

Comparative analysis of stress-shifting pronominal  
encliticisation in two Menorcan towns

Júlia Florit Pons

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Seminari 101: Descripció i comparació de llengües

TREBALL DE FI DE GRAU

UPF JUNY 2019

Tutor del TFG: Mario Bisiada



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## Abstract

This study describes the syllabic prominence on Menorcan Catalan weak pronouns when placed after a verbal form, a phenomenon caused by stress shift. Weak pronouns are usually unstressed in Romance languages but some varieties present variations where enclitic pronominals receive stress. This paper aims to study this phenomenon in Menorcan Catalan by comparing two different towns, Ferreries and Alaior, and different age groups, investigating the influence of standard Catalan on these varieties. The data analysis reveals on the one hand that speakers of Ferreries tend to use and accept more the unstressed forms and that two phenomena interfere with the natural use of shifted weak pronouns: consonant gemination and stress clash. On the other hand, the results for Alaior show that there is a general consistency of use and acceptance for the shifted variant. In both towns, the greatest frequency of use exists among younger speakers. The frequency of use declines with older speakers showing the least amount of stress shift. This underlines the importance of taking age into account as a sociolinguistic variable, which existing studies have not done. This study also addresses the theoretical discussion on weak pronouns and true clitics and argues that Menorcan Catalan has weak pronouns, due to their inner properties like stress-shifting variability with particular forms and clitic clusters, whereas central Catalan has true clitics, as they are always systematically unstressed.

Keywords: Menorcan Catalan, stress shift, clitics, weak pronouns, encliticisation

## Resum

Aquest estudi descriu la prominència sil·làbica en els pronoms febles que es troben després d'una forma verbal en menorquí, un fenomen causat pel canvi d'accent. Els pronoms febles normalment no estan accentuats en les llengües romàniques, però algunes varietats presenten variacions amb alguns pronoms enclítics que reben accent. Aquest treball pretén estudiar aquest fenomen en menorquí per comparar dos pobles diferents, Ferreries i Alaior, i grups d'edat diferents, per investigar la influència del català estàndard a sobre d'aquestes varietats. L'anàlisi de dades revela, per una banda, que els parlants de Ferreries solen utilitzar i acceptar més les formes no accentuades i que dos fenòmens intervenen en l'ús natural dels pronoms febles accentuats: la geminació de consonants i la col·lisió accentual. Per altra banda, els resultats d'Alaior mostren que hi ha una consistència general d'ús i acceptació per la variant amb canvi d'accent. En els dos pobles, la freqüència més gran d'ús apareix en els parlants joves. La freqüència d'ús disminueix amb els parlants grans, els quals utilitzen menys formes amb canvi d'accent. Aquest fet remarca la importància de considerar l'edat com una variable sociolingüística, un fet que els estudis existents no han tingut en compte. Aquest estudi adreça la discussió teòrica sobre pronoms febles i clítics i argumenta que el menorquí té pronoms febles per les seves propietats internes com la variabilitat en el canvi d'accent amb formes determinades i amb grups clítics, mentre que el català central té clítics, ja que mai tenen accent.

Paraules clau: menorquí, canvi d'accent, clítics, pronoms febles, encliticització

## Resumen

Este estudio describe la prominencia silábica en los pronombres átonos que se encuentran después de una forma verbal en menorquín, fenómeno causado por el cambio de acento. Los pronombres átonos normalmente no tienen acento en las lenguas románicas, pero algunas variedades presentan variaciones con algunos enclíticos que sí lo reciben. Este trabajo pretende estudiar este fenómeno en menorquín para comparar dos pueblos distintos, Ferreries y Alaior, y grupos de edad diferentes, investigando así la influencia del catalán estándar sobre estas variedades. El análisis de datos revela, por un lado, que los hablantes de Ferreries suelen utilizar y aceptar más las formas no acentuadas y que dos fenómenos intervienen en el uso natural de los pronombres átonos acentuados: la geminación de consonantes y la colisión acentual. Por otro lado, los resultados de Alaior muestran que hay una consistencia general de uso y aceptación de la variante con cambio de acento. En los dos pueblos, la mayor frecuencia de uso aparece en los hablantes jóvenes. La frecuencia de uso disminuye con los hablantes mayores, quienes utilizan menos formas con cambio de acento. Esto remarca la importancia de considerar la edad como una variable sociolingüística, lo que los estudios existentes no han hecho. Este estudio aborda la discusión teórica sobre pronombres átonos y clíticos y argumenta que el menorquín tiene pronombres átonos por sus propiedades internas como la variabilidad en el cambio de acento y con los grupos clíticos, mientras el catalán central tiene clíticos, pues nunca reciben acento.

Palabras clave: menorquín, cambio de acento, clíticos, pronombres átonos, encliticización





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# 1. INTRODUCTION

## 1.1. Motivation and interest

I am from Menorca and I have always had a lot of interest in languages. As a student of Applied Languages, I have developed a great interest in formal linguistics, especially in some specific areas like phonology, morphology, syntax and prosody. For this reason, I want to study a phenomenon which combines all these aspects.

I would like to analyse a phenomenon which is not widely known and only present in certain varieties of some Romance languages, such as the dialect I speak, Menorcan Catalan. Apart from dialectal vocabulary differences, there are stress-related and intonational aspects that set apart Menorcan Catalan and central Catalan. While weak pronouns in the form of pronominal clitics are usually unstressed, speakers of my dialect put stress on these clitics when they occur after some verbal forms. This caught my attention and I started to read about this aspect.

Some studies exist on stress shift in Mallorcan and Menorcan Catalan (Grimalt 2002, Bonet & Torres-Tamarit 2011, Nadeu et al. 2017 and Pons-Moll & Torres-Tamarit 2018), but most of them are only focused on Mallorcan Catalan, while neglecting Menorcan Catalan. The studies which consider the Menorcan variety (Grimalt 2002 and Pons-Moll & Torres-Tamarit 2018) have only analysed certain towns like Ciutadella, Es Mercadal, Es Migjorn and Maó, whereas all the other towns have not been considered by these studies. For instance, Ferreries and Alaior, two big towns in Menorca, have so far not been studied. Also they are based on a very small amount of speakers, which did not allow them to take the speakers' age into account. I would like to contribute a similar analysis to improve on existing investigations.

Furthermore, as there are not many studies regarding the morphology and phonology of weak pronouns in the Balearic Islands, Pons-Moll & Torres-Tamarit (2018) have called for research in form of quantitative-phonetic and phonological studies of pronominal pronouns of real speakers of Menorcan Catalan (2018: 122) and thus my aim is to provide such a thorough dialectal description of the phenomenon described above.

## 1.2. Introduction to the study

This BA thesis is concerned with the morphology and phonology of Catalan clitics. More precisely, it is a study related to the stress on some pronominal clitics in Menorcan Catalan.



For my research, it was of interest to investigate why there are differences regarding the aspect of stressed pronominals between central Catalan and Menorcan Catalan and also between Ferreries and Alaior. Specifically, another focus is whether the dialects spoken in the two towns which are only 15 km apart differ from each other. Thus, this study has the aim to answer the following research questions:

1. Do speakers of Menorcan Catalan perceive differences between central Catalan and Menorcan Catalan with regard to stress-shifting pronominal encliticisation?
2. Are there differences concerning stress-shifting pronominal encliticisation between the varieties spoken in Ferreries and Alaior?
3. Does age play a role in stress-shifting pronominal encliticisation due to higher exposure of the youth to standard Catalan?
4. Does Menorcan Catalan have “true clitics” or “weak pronouns”?

With regard to the first question, the aim is to see whether the speakers of Menorcan Catalan are able to distinguish between the two dialects and to perceive that their variety is the one with stress shift, whereas central Catalan pronouns placed after a verbal form are unstressed.

Concerning the comparison of Ferreries and Alaior, as there are some “accent” differences between these two towns, my second goal is to find out whether the phenomenon of stress shift also presents variations even inside a small territory like Menorca, specifically in Ferreries and Alaior. As a native speaker of Menorcan Catalan, my perception is that there are not many differences regarding this aspect. Thus, my hypothesis is that there will not be variation between Ferreries and Alaior, and if there is, it will be minor differences.

