestures like the ‘two’ gesture in question. The annotation also shows additional tracks (syllables, FacialExpressions, HeadMovements, and BodyPosture) that were not used for this study and are therefore left empty.

A total of 30 hand gestures are present in the fronted complement example dataset. Of these, 27 (90%), occur in conjunction with the fronted complement. This looks like a pattern, indicating a strong tendency for fronted complements to be accompanied by gestures. To check that this is a real tendency, we also analysed all the hand gestures produced by two of the MAMCO speakers in two different conversations. Both speakers produce 80 hand gestures for which the
whole extension from the beginning of the movement to its end has been annotated as described earlier. Of the 80 gestures, only 17 (21%) in the case of one speaker, and 13 (16%) in the case of the other, are aligned with the initial sentence constituent. Six of these cases (2 and 4, respectively) involve fronting. The remaining gestures occur in the middle of the sentence, towards the end, or span the whole sentence. The last type makes up a large portion of the gestures (63 and 67, respectively). These gestures have a long duration, either because they are repeated or because they have a long prestroke hold, and their extension spans the duration of the whole sentence.

These numbers seem to provide a more complex picture than the one described by Ebert et al. (2011) for German, and call for a detailed analysis of the alignment between gesture strokes and pitch accents in Maltese. For the present study, however, it suffices to note that in general, the probability for a gesture to align with the initial sentence constituent in our data (without spanning the rest of the sentence at the same time) is relatively low. This probability increases in sentences where the initial constituent is a fronted complement.

4.3 Annotation of discourse status

The purpose of annotating the fronted complement with respect to the discourse status of the corresponding referent was to use discourse status to distinguish between the constructions discussed previously.

The discourse referent corresponding to the fronted complement was annotated using one of the three categories new, poset, or old. New means that the referent has not been mentioned earlier and is not implied, in other words that it is referentially new; poset that it has not been mentioned, but stands in what Prince (1981) calls a partially-ordered set relation with an already mentioned or implied referent (for instance by expressing contrast or by referring to a more specific but related concept); finally old means that the referent has already been mentioned. The distribution of the three categories is shown in Table 4.

10For a discussion of the difference between referentially and relationally new, see e.g. Gundel & Fretheim (2008).
Table 4: Corpus data statistics: discourse status of the fronted complement (absolute counts)

<table>
<thead>
<tr>
<th>Discourse status</th>
<th>Counts</th>
</tr>
</thead>
<tbody>
<tr>
<td>new</td>
<td>15</td>
</tr>
<tr>
<td>poset</td>
<td>7</td>
</tr>
<tr>
<td>old</td>
<td>14</td>
</tr>
<tr>
<td>total</td>
<td>36</td>
</tr>
</tbody>
</table>

5 Results

In this section we analyse the way in which the different constructions involving fronting which we described earlier are realised in the corpus data. We start by providing some corpus statistics intended to give a quantitative view of different properties of these constructions in our data, and we then analyse examples which we consider typical of these tendencies in a qualitative fashion.

5.1 Corpus statistics

Based on the overview of the literature, we distinguish four different constructions based on the discourse status of the fronted complement. In addition, the presence or absence of a clitic or a pronoun coreferential with the fronted complement is used as a diagnostic to keep topicalisation and left dislocation apart.

- By definition, in focus movement (FM) constructions the fronted complement is new. Following Prince (1981)’s analysis, we expect it often to be an attribute that is added as new information to an otherwise presupposed referent.

- In left dislocation constructions, there are two possibilities, as we saw earlier. The fronted complement can be new, and introduced as a new topic for subsequent reference. It can, however, also be old. Following Geluykens (1992), we will call the two types of left dislocation LD1 and LD2, respectively. In either case, there is always a clitic or a pronoun in the rest of the sentence which has the same referent as the fronted complement and syntactically agrees with it.