With respect to the third research question on age differences in stress-shift, as previous research has not considered this variable, my purpose is to analyse the speech of people of different age in order to see whether they present variations when using verbs and weak pronouns. My hypothesis is that probably younger people will use stress stable forms as they are more influenced by central Catalan than older people. Young people in Menorca are taught standard Catalan at school and most of the Catalan speaking media they consume is also in standard Catalan. Older people, however, have not been schooled in Catalan and tend to use traditional speech.

Lastly, regarding the fourth research question, some theoretical and practical investigations exist on the issue of whether different dialects of Catalan have true clitics or weak pronouns. This topic will be discussed in detail in Section 2.3 and in Section 5. This

study sets out to address this question based on the specific data gathered in the speaker survey.



## 2. WEAK PRONOUNS AND STRESS SHIFT IN ROMANCE LANGUAGES

### 2.1. What are clitics?

There is an agreement when defining grammatical units like phrases, lexical items or stems. However, the term “clitic” has always been difficult to define and has caused controversy among experts, as it does not follow strict patterns in terms of syntactic, morphological or phonological rules. A large number of existing studies in the broader literature have examined this topic and many authors have tried to define clitics so as to make the concept clearer. For instance, one thorough description is given by Franks (2000):

Clitics defy easy categorisation and as such pose unusual problems for strictly modular theories of grammar. The reason is that they seem to have characteristic properties at multiple levels of representation — in addition to their morphological quirks they display special syntactic *and* prosodic properties that differentiate them from other words. This suggests that any definition of ‘clitic’ may have to encompass more than one subsystem of the grammar.

(Franks 2000: 2, emphasis original)

Other researchers have contributed to this topic, such as Nevis et al. (1994). They define clitics as an “umbrella term”, which means that they are elements that “present ‘mixed’ properties of some kind” (1994: xiii) since they can have both syntactic and affix-like functions. They argue that all the elements labelled as clitics have one single characteristic in common: they are “adjoined to some adjacent material in a prosodic domain” (Nevis et al. 1994: xii-xv). Van Riemsdijk (1999) debates whether clitics should be considered as affixes or as syntactic elements, as they “constitute a rather hybrid category” (1999: 1) and argues that “clitics are phonologically more active than fully regular syntactic combinations of words and phrases” (1999: 12). Wanner (1987: 31-33) also discusses this aspect and argues that clitics are not purely morphological nor purely syntactic nor purely phonological, as these properties need to be considered at the same time for a clitic.

When defining the term, some authors do consider phonology, but others do not, a fact that shows some discrepancies on this matter. Thus, from these definitions it can be summarised that a clitic is a grammatical unit that is between a morpheme and a word, and cannot act on its own, that is, it depends on an adjacent word.

The label “clitic” gathers different types of words, such as:

— articles	IT. <i>il, la, gli, un, uno, una</i> , etc. FR. <i>le, la, les, un, une</i> , etc.
— weak pronouns	ES. <i>me, te, lo, la, le</i> , etc. POR. <i>me, te, o, a, lhe, nos, vos</i> , etc.
— weak prepositions	CAT. <i>a, amb, de, en, per</i> IT. <i>a, di, da, con, per</i>
— weak possessive determiners	CAT. <i>mon, ton, ma, ta</i> , etc.
— weak conjunctions	ES. <i>que, y, ni</i> FR. <i>et, que</i>

There is a controversy on the difference between a clitic and an affix, which has been broadly studied (see Zwicky 1985, Carstairs 1987 and Heggie & Ordóñez 2005 for more information). However, this study is concerned with the difference between clitics and weak pronouns, two terms which are used indistinctively by some researchers. This controversy will be discussed in Section 2.3 and in Section 5. For the present purposes, I will use “clitic” as the hyperonym term, and “weak pronoun” as the hyponym.

A weak pronoun, just like the rest of the clitics, is always unstressed and always monosyllabic (Monachesi 1998: 312). It depends on the adjacent word, which is stressed, and whenever weak pronouns are pronounced as a whole, they are called a “clitic group”. Weak pronouns substitute another element in the previous sentence, a process called “pronominalisation”, so they have an anaphoric function with the referent in the previous utterance, which gives it referential value (Solà 2006: 139) (see example (1) below).

- (1) El paquet, entrega'l a la Maria.  
‘The parcel, deliver it to Maria.’

## 2.2. Pronominal encliticisation

Clitics are usually found in a proclitic position (Fischer 2002: 71): the clitic is found before the host (see example (2)), which is opposed to an enclitic position in which the clitic attaches to the back of the host (see example (3)). Weak pronouns specifically can either have a proclitic or an enclitic position.

For instance, the Catalan clitic *se* can be found preverbally and postverbally:

- (2) El departament *es* vol afegir a la vaga.  
‘The department wants to join the strike.’
- (3) El departament vol afegir-*se* a la vaga.  
‘The department wants to join the strike.’

Clitics can also occur in a mesoclitic position: the clitic is found between the stem of the host and its affixes, a phenomenon very common in Portuguese, and in Old Spanish and Old Catalan (see example (4) taken from Azevedo 2005: 109).

- (4) Entregar-*lho*-ei em Berkeley.  
‘I’ll give it to you in Berkeley.’

Some languages like Pashto, Sorani Kurdish and Degema are thought to have clitics positioned inside the root, known as “endoclititics” (Kopris 2009, Kari 2012 and Walther 2012), even though their existence needs to be further proven.

Even though Latin only had personal proclitic pronouns, Salvi (1996) argues that “Romance clitics are the descendants of Latin weak pronouns and that their position is essentially the position weak pronouns occupied in the Latin sentence” (1996: 16). However, nowadays pronominal encliticisation is found in many Romance languages, and in many different ways. For instance, clitics can be attached to different verbal forms, like imperatives, infinitives, participles or gerunds. These combinations do not occur in every Romance language nor in every variety, but they do at least in one. Here are some examples:

— Pronominal encliticisation in imperative forms

FR.	Donne- <i>lui</i> la carte!	‘Give him the letter!’
ES.	¡Mírala!	‘Look at her!’
CAT.	Canta- <i>li</i> una cançó!	‘Sing him a song!’
RO.	Cheamă- <i>l</i>	‘Call him!’

— Pronominal encliticisation in infinitive forms

IT.	Voglio veder <i>lo</i> .	‘I want to see it.’
ES.	La caja pesa mucho y no puedo coger <i>la</i> .	‘The box weighs a lot and I cannot get it.’
CAT.	M’agradaria ajudar- <i>te</i> .	‘I would like to help you.’

— Pronominal encliticisation in participles

CAT.	Promés <i>li ho</i> havem <sup>1</sup> .	‘We have promised it to him/her.’
------	--	-----------------------------------

— Pronominal encliticisation in gerunds

ES.	Estaba leyend <i>ola</i> .	‘He was reading it.’
POR.	Estou a lava- <i>los</i> .	‘I am washing them.’
RO.	Chemându- <i>l</i> .	‘I am calling him.’

The focus of this study will be weak pronouns in Catalan in imperative and infinitive forms. Over the past several centuries, the position of clitics in a sentence has changed in Catalan. Fischer (2002: 71) argues that clitics like “*me, te, lo*, etc. could either precede or follow the verb, while the clitics with the shapes *em, et, el*, etc. could only appear in preverbal position”. Modern Catalan clitics, however, follow a complementary distribution since they can be found either before or after the verb (Fischer 2002: 80).

Solà (2006) also argues that in Catalan the form of clitics can vary depending on the dialect, a fact which is more related to sociolinguistics rather than to grammar itself as these dialectal variations are a result of the social situation of the language (2006: 152). In grammatical issues, clitics vary as well regarding whether they appear before or after the verb (*em* and *me, us* and *vos*) (see Table 1) and whether the adjacent letter is a vowel or a consonant (*et/te* and *t’/’t*, respectively).

---

<sup>1</sup> Example from Old Catalan (14th century) taken from Batllori, Iglésias & Martins (2005).

**Table 1.** List of accusative and dative clitics in Catalan (adapted from Fischer 2002: 37)

	preverbal		postverbal	
	before consonant	before vowel	after consonant	after vowel
1sg	em	m'	me	'm
2sg	et	t'	te	't
3sg/m	el <sub>ACC</sub> /li <sub>DAT</sub>	l' <sub>ACC</sub> /li <sub>DAT</sub>	lo <sub>ACC</sub> /li <sub>DAT</sub>	'l <sub>ACC</sub> /li <sub>DAT</sub>
3sg/fem	la <sub>ACC</sub> /li <sub>DAT</sub>	l' <sub>ACC</sub> /li <sub>DAT</sub>	la <sub>ACC</sub> /li <sub>DAT</sub>	la <sub>ACC</sub> /li <sub>DAT</sub>
3sg/reflexive	es/se	s'	se	's
3sg/neuter	ho	ho	ho	ho
1pl	ens	ens	nos	'ns
2pl	us	us	vos	us
3pl/m	els	els	los	'ls
3pl/fem	les	les	les	les

The term encliticisation refers to the result of a clitic occurring postverbally, that is, the pronominal clitic pronoun is placed after the verb. Pronominal enclitics (*me, te, lo, la, li, se, ho, nos, vos, los* and *les*) are found after certain verbal forms, like imperative and infinitive forms (see example (5b), (6b) and (7b)), whereas proclitics tend to appear next to finite or non-imperative verbal forms (see example (5a), (6a) and (7a)).

- (5) a. El nen guarda el llibre a la motxilla. El nen *el* guarda a la motxilla.  
 ‘The kid keeps the book in the backpack. The kid keeps it in the backpack.’  
 b. El llibre, guarda’/a la motxilla.  
 ‘The book, keep it in the backpack.’
- (6) a. La mare *em* va fer un petó abans de marxar.  
 ‘Mother gave me a kiss before leaving.’  
 b. La mare va dir que volia fer-*me* un petó abans de marxar.  
 ‘Mother said that she wanted to give me a kiss before leaving.’
- (7) a. *Ens* volen ajudar a fer la mudança.  
 ‘They want to help us do the house move.’  
 b. Ajudeu-*nos* a fer la mudança.  
 ‘Help us do the house move.’



### 2.3. Stress shift through encliticisation

In Section 2.1. clitics have been defined as having the particularity of depending phonologically on a host, and as being unable to function by themselves. Thus, according to Franks (2000), clitic behaviour is said to be “the result of the complex interaction of (at least) prosodic, syntactic and morphological requirements of clitics” (2000: 19).

In some Romance languages and varieties, in spite of being defined systematically as “unstressed” (Nevis et al. 1994 and Van Riemsdijk 1999), clitics can indeed receive stress whenever they are placed postverbally, under a phenomenon called stress-shifting encliticisation. Stress shift occurs whenever the stress moves to another syllable. In the case of clitics, that is, the stress falls onto the enclitic instead of the host (see example (8) marked in bold) of Campidanese Sardinian taken from Kim & Repetti 2013: 268, 271).

- (8) a. **Nara** *mi*. (Nuorese and Logudorese Sardinian)  
‘Tell me.’  
b. Nara ***mi***. (Campidanese Sardinian)  
‘Tell me.’

Stress is part of the broader linguistic concept of intonation. The term intonation refers to the pitch variations in speech of any language, and every language has its own intonation characteristics. The Catalan intonation is divided into different functions, *grosso modo* imperative, interrogative, declarative, demarcative and expressive (Prieto 2002: 16-21). Every sentence or sequence is defined by the stress falling on the prominent syllables in the prosodic domain (Gordon 2011: 141). That is, some elements of the utterance do receive stress and others do not, depending on different aspects like the order of the elements in the clause, the function of that utterance and the category of those elements.

There are intonative contrasts among Catalan varieties: Menorcan Catalan has stressed clitics whereas central Catalan does not (see example (9)).

- (9) a. **Dona-*li*** la carta! (central Catalan)  
‘Give the letter to him/her!’  
b. Dona-***li*** la carta! (Menorcan Catalan)  
‘Give the letter to him/her!’

As in the majority of Romance Languages, clitics in standard Catalan are, as a general rule, not stressed (IEC 2016*b*: 96; 2016*d*: 127). Nevertheless, there can be a shift of stress in some

Catalan varieties (Northern Catalan, Mallorcan Catalan and Menorcan Catalan) in the case of pronominal encliticisation. That is, in example (9a), the stress falls on the syllable <do>, the stressed syllable of the verbal form; but in (9b), the stress is placed on the clitic *li*. This phenomenon is said to be a characteristic from Old Catalan that has remained in these dialects, and can be shown by the fact that, by that time, pronominal clitics were written separately and by reference to the metre in poetry (Colomina 2002: 578-579).

As stated above in Section 2.1, there is a controversy among linguists on the denomination and difference between “(true) clitic” and “weak pronoun” (Ordóñez & Repetti 2006 and Nadeu et al. 2017). Theoretically, the term “clitic” is semantically wider than “weak pronoun” as a weak pronoun is a type of clitic. Nonetheless, they are regularly used indistinctly (Grimalt 2002 and Solà 2006). Clitics are defined with morphological and phonological properties. Morphologically, they have different functions, and phonologically, they lack individual stress, but these definitions are under discussion since in some varieties clitics do have stress (Ordóñez & Repetti 2006, Repetti 2013 and Nadeu et al. 2017). From this perspective, researchers have analysed this topic and have tried to give an appropriate response to it.

On the one hand, there are researchers who take into account both morphological and phonological features when defining clitics and weak pronouns. For instance, Manzini (2014) claims that even though clitics and weak pronouns presumably have the same morphological features, clitics have more syntactic structure than pronouns, like case inflections (2014: 172). In order to make the distinction clearer, Repetti (2013) created a test for clitic pronouns and weak pronouns, using these diagnostics:

- a. In a mixed pronoun cluster, a weak pronoun will not precede a clitic pronoun.
- b. Weak pronouns land in a Spec position, while clitics land in a head position.
- c. Weak pronouns are morphologically more complex than clitic pronouns.

(Repetti 2013: 368)

Based on these, she claims that clitics have no metrical structure and that they are part of the same Phonological Phrase (PPh) of the verb, whereas a weak pronoun is part of the Phonological Word (PW). This argument is also used by Loporcaro (2000) who says that in languages which have stress shift, the placement of stress is at the PW and that the other ones with stress stability do not accept stress shift, so languages vary depending on which phonological rules they follow.

On the other hand, another group of researchers base their studies on a purely morphological perspective rather than a phonological one. For example, Ordóñez & Repetti (2006) make a distinction between “strong pronoun”, “weak pronoun” and “true clitic” by saying that strong pronouns are always stressed, true clitics are never stressed, and weak pronouns may receive stress. Hence, with this definition, central Catalan would have true clitics (because of stress stability on the verb) and Balearic Catalan would have weak pronouns (because of the stress shifting to the pronominal enclitic). Nadeu et al. (2017) follow this point of view and, after conducting a thorough study on these differences, they argue that most of the authors have one single characteristic in common and it is that “they assume that stress is either preserved on the verbal host or is moved to another syllable within the unit formed by the verb and the pronominal element(s) —prosodic word or not, depending on the particular account” (Nadeu et al. 2017: 125).

I agree with the position of Ordóñez & Repetti (2006), as weak pronouns do receive stress in my dialect due to this property peculiar to them. However, it is not accurate enough to call them “weak” pronouns if they receive stress and are thus not weak at all —even though the authors base their arguments on morphological patterns. For this reason, in this study I will use the denomination “clitic” as an “umbrella term” when talking about both clitics and weak pronouns. Moreover, a further question is whether phonology should be taken into so much consideration when defining a clitic. One aim of this study is to provide a theoretical explanation of this aspect from the existing investigations of the topic and from the results of the analysis of this specific research (see Section 5).

#### **2.4. Previous research on stress shift through encliticisation**

The phenomenon of stress shift through encliticisation has been studied over the past years by many researchers. As seen in Section 2.3, while clitics do not usually affect stress assignment in Romance languages, some varieties do exhibit stress shift when clitics are added, so there are recent studies on this topic in these languages. Several theories have been proposed to explain the final or penultimate stress shift, some focusing on Italian regions such as Sardinia or southern Italy, others on the Spanish regions of northern Catalonia and on the Balearic Islands.