- Finally in topicalisation constructions (TOP), the fronted complement is either old or it stands in a poset relation with an already introduced referent.
There is no clitic or pronoun in the rest of the sentence that agrees with the topicalised complement. Note that examples of topicalisation without a following clitic in our data also include PP fronting. This seems to confirm that cliticisation is linked to a specific construction rather than to syntactic properties of the fronted constituent.

Table 5 shows counts of the four constructions in the corpus together with a specification of the discourse label of the fronted complement, which was used for the construction classification. Given this taxonomy and the distribution of the data shown in the table, the question we ask in this section is whether the suprasegmental characteristics provided by prosody and gestures to some extent differ depending on the construction type.

Table 5: Constructions and discourse status of the fronted complement (absolute counts)

<table>
<thead>
<tr>
<th>Construction type</th>
<th>new</th>
<th>poset</th>
<th>old</th>
</tr>
</thead>
<tbody>
<tr>
<td>FM</td>
<td>11</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>LD1</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>LD2</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>TOP</td>
<td>0</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>total</td>
<td>15</td>
<td>7</td>
<td>14</td>
</tr>
</tbody>
</table>

We saw earlier that the majority of our examples (27) are characterised by the occurrence of a single pitch accent on the fronted complement, whilst the remaining 9 examples display two pitch accents (three in one single case). If we look at how the two prosodic patterns map onto the different construction types (Table 6), an interesting tendency seems to emerge.

The numbers show that the tendency for topicalisation and focus movement constructions to be accompanied by only one pitch accent is inverted in the case of left dislocation, where we see a slight preponderance of the two-accent pattern (7 vs 4). The differences are statistically significant (Fisher’s exact test, p-value = 0.004918). The different pattern displayed by left dislocation reflects the fact that the fronted complement in this construction is somehow detached from the rest of the construction, as also indicated by the presence of a clitic or pronominal reference. The length of the utterance (in the sense of the number of words used), may also, however, in itself contribute to the presence of an additional pitch accent. In fact, most of the cases in which two pitch accents occur, but also most
of the left dislocation constructions, are relatively long. This makes sense in terms of discourse strategy. Left dislocation constructions introduce the referent in a more elaborate way, and therefore often have more substantial material in the clause.

Turning now to gestures (Table 7), we see here that left dislocation and topicalisation constructions seem to fall into a different category in that they are always or nearly always characterised by the presence of a gesture (100% of the LD1 and LD2 cases, and 75% of the TOP ones), against a more or less 50/50 distribution in the case of focus movement. The differences, once the two LD types are collapsed, are significant (Fisher’s exact test, p-value = 0.01135). It is tempting to advance the tentative explanation that gestures are instrumental in marking the topical nature of the fronted complement in left dislocation and topicalisation constructions.
5.2 Analysis of four examples

To provide a more detailed analysis of the tendencies identified in the statistical analysis, we give below what we consider particularly illustrative examples of the four construction types from our corpus. Given our focus on both prosody and gestures, we have chosen examples where gestures are always produced in conjunction with the fronted complement, even though about half of the examples of focus movements do not contain a gesture. For each example we describe the way prosodic and gestural characteristics have been annotated.

(15) MAMCO: 18_g_116

\[
\text{sa l-ahħar ta-x-xahar għand=hom}
\]

\['Till the end of the month they have.'\]

Example (15) is a focus movement construction. The two speakers are talking about how much time students have left to prepare for their exams. The fronted complement \(sa l\-ahħar ta\-x-xahar\) ‘till the end of the month’ is a temporal expression that provides a new attribute to the presupposed timeframe of the action, and is thus annotated as \textit{new}.