Repetti (2013) and Lai (2016; 2017) have focused their studies on some Italian varieties that suffer stress shift in pronominal encliticisation. Repetti (2013) aims to find out why stress shift occurs when a clitic is added after an imperative form in some varieties but not in others, and what determines the position of this stressed syllable. She first introduces the differences among the varieties regarding the position of stress shift (to the penultimate, antepenultimate

or final syllable), but then focuses on the dialects of Campania, Basilicata and Sardinia in Italy, like Neapolitan, Campidanese and Logudorese Sardinian and Algherese. She suggests that this phenomenon is found because of morpho-syntactic, phonological and phonetic processes (for further explanation see Repetti 2013: 362-368). Her analysis is based on the speakers collected in the *Clitics of Romance Languages* database by Repetti & Ordóñez (2011). Repetti finally argues that “weak pronouns are involved in stress shift because they consist of a foot, but clitics can (optionally) also be involved in stress shift if certain high ranked metrical constraints are violated” (Repetti 2013: 375).

On the contrary, Lai (2016; 2017) centres her work on the study of the cliticisation in Sardinian gerunds and imperatives. Her (2016) study addresses the Sardinian variety in general, that is, it takes into account all subdialects. Its topic is the stress placement of all combinations of clitics, and its purpose is to “determine the conditions under which a stress shift” across Sardinian varieties occurs (Lai 2016: 183). She suggests that there are three different patterns of stress shift depending on the subdialect (Campidanese Sardinian, Logudorese-Nuorese Sardinian and the transitional area between Campidanese and Logudorese-Nuorese Sardinian) and on the number of clitics. Her conclusion is that whenever there is one single clitic, stress in Logudorese-Nuorese Sardinian remains unchanged, but in Campidanese Sardinian this stress moves to the final syllable (when it is a 1st or 2nd person clitic) and to the penultimate syllable (when it is a 3rd person non-reflexive clitic).

Lai (2017) focuses on clitic clusters in both enclitic and proclitic positions in Nuorese Sardinian and aims to make a distinction between true clitics and weak pronouns. By using the Nuorese Sardinian variety, she shows that all Sardinian varieties are the only dialects that have the stress placement phenomenon not only with enclitics —like other Romance varieties— but also with proclitics. Lai’s final conclusion is that “enclitics include forms endowed with stress-related features, and are actually weak pronouns rather than true clitics; proclitics, on the other hand, are always clitics” (Lai 2017: 196). Hence, these studies show the stress-shifting phenomenon in southern Italy and both agree on making a distinction between weak pronouns and clitics regarding their function in the utterance.

On the other hand, few researchers have examined stress-shifting pronominal encliticisation in Balearic Catalan, the topic of my study. Bonet & Torres-Tamarit (2011) have studied pronominal encliticisation in imperative forms across three varieties of Catalan: central Catalan, Mallorcan Catalan and Formenteran Catalan. The goal of their study was to explain this phenomenon in the Catalan language: what motivates the vowel extension in

stress-shifting encliticisation? (Bonet & Torres Tamarit 2011: 38) In order to answer this question, they had to analyse speaker data and to do so, they used some local informants' data for their study: two informants for Formenteran Catalan and one for Mallorcan Catalan. They finally argue, drawing on the Optimality Theory (see Prince & Smolensky 2008), that the phenomenon occurs because speakers prefer using already existing items in the vocabulary rather than new forms —such as epenthesis—, a theory called Lexical Conservatism (Bonet & Torres Tamarit 2011: 57). The researchers also suggest that this phenomenon is not a case of allomorphy (a clitic varies its form, but not its meaning) since some extensions in Formenteran Catalan have more than one morpheme. A remarkable point of this study is that the authors consider the sonority hierarchy so as to explain intersyllabic contacts, whereas other authors do not (for example, Grimalt 2002 and Pons-Moll & Torres-Tamarit 2018). A shortcoming of this study is that the authors base themselves on only three speakers, which may not be representative.

Nadeu et al. (2017) have also studied the stress placement on clitics in Mallorcan Catalan, but from another point of view. Their analysis is based on the “duration, vowel quality, and  $f_0$  in verb+pronominal sequences, which are compared to a baseline condition without pronominals and to the same sequences in a Catalan variety without stress shift” (Nadeu et al. 2017: 119) and they want to provide empirical evidence of it. Like other authors (Colomina 2002 and Bonet & Torres-Tamarit 2011), these researchers also defend that the fact that Mallorcan Catalan has stress shift is due to the archaising trait of Old Catalan, which had stressed clitics (2017: 121). The data used in this study is extracted from eight female speakers of Central Catalan (recorded in Tarragona) and eight female speakers of Mallorcan Catalan (recorded in Palma and Manacor) between the ages of 18 and 40. Their final results show that there are differences in the acoustic realisations of enclitics between central and Mallorcan Catalan: “postverbal pronominals present higher prominence in Mallorcan Catalan than in central Catalan” (2017: 157). They suggest that Sardinian and Neapolitan varieties do not have true stress —because these varieties only show additional prominence on the syllable—, whereas Mallorcan does.

Some recent studies (for instance, Grimalt 2002, Bonet & Torres-Tamarit 2011 and Pons-Moll & Torres-Tamarit 2018) have used the Optimality Theory to explain the variation on stress shift. Pons-Moll & Torres-Tamarit (2018) have recently done a thorough analysis of this phenomenon comparing Barcelona Catalan, Formenteran Catalan and Mallorcan and Menorcan Catalan. The aim of their study is to provide “a novel and unified formal analysis” of this topic and to address “how pronominal enclitics are organised prosodically”, since the

existing studies are not exhaustive enough in considering all the Catalan linguistic area (Pons-Moll & Torres-Tamarit 2018: 408). In order to do their analysis, they used different sources of material, such as data from other authors (Bonet & Torres-Tamarit 2011 and Grimalt 2002) and data they collected from some interviews with three speakers of the analysed areas. The researchers conclude that “the hypothesis that stress shift is always driven by the avoidance of marked stress patterns [...] can be maintained for all dialects” and that “the distinction between weak pronouns and true clitics is not enough to account for the differences found between Balearic Catalan dialects” (Pons-Moll & Torres-Tamarit 2018: 440).

Grimalt (2002) aims to do a thorough analysis of the encliticisation and stress of Mallorcan and Menorcan Catalan, which he describes as one of the fields that has more dialectal variation in Catalan (2002: 2). His purpose is to explain stress shift in enclitic pronouns (2002: 3), which is strictly related to stress, and also to see if this is a geolectal (referring to geographic dialects), sociolectal (referring to the social class), generational (referring to the age group) or free element (does not refer to any of the aforementioned phenomena) (2002: 8). He assumes that it is the last syllable which is stressed whenever there is a weak pronoun after a verb, in Mallorcan and Menorcan Catalan (2002: 3). For his study, Grimalt recorded three or four speakers from different villages of the islands (Menorca: Ciutadella, Es Mercadal, Es Migjorn Gran and Maó) in order to analyse the stress shift according to the Optimality Theory (2002: 4-5).

First of all, through different data depending on whether the forms were imperatives and infinitives with one or two clitics each, he shows the pronunciation of the informants for every combination of verb + enclitic pronoun he asked them to translate, by using the Catalan writing and the phonetic transcription of each sequence. He follows this pattern for every town in which he collected data. After that, the author makes a brief statement which summarises the speakers of that specific place, such as any specific characteristic of that dialect or any comparison with another town (2002). In the end, Grimalt (2002) synthesises all the information so as to compare all the analysed towns in order to investigate the similarities and differences among them (2002: 48-49). He uses this data to finally discuss the arguments on Optimality Theory of the Catalan phonology suggested by Serra (1996) and Vallverdú (1997).

He (2002) concludes that there are different stress mechanisms, depending on whether the stress falls on the last or on the penultimate syllable and suggests that there are two paradigm forms of stress on the penultimate syllable. One is related to the 2nd person

singular of imperative forms or of an infinitive ending in a feminine 3rd person pronoun (either singular or plural) (*dona-la* ‘give it’, *dona-les* ‘give them’, *perdre-la* ‘to lose it’, *perdre-les* ‘to lose them’); and the other one is related to any verbal form followed by a feminine 3rd person singular or plural enclitic, combined with a dative pronoun of the 1st or 2nd person singular or of the pronoun *es* (*donar-me-la* ‘to give it to me’, *donar-me-les* ‘to give them to me’, *dona-me-la* ‘give it to me’, *dona-me-les* ‘give them to me’) (Grimalt 2002: 82). He also answers his own question about which is the element that determines stress-shifting pronominal encliticisation and finally states that this element is a geolectal one, which means that this phenomenon is described as being a characteristic of the Mallorcan and Menorcan Catalan dialects, despite the differences among towns (2002: 82). However, it needs to be considered that there are differences in the two clitic combinations between Mallorca and Menorca: some varieties of Mallorcan Catalan have stressed forms on the penultimate syllable and allow forms such as *dona-la-me*, which would never be found in Menorcan Catalan (Grimalt 2002: 82).

To sum up, it has been observed that the existing studies have some limitations and shortcomings. For instance, one of the negative aspects of the existing investigations on stress shift of pronominals in Menorca is that the researchers used few participants for their analysis—for instance, Grimalt (2002) only used three participants per town. Furthermore, there has not been age and gender discrimination in these studies, a fact which does not guarantee an accurate representation of the phenomenon. The present research will attempt to improve on these aspects by taking into account the relevant variables.

### **3. METHODOLOGY**

This project uses an empirical methodology based on gathering speech data from the participants. A total of thirty-seven speakers of Menorcan Catalan participated in the survey: the study consists of a translation and an acceptability judgement task. In the first part, participants had to read sentences in Spanish composed to elicit clitic use and translate them into Catalan, and after that, they had to listen to different sequences that used one or two clitics and decide which one was acceptable for their variety. The aim of the first part of the survey was to gather the actual speech of the speakers in Menorca, which has helped me to see whether Menorcan Catalan speakers put stress on weak pronouns systematically and to argue the differences among town and age groups. With the second part of the survey, the acceptability survey, the goal was to confirm that Menorcan Catalan speakers prefer the options with stressed pronominals, rather than the unstressed ones from central Catalan.

#### **3.1. Participants**

The informants of this survey were first of all divided by the town they were from: Ferreries or Alaior, and after that, by age groups. Gender has not been studied as a variable itself, but the collected data is from both women and men (72% and 28%, respectively). However, other sociolinguistic data —level of education, for instance— has not been considered for this research. All the participants of my study were native speakers of Menorcan Catalan and had a high level of Spanish, nearly bilingual.

As the previous investigations on stress shift of pronominals in Menorca used few participants, to conduct a representative quantitative phonological study of Menorcan Catalan, I considered it necessary to base my study on a greater pool of data. I expected to have at least 15 participants for both towns, a total of 30. However, I decided to record some more speakers if there was any problem with the recordings: so in the end I obtained a total of thirty-seven.

As regards the variable “town”, both Ferreries and Alaior are two towns which are located in the centre of the island: Ferreries is in the western part, right next to Ciutadella, whereas Alaior is in the eastern part, next to the capital, Maó. According to the population census of 2011 (IBESTAT 2011), Alaior had 9,450 inhabitants and Ferreries, 4,667, so Alaior is much bigger. Regarding the language spoken, as they are not areas with a lot of tourism and with a lower number of immigrants, Catalan is the usual language, which is used by more than a 60% of the population in Menorca (IBESTAT 2010).



Regarding the factor “age”, after being separated by town, the participants were divided into three age groups: a) people under 26 years of age, b) people between 26 and 64 years old, c) people more than 64 years old. As my aim was to do a thorough analysis of the stress-shifting pronominal encliticisation and as the studies that had been done in Menorca (Grimalt 2002 and Pons-Moll & Torres-Tamarit 2018) did not take into account the variable “age”, I wanted to focus on it. With this analysis, it would be possible to see whether the speakers’ age might affect their attitude to and use of the Menorcan stress shift. A total of thirty-seven speakers participated in the survey: nineteen from Ferreries and eighteen from Alaior. In the group of people under 26, seven people from each town were recorded; in the second one, seven people from Ferreries participated and six from Alaior; regarding the group of older people, five people from both Ferreries and Alaior participated in the survey (see Table 2).

**Table 2.** Total of participants of the survey

<b>Age group</b>	<b>under 26</b>	<b>26-64</b>	<b>above 64</b>	<b>Total</b>
Ferreries	7	7	5	19
Alaior	7	6	5	18
<b>Total</b>	14	13	10	37

Regarding the recordings, the informants had to fill in and sign a recording consent (see Appendix A), so that they agree that their voice was recorded and that I had their data for my study. The recordings and results of the participants were totally anonymous: their data were collected with an alphanumeric code: *a* or *f* for ‘Alaior’ and ‘Ferreries’, the number of age group (25 for people under 26; 26 for people between 26 and 64; and 65 for people older than 64), and the number of speaker (from 1 to 7). For instance: a25-1 would correspond to the speaker 1 of the age group “under 26” from Alaior.

### **3.2. Materials**

As I said above, the survey for my study had two main parts: one which involved translating and speaking and another one which involved selecting the acceptable option for the Menorcan dialect. Before starting each part of the survey, the participants had to carefully read the instructions which I showed them on a laptop and ask any questions regarding the survey.

On the one hand, the design of the first part of the survey was adopted from both Grimalt (2002) and Pons-Moll & Torres-Tamarit (2018): the participants were shown a

sentence in Spanish and had to translate it into Catalan (in the most natural way as if they were speaking to any friend, in their variety of Catalan). There were four different types of sentences: imperatives and infinitives with one clitic (e.g., *Vístete que llegamos tarde* ‘Get dressed, we are late’ and *Este bote de pintura pesa mucho y me cuesta aguantarlo* ‘This paint pot weighs a lot and I cannot hold it up’) and imperatives and infinitives with two weak pronouns, a combination known as ‘clitic cluster’ (e.g., *¿Ya has acabado los ejercicios? Enséñamelos* ‘Have you finished the exercises? Show them to me’ and *No he sido capaz de acabármelo* ‘I have not been able to finish it’)<sup>2</sup>. For the first two cases, with only one pronoun, there was a sentence for each Catalan weak pronoun (*me, te, ’l, la, li, ’ls, les, mos, vos, lis*<sup>3</sup>, *en, hi, ho*), that is, thirteen sentences in total for both imperative and infinitive. Regarding the sequences with two pronouns, there were only six sentences in total, three for imperative and three for the infinitive forms. The sentences in Spanish that I used in the survey were examples extracted from a list of nearly 500 sentences which Pere Grimalt provided me. I used these examples since they had been proven and worked in most of the contexts. In the list of examples of my survey there were some sentences without pronouns to distract the participants (e.g., *Cantas canciones muy bien* ‘You sing songs pretty well’). Nonetheless, even though these examples were appropriate for the study, it is relevant to know that in some sequences there can be interferences from the translation from Spanish. So, the task was to translate these sequences into Catalan while I was recording their speech with a recorder —a Handy Recorder H4n zoom pro. This part of the survey was designed to address the research questions 2 and 3. As regards the second one, the fact of having real data from both towns has been used to investigate similarities and differences between them. Concerning the third research question, the recordings have been used to see the differences among age groups.

On the other hand, the second part of the survey was an acceptability judgements test, i. e. a test in which the participants had to select which option they found to be more acceptable to the variety they spoke. This part had 10 different questions and each of them had two audios (except for one which had four). In each sentence, the two audios had the same sentence, but pronounced differently. More specifically, one was pronounced with stress stability (similar to the intonation of central Catalan) and the other one had a stressed pronoun, that is, stress shift (similar to the intonation of Menorcan Catalan). The second question (*Quan puguis, dona-m’ho* ‘Whenever you can, give it to me’), however, was more restrictive in terms of dialects: one recording was imitating the central Catalan intonation,

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<sup>2</sup> For all the examples used in the survey, see Appendix B.