![Figure 3: PRAAT screen dump showing the prosodic annotation of example (15) sa l-ahħar tax-xahar għandhom ‘Till the end of the month they have’.](image)

The prosody is characterised by a falling pitch accent, \(H^*+L\), on the nuclear accented syllable of the fronted complement, \(^{*x}xa\-har\). Pitch continues to fall to a Low phrase accent, \(L-\), associated with the secondary accent on \(għand\) in \(għand\-hom\), followed by a slight rise to a Hi boundary at the end of the phrase. There
is no clear intermediate target for a Low boundary, Lp, following the H*+L pitch accent, in this example. Figure 3 displays the PRAAT screen dump showing the prosodic contour and annotation. The gesture performed by the speaker on the left, and shown in Figure 4, is a batonic gesture (IndexicalNonDeictic) performed with the left hand. The arrows in the figure are intended to show the trajectory of the gesture: the hand starts from a resting position close to the body, is lifted forward and brought back to its initial position. The segment corresponding to the gesture in the annotation board shows the entire extension of the movement, which overlaps with the fronted focus carrying the pitch accent.

\[(16)\quad\text{MAMCO: 36\_k\_105}
\quad\textit{Maltese and English many people have them’}
\]
4 Prosodic and gestural marking of complement fronting in Maltese

glish as being subjects that a lot of people meet the requirements for. Maltese and English have not been mentioned previously and are not contrasted with other subjects or requirements. They have therefore been labelled as new. The verbal affix -hom agrees in number with the fronted complement.\textsuperscript{11} The discourse function of LD1 is, as we saw earlier, to promote a new referent to being the topic of the sentence. Interestingly, the other speaker acknowledges the introduction of the new referent by nodding, thus making this example neatly conform with Geluykens (1992)’s view of left dislocation as an interactional device.

The prosody in this case, see Figure 5 is again characterised by a falling pitch accent, H\textsuperscript{*}+L, on the fronted element, In\textsuperscript{*}GLIZ. In this case the fall is not visible (although it is auditorily perceptible) due to the presence of the obstruent (/z/ in word-final position in Maltese is devoiced to [s]). The phonological phrase containing the fronted complement in this case is followed by another phonological phrase having a H tone, H\textsuperscript{*}, on the accented syllable NIES, followed by a phrase accent, L-, on the syllable carrying secondary prominence KOL of ikollhom and a slight rise to a High boundary tone, Hi, at the end of the phrase. The main difference here is that the fronted element gets its own separate pitch accent, which is not the case for the focus movement case illustrated earlier.

\textsuperscript{11}It can also be argued, however, that hom in this example agrees with the plural subject. Were such an analysis to be chosen, the example would have to be re-categorised as a focus movement example rather than a case of LD1.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure5.png}
\caption{PRAAT screen dump showing the prosodic annotation of example (16) Malti u Ingliż hafna nies ikollhom ‘Maltese and English many people have them’.}
\end{figure}
As for the gestural behaviour, the speaker actually produces two hand gestures, one for each of the nouns in the fronted complement. Both are symmetrical two-handed gestures, where the hands move together first to the left, and then to the right, as can be seen in Figure 6. In the annotation board, the red vertical line corresponding to the mouse position highlights the second gesture, which overlaps with the fronted complement that carries the pitch accent. The first gesture, in turn, aligns temporally with the unaccented *Malti* ‘Maltese’, the other noun in the fronted complement. In other words, we see here an example where gestures accompany the fronted complement, but where there isn’t a complete correspondence between the gestural and the prosodic features.

Figure 6: Left dislocation (LD1) and gesturing in example (16)
4 Prosodic and gestural marking of complement fronting in Maltese

(17) MAMCO: 20_g_165
\[\text{it-tequila} \ j-\text{rid} \ j-\text{koll-i} \ \text{burdata} \ \text{ghali}=h\]
def=tequila.sg.f 1-want 1-have-1.sg mood for=3.sg.m

'Tequila I need to be in the mood for it.'

Example (17), which was also mentioned earlier as example (10), is a left dislocated construction of the LD2 type. The referent of the fronted complement, *it-tequila* ‘tequila’ has just been mentioned by the other speaker in the context of a discussion of various alcoholic drinks. The discourse status label used is therefore *old*. The current speaker, on the left in Figure 7, makes this referent the topic of her utterance and states her attitude towards it. Note that there is a lack of agreement between the fronted complement *it-tequila*, which is feminine, and the masculine clitic in *ghali*.\(^{12}\)

---

\(^{12}\) One of the reviewers of this paper considered the error in this example a slip on the part of the speaker. Another, however, noted that tequila is often considered masculine in Maltese speech, on a par with *wiski, vodka* etc.