<sup>3</sup> Dialectal form used for the dative plural grammatical pronoun *los*.

the second one was with the Menorcan Catalan intonation with the pronunciation [mo], and the last two with the Menorcan Catalan intonation but with the pronunciation [məw] and [mɛw] for the clitic cluster (IEC 2016a: 204), differentiating a reduced vowel for Ferreries and a non-reduced vowel for Alaior, respectively. So, the main difference between the two audios is whether the stress is placed on the enclisis or on the verbal form. The examples of this part of the survey were also infinitives and imperatives with one or two clitics (e.g., *No fas res més que mirar-te'l* 'You do nothing but look at him', *Que vols congelar-ne, de canelons?* 'Do you want to freeze canelloni?' and *Ha vingut per comprar-s'ho* 'He/She came to buy it'). The speaker pronouncing these sentences for the recordings was me, using the same recorder as before. This second part of the survey has mainly addressed the first question, but also with the other two: whether Menorcan speakers (both people from Ferreries and from Alaior) identify themselves with central Catalan forms or with Menorcan Catalan, and whether younger people tend to select the sequences of central Catalan, rather than the Menorcan Catalan ones.

The recordings (recordings can be accessed in Appendix C), for the first part of the survey were recorded in the same conditions, a silent room: either at the participants' home or at a conference room at the Menorcan headquarters of the Universitat de les Illes Balears in Alaior. The audios that I showed the participants in the second part of the survey were also recorded in the same conditions.

### 3.3. Data analysis

In order to do a thorough analysis for my study, I gathered all the data collected from the conducted survey. The data analysis is synchronic, as it is focused on a certain point in time, which is the present time, and both qualitative and quantitative: firstly, it is qualitative since I have used the recorded language data to suggest some characteristics of the phenomenon studied and the differences and similarities between Ferreries and Alaior themselves and between Menorcan Catalan and central Catalan. Secondly, it is quantitative since I have used proportional data to compare the results from this qualitative analysis.

The first part of the analysis was extracting the verb + weak pronoun sequence from each sentence in the recording of each participant, a process called speech segmentation. In order to do so, I used PRAAT, a tool used to process and edit speech data. After that, the task was to transcribe the sequences phonetically and to mark the stressed enclisis. For this,

I used the “Els sons del català” website from the Universitat de Barcelona (2014) and an IPA (International Phonetic Alphabet) chart keyboard<sup>4</sup> to write the sequences.

I used a Microsoft Excel file, in which I had all the different possible transcriptions of sequences used by the participants, i. e., sequences used by both Ferreries and Alaior speakers, sequences used only in Ferreries Catalan, sequences used only in Alaior Catalan and sequences of central Catalan. In the end, I gathered the transcriptions into different tables according to the town, distinguishing the age group. While I was listening to the recordings, I annotated the sequence they pronounced. Another task of extracting data was to gather the responses of the participants for the acceptability judgements test and to move them also into different tables for age and town, with the aim to extract data from them.

The second part of the analysis was to convert the data into “numbers” so as to analyse it. Concerning the first part, the initial task was to write down the results of each participant, that is, I counted how many times the informants used a form with stress shift, with stress stability, with a proclitic or whether they did not use a pronoun. After this, I listened to the recordings again and annotated the number of participants who pronounced each realisation in the same way. From this data, I was able to extract the percentages of people who pronounced the sentences in central Catalan or in Menorcan Catalan, and also on some occasions, more specifically, in Ferreries Catalan or in Alaior Catalan. This information was also useful to see whether there were differences between Ferreries and Alaior. As regards the second part of the survey, the task was similar: I extracted the numerical data from the qualitative data. That is, I counted how many participants, out of the total of each group and town, had chosen the same option and from this I got the totals of each question. From these totals I was able to see the percentages of acceptability for the shifted variant. Moreover, the data from the second part of the survey helped me see which percentage of the population I analysed identified with Menorcan Catalan.

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<sup>4</sup> Online source designed by Ruter (2009).



## 4. ANALYSIS

### 4.1. Introduction

This analysis is concerned with the quantitative data gathered in the two surveys of the study and will help answer the research questions 1-3, as well as to inform my discussion of the fourth research question by investigating the differences between Alaior and Ferreries, between the age groups and between Menorcan Catalan and central Catalan. My aim is to find out whether age or location are relevant factors in the phenomenon of stress shift in pronominals.

### 4.2. Ferreries

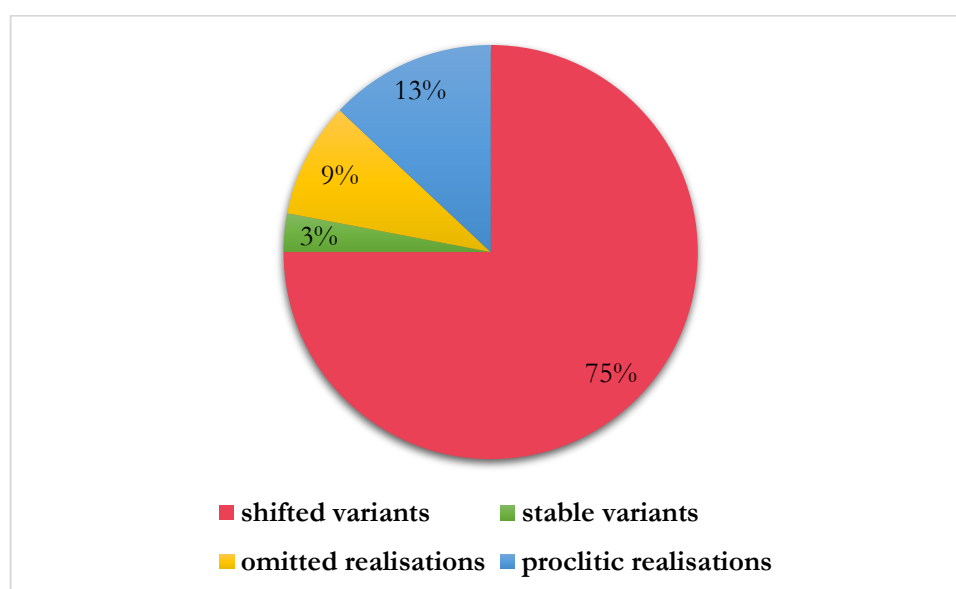
The first part of the survey had a total of 32 stimuli, that is, 32 sentences with one or two weak pronouns that the participants had to translate from Spanish to Catalan. Theoretically, these weak pronouns were placed after the verb in the stimuli so that the participants translated them also with enclitics, but in different occasions it did not happen. For instance, concerning the younger group, for the sentence *Cuando llegue tu hermano, deberás abrirle la puerta* only three people used the form *obrir + li*, as most of them used the pronoun in a proclitic position.

#### 4.2.1. Variable “age”: under 26

Concerning the first part of the survey for the age group “under 26” of Ferreries, the participants used, on a general basis, the same form of verb + weak pronoun—with stress shift—when translating the sentences. More specifically, as observed in Table 3, 75% of the answers from the participants correspond with the shifted variant, whereas only 3% corresponds to the stable variant. However, it can be noted that 9% of the realisations were answers in which the participants did not use any pronoun at all and 13% are responses with proclitic pronouns. Thus, 22% are realisations in which the participants did not use enclitics.

**Table 3.** Individual results of the age group “under 26” of Ferreries

	shifted variants	stable variants	omitted realisations	proclitic realisations
speaker 1 (f)	29	0	2	1
speaker 2 (f)	18	0	8	6
speaker 3 (f)	23	1	0	8
speaker 4 (m)	24	0	3	5
speaker 5 (f)	22	4	4	2
speaker 6 (f)	25	2	1	4
speaker 7 (f)	27	0	1	4
Percentage	75%	3%	9%	13%



**Figure 1.** Percentage of the variants used by the age group “under 26” of Ferreries

I will now take a closer look at the 3% which represent stress stable variants. In particular, the forms *fes-bo*, *vés-bi*, *tallar-te*, *fer-bo*, *anar-bi* and *acabar-m'bo* are the ones where the participants differed in their pronunciation. For example, for the form *fes-bo*, five participants used the realisation [ˈfew]<sup>5</sup> and one of them, the form [ˈfe.zu]. It can be observed that the weak pronouns *bo* and *bi* appear in five out of six forms.

Regarding the second part of the survey, the acceptability judgements test, the seven participants in Ferreries chose the Menorcan Catalan sentence for each question. That is, 100% of the speakers did not accept pronouncing a sequence with stress stability on the

<sup>5</sup> See Appendix D for all transcriptions.

verbal forms, both imperative and infinitive. With respect to the second question (*Quan puguis, dona-m'ho*), the one which distinguished four different realisations (one with stress stability and three with stress shift, with the forms /mo/, /məw/ and /mɛw/), all of them also agreed on the sequence that had the form /mo/, rather than /məw/ or /mɛw/. It can be observed that, in general, the younger speakers of Ferreries can indeed perceive differences between Menorcan and central Catalan and use the shifted variant consistently.

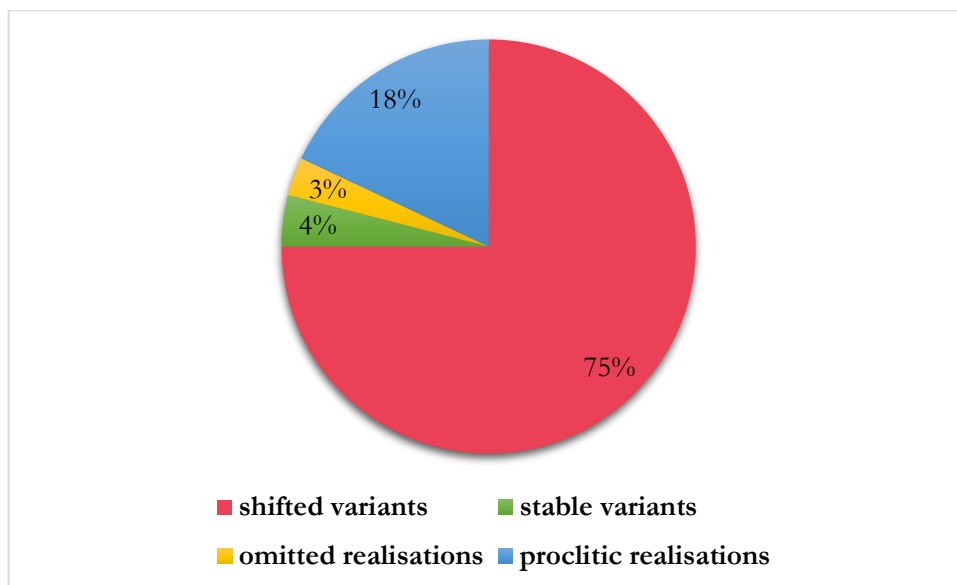
#### 4.2.2. Variable “age”: 26-64

With respect to the translation task for the age group “26-64” of Ferreries, the results show that the majority of the participants produced realisations with stress shift (see Table 4 for the individual results and Figure 2 for the percentages). Stable variants have a low use in this age group, since only 4% corresponds to it. However, it can be observed that, like the age group “under 26”, the participants used many realisations with proclitic pronouns: more specifically, 18% of the responses correspond to proclitic realisations. It is relevant to see that there are some participants which only used either a shifted variant or a proclitic realisation (speaker 3, speaker 6 and speaker 7), whereas other participants showed more variability in their responses (speaker 1, speaker 2, speaker 4 and speaker 5).

**Table 4.** Individual results of the age group “26-64” of Ferreries

	<b>shifted variants</b>	<b>stable variants</b>	<b>omitted realisations</b>	<b>proclitic realisations</b>
speaker 1 (m)	26	2	1	3
speaker 2 (f)	20	2	3	7
speaker 3 (f)	24	0	0	8
speaker 4 (m)	20	4	2	6
speaker 5 (f)	28	0	1	3
speaker 6 (f)	23	0	0	9
speaker 7 (m)	27	0	0	5
Percentage	75%	4%	3%	18%



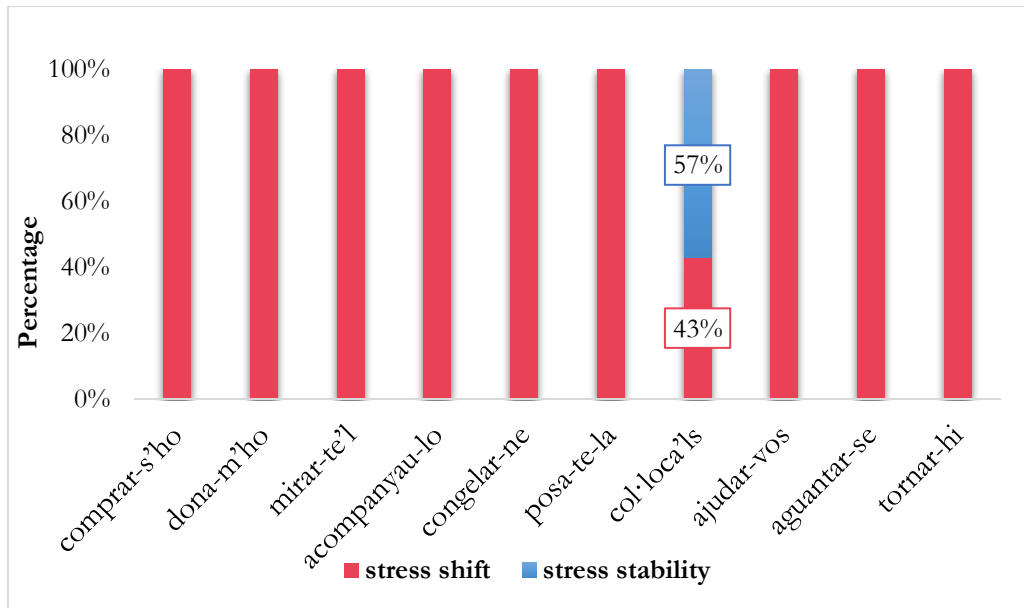


**Figure 2.** Percentage of the variants used by the age group “26-64” of Ferreries

Regarding the 4% of realisations pronounced with stress stability, the sequences with forms *agafa-les*, *tallar-te*, *planxar-les*, *mirar-nos*, *ajudar-vos*, *comprar-ne* and *acabar-m'ho* are the ones where the informants were not consistent when placing stress. For example, in the sentence *Estos chicos no paran de mirarnos*, when translating the form *mirarnos*, five participants used [mi.rəm.'mɔz] or [mi.rən.'noz], with stress shift; whereas two informants used a stress stable form: [mi.'ra.rnoz]. It can be observed that the weak pronouns produced with stress stability by participants do not coincide with the pronouns with the same characteristics in the age group “under 26”.

The middle-aged people of Ferreries agree, in general, when choosing the acceptable sequence for their variety, the Menorcan Catalan forms with stress shift (see Figure 3). However, they did not agree on the sentence *Es calçons<sup>6</sup> col·loca'ls a s'armari*. As seen in Figure 3, 57% of speakers chose the recording in which the verbal form was pronounced with stress stability, rather than with stress-shift, which would be the most natural way of pronouncing it in Menorcan Catalan. This disagreement might have occurred due to the presence of the <l·l> of the verb *col·locar* and this form is the one of the two cases that has an abbreviated clitic ('ls for *els*).

<sup>6</sup> Menorcan Catalan word used for *pantalons* ‘trousers’.



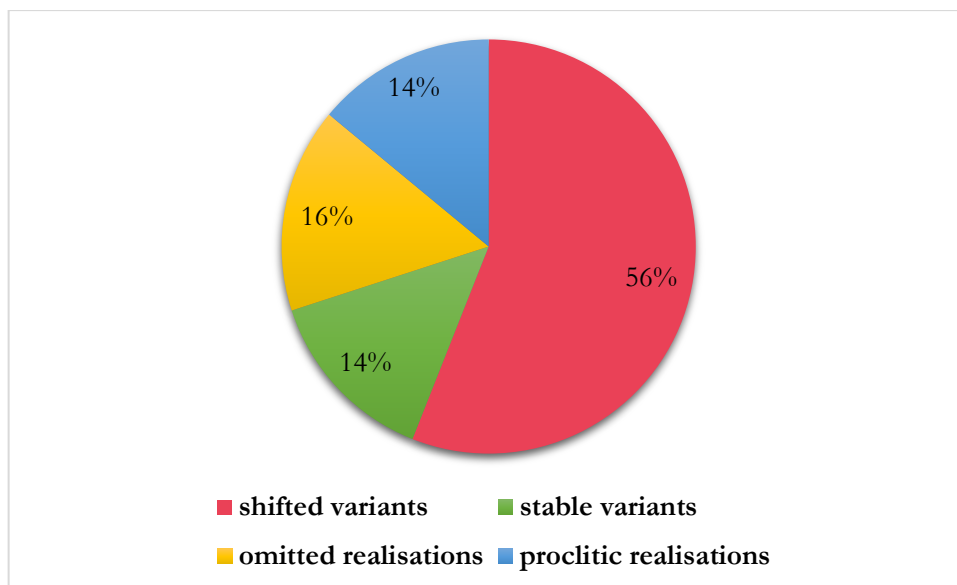
**Figure 3.** Results of the acceptability judgements test for the age group “26-64” of Ferreries

#### 4.2.3. Variable “age”: above 64

With respect to the first part of the survey, the individual results (see Table 5) of the age group “above 64” also show that the shifted variant is the one used by most speakers in Ferreries, as in the other age groups: 56% of the total responses were the Menorcan Catalan ones (see Figure 4). However, it can be noted that this shifted variant percentage is lower than in the other age groups, whereas the stable variant percentage has increased (14% compared to 3% and 4% for the age groups “under 26” and “26-64”, respectively). These results show that the age group “above 64” has significantly more omissions, especially than the middle-aged group, while proclitic stays stable in the three age groups.