---

Figure 7: Left dislocation (LD2) and gesturing in example (17)
The prosody of the example, shown in Figure 8, is characterised by a falling pitch accent, H*+L, on the fronted element te*quila, with a clear Low phrase boundary, Lp at the end of this element. Pitch continues to fall to a Low phrase accent, L-, on the secondary accent on għalih, and there is a final slight rise to a High boundary tone, Hi. In this case, although there is no clear pause following the fronted complement, a phonological phrase boundary, Lp, does seem to be present.

On the gestural level the speaker (on the left) performs what looks like a deictic gesture, as if pointing at an imaginary tequila in the air. The dynamic of this gesture corresponds to the upward arrow in the figure, and the first gestural element in the annotation board. The point of maximal extension of the gesture (which is not, however, explicitly annotated) coincides very clearly with the pitch accent on the fronted complement. The hand is then lowered with the index still extended in two subsequent, shorter movements performed after the phonological phrase boundary. Interestingly, the other speaker (on the right) also gestures at the same time, as if acknowledging the joint topic. Again, we see the interactional nature of left dislocation realised in the gestures.

(18) MAMCO: 4_b_155
recordings ghand-i
recordings 1-have-1.sg

'Recordings I have.'
Finally, an example of a topicalised construction is shown in (18). The speakers are discussing the methods they used in their dissertations. The male speaker explains that he conducted interviews. The female speaker then says that she does not have data from interviews, but that instead she has some recordings. The referent corresponding to the fronted object, *recordings*, stands in a *poset* relation to *interviews* which both speakers have just mentioned: more specifically, it marks a contrast between the two referents.

The prosody is characterised by a falling pitch accent, $H^*+L$, on the nuclear accented syllable of the fronted complement *re*cording*, as shown in Figure 9. It is difficult to ascertain whether there is an L boundary tone, Lp, separating the phrase containing the fronted complement from the phrase accent and boundary tone sequence, L-Hi, on *għandi* of *ghan*.

As for the gestures, the speaker (on the right) accompanies the topicalised object (and the corresponding pitch accent) with a batonic gesture performed with the right hand, as can be seen in Figure 10. From the annotation board in the same figure it can also be seen that this gesture is immediately preceded by another one in correspondence with the negated ‘interviews’ in the preceding sentence.

To sum up, the examples discussed above show what seems to be a rather fundamental difference between left dislocation constructions on the one hand, and topicalisation and focus movement on the other, a difference which is also indicated by the quantitative analysis of the prosodic features. Left dislocation examples display a more complex suprasegmental structure, more often charac-
terised by two pitch accents and the presence of multiple gestures, sometimes on the part of both speakers. There are, however, more initial gestures in topicalisation than in focus movement constructions.

6 Conclusions

This paper deals with complement fronting in Maltese, and examines the interface between syntax, prosody, discourse and gestures by discussing the temporal alignment of pitch accents and gestures with the fronted complement, as well as the discourse status of the referent denoted by this same complement in different contexts. This study is the first of its kind in that it uses data taken from a corpus of spoken Maltese (MAMCO). Our results contribute to what previous research has shown, but also give a more detailed analysis by providing an account of four different constructions all involving complement fronting: focus movement, topicalisation and two types of left dislocation.
Overall, the results show that, unless the example is a question, the fronted complement has a falling nuclear pitch accent, annotated as $H^*+L$ (Lp). However, there is a tendency for left dislocation to have two falling nuclear pitch accents, one on the fronted complement and the other on another complement following it. In the majority of the examples, the nuclear pitch accent on the fronted complement was followed by a low boundary phrase accent, L- Hi. As for the realisation of gestures, our results show that left dislocation and topicalisation constructions have a clear tendency (75-100%) to be accompanied by a hand gesture on the fronted complement. In the case of focus movement, on the other hand, the likelihood of a gesture occurring is much less (about 50%). These figures contrast with the much lower probability of sentence-initial gestures (10-21%) in a baseline of 160 non-fronted examples from the same corpus.

Keeping in mind that this was a corpus-based investigation using limited spoken data and, therefore, the number of examples was small, we make the following tentative conclusions. Firstly, the prosody on fronted complements is similar across the four types of construction (unless the fronted complement involves a question which in turn has a different prosodic structure than statements); however, the presence of an additional pitch accent in left dislocation examples seems to strengthen the detached nature of the fronted complement, which is also signalled in some cases by the presence of verbal or gestural feedback by the interlocutor. Secondly, the occurrence of gestures partitions the constructions in a slightly different way, with left dislocation and topicalisation on the one hand, and focus movement on the other. In this connection, it is noteworthy that gestures align more readily with topics than foci in constructions involving fronting.

The two sets of findings seem to point to the fact that the four construction types can be placed on a continuum as regards the complexity of the suprasegmental structure, with focus movement and both types of left dislocation on the two ends of the scale, and topicalisation in the middle, sharing some features with focus movement (prosodic structure) and others with left dislocation (presence of gestures). This continuum is illustrated in Figure 11.

![Figure 11: Maltese fronted complement constructions ordered on a continuum of suprasegmental complexity](image-url)

---

*Figure 11: Maltese fronted complement constructions ordered on a continuum of suprasegmental complexity*
An aspect which has not been analysed in depth, and which could constitute a direction for future work, relates to the transition between the fronted complement and the rest of the sentence. In left dislocated constructions, in contrast to focus movement ones, the transition seems to be characterised by some sort of discontinuity. Such discontinuities are often perceptually noticeable but not necessarily easy to identify acoustically, thus rendering phonological interpretation difficult.

In addition, a more thorough analysis of the temporal coordination between gesture phrases and speech in the entire corpus would provide a more solid basis to understand the relation between gestures and discourse in more general terms.

Acknowledgements

We would like to thank the students from the Institute of Linguistics at the University of Malta who helped with the transcription and annotation of the MAMCO corpus. We also thank Marie Azzopardi-Alexander, Elisabet Engdahl and the external reviewer for their comments on the first version of this article.

Abbreviations

Abbreviations used in the glosses

<table>
<thead>
<tr>
<th></th>
<th>First person</th>
<th>IPFV</th>
<th>Imperfect Verb</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Third person</td>
<td>M</td>
<td>Masculine</td>
</tr>
<tr>
<td>3</td>
<td>Definite</td>
<td>POSS</td>
<td>Possessive</td>
</tr>
<tr>
<td></td>
<td>Feminine</td>
<td>PRF</td>
<td>Perfect Verb</td>
</tr>
<tr>
<td></td>
<td>Indirect Object</td>
<td>SG</td>
<td>Singular</td>
</tr>
</tbody>
</table>

Individual symbols used in the prosodic annotation

| H  | High tone |
| L  | Low tone  |
| *  | prominence marker, e.g. H* represents a High tone associated with a prominent (accented) syllable usually in nuclear position, but possibly also in prenuclear position. |
| -  | secondary prominence marker, e.g. L- represents a Low tone associated with a syllable having a secondary prominence in post-nuclear position. |
4 Prosodic and gestural marking of complement fronting in Maltese

p phonological phrase boundary marker,  
   e.g. Lp is a phonological phrase boundary Low tone.  
i intonational phrase boundary marker,  
   e.g. Hi is an intonational phrase boundary High tone.  
( ) marker of a phonologically expected tonal target  
   which does not seem to be realised phonetically.

Patterns used in the prosodic annotation

Examples of patterns combining the symbols above are the following:

H* + L (Lp)  Falling pitch accent with a Low boundary tone phonological 
             target which may or may not be realised.
L- Hi  Low phrase accent and slight rise to an H boundary tone 
        associated with a secondary prominence in postnuclear 
        position.