**Table 5.** Individual results of age group “above 64” of Ferreries

	shifted variants	stable variants	omitted realisations	proclitic realisations
speaker 1 (m)	17	8	0	7
speaker 2 (f)	12	5	10	5
speaker 3 (f)	16	3	8	5
speaker 4 (m)	22	2	4	4
speaker 5 (f)	22	5	3	2
Percentage	56%	14%	16%	14%



**Figure 4.** Percentage of the variants used by the age group “above 64” of Ferreries

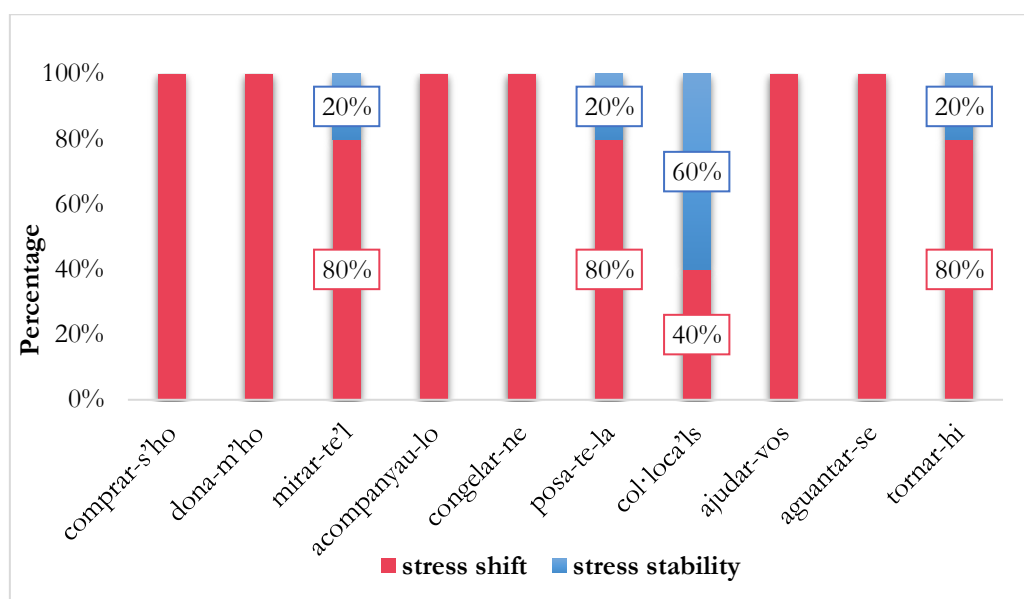
Concerning the 14% where the stable variant was used, the forms in which the participants did not coincide are *rentau-nos*, *agafa'n*, *aguantar-lo*, *aguantar-los*, *planxar-les*, *mirar-nos*, *ajudar-vos*, *anar-bi* and *acabar-m'ho*. For instance, the forms *mirar-nos* and *ajudar-vos* are the forms which were pronounced by more participants as a stable variant. It can be observed that there are always the same pronouns which are pronounced with stability: *mos/nos*, *vos*, *bi*, *ho* and *los*. In this case, these pronouns do coincide with the weak pronouns seen in the other age groups, which might mean that people are confused when translating and using them. For instance, when translating the form *plancharlas*, three participants used the stable variant, whereas two pronounced it with stress shift (see example (10)).

- (10) a. stable variant: [plən.ˈʃar.ləz]  
 b. shifted variant: [plən.ʃəl.ˈləz]

In this example it can be observed that there is a process of gemination, also known as consonant lengthening, which is a phonological process in which a consonant gets doubled and has a longer duration. This is a distinctive feature of Catalan (*col·legi* ‘school’), however, Menorcan Catalan has a broader use of it. For example, looking at (10), in central Catalan, when the weak pronoun *les* attaches to the infinitive form *planxar*, the sound /r/ stays; whereas this sound disappears in Menorcan Catalan as the consonant is lengthened because there is a stressed syllable. For this reason, this geminate sound —a geminate /l/—appears as /r/ and /l/ are both alveolar sounds and /r/ is assimilated. This phenomenon is produced

regularly by the participants of this study, e.g. [ə.ɣwən.təl.'loz] for *aguantar-los* or [tə.lə.fu.nəl.'lə] for *telefonar-la*, among others.

The responses of the older speakers in Ferreries are not as consistent as the ones for the two other age groups. Out of 50 responses in total, six used the central Catalan stress pattern, three of them in the sequence *col·loca'ls* (see Figure 5). That is, as in the middle-aged group, this form caused confusion and controversy among participants of the survey. For instance, as the gemination phenomenon influences speakers' use of stressed pronominals, it can also have an influence of their perception on acceptability in the sentence *Es calçons, col·loca'ls a s'armari*. As seen in Section 4.2.2, the fact of having the pronoun *els* abbreviated might inhibit the participants' acceptability for the shifted variant.

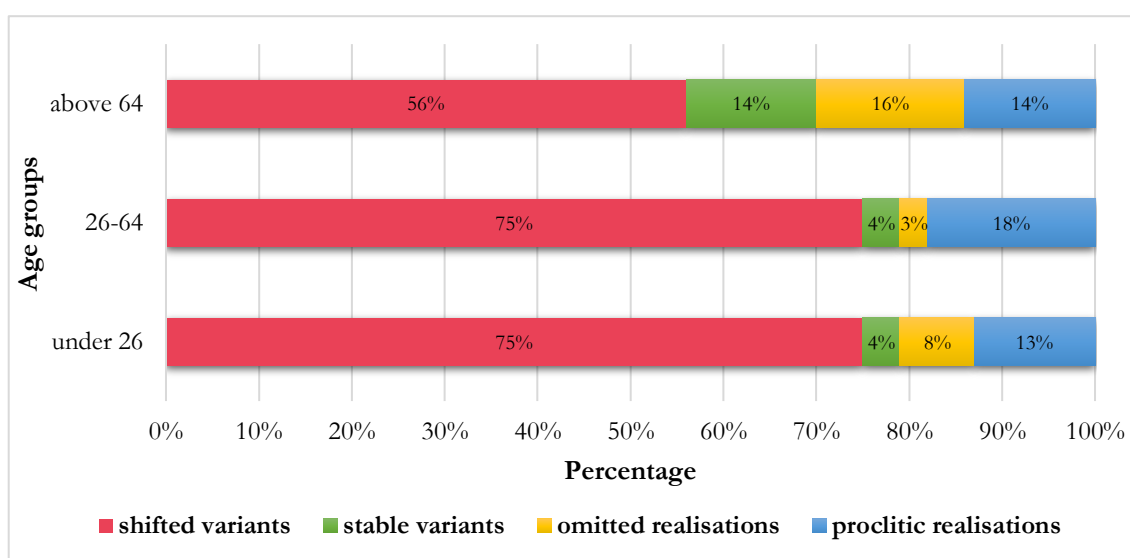


**Figure 5.** Results of the acceptability judgements test for the age group “above 64” of Ferreries

Variety was also seen in the second question (*Quan puguis, dona-m'ho*) as two people chose the option [du.nə.'mɔ] and three the form with the clitic cluster [du.nə.'məw]. The form /mɔ/ has a short sound, that is, /o/