Fronted complement examples corpus

1. *bl-interviews għamiltha  
   ‘with interviews I do it’
2. Haż-Żabbar għandi kużin minn hemmhekk jien  
   ‘Ħaż-Żabbar I have [a] cousin from there’
3. Wied il-Għajn ija immur ta  
   ‘Wied il-Għajn yes do I go [there]’
4. *jiena mhux interviews recordings għandi differenti ’iġifieri  
   ‘I don’t have interviews recordings I have I mean’
5. emozzjonijiet qieghda nagħmel infatti  
   ‘emotions I’m doing in fact’
6. linguistics jiena  
   ‘linguistics I do’
7. *imma dil-water fight qatt ma mort  
   ‘this water fight never I went’
8. procedura u hekk tal-qorti gha’na m’għamilninhomx  
   ‘procedures and so on of the courts still we haven’t done them’
9. id-dar ta’ hdejha toqghod iz-zija tiegħi fiha
   ‘the house next to it lives my aunt in it’

10. second year ghadni
   ‘second year I’m still [in]’

11. opera ma tarahhiex bil-wiefqa taraha bil-qieghda
   ‘an opera you don’t see it standing you see it sitting down’

12. tipo mużika tal-parties ma nhobbhiex
   ‘as in music for parties I don’t like it’

13. twenty two ha nagħlaq
   ‘twenty two I’m going to be’

14. picnic u hekk ha nithajjar immur
   ‘picnic and such I’m going to be tempted to go [to]’

15. practicals u hekk għadna għaddejjin s’issa
   ‘practicals and such still we are carrying on till now’

16. u n-nagħġu ilni ma nara’
   ‘and the goat [nickname] for a while I haven’t seen’

17. Martini per eżempju jogħġobni
   ‘Martini for example I like’

18. sa l-ahhar tax-xahar għandhom
   ‘till the end of the month they have’

19. il-Baileys inhobb ukoll
   ‘Baileys I like as well’

20. it-tequila jrid jkolli burdata ghalih
   ‘tequila I need to be [in the] mood for it’

21. i... i... ije l-università qieghed
   ‘ye... ye... yes [at] the University I am [there]’

22. hafna nies it-tequila jdejjaqhom hafna
   ‘a lot of people tequila they dislike [it] a lot’

23. l-università qieghed inti?
   ‘the university do you attend [it]?’
4 Prosodic and gestural marking of complement fronting in Maltese

24. twenty għalaqna
   ‘twenty we turned’

25. sentej’ iżgħar minnek jien kont
   ‘two years younger than you I was’

26. il-Fabian anka jien ili ma narahom ta
   ‘Fabian also I in a while haven’t seen them too’

27. il-tagħkom nahseb il-hadd m’ghadni nara jie’a
   ‘your class-mates I think none of them I see’

28. outskirts hafna noqghod
   ‘outskirts a lot I live [there]’

29. ee Antonia jisimni jien
   ‘uh Antonia my name is me’

30. l-filosofija kelli intermediate
   ‘philosophy I had [at] intermediate’

31. u Chetcuti tghidx k’m konna nittnejku bih miskin
   ‘and Chetcuti you don’t say how much we used to make fun of him poor [him]’

32. sal-erba u nofs għandna
   ‘until 4:30 we have’

33. ma ma Dr. Moses kont
   ‘oh dear with Dr Moses I was’

34. dak il-hassle m’ghandix aptit jien
   ‘that hassle I don’t fancy it’

35. l-ghadam ta’ Novembru qatt m’ghamilthom u qatt ma doqthom ’igiżieri on-
estament
   ‘the bones of November never I made them and never I tasted them I mean honestly’

36. Malti u Ingliż hafna nies ikollhom
   ‘Maltese and English many people have them’
References


Bezzina, Anne-Marie. 2015. La dislocation à la gauche comme manifestation de la variation stylistique en Maltesis. Studii de linguistica 5. 91–113.


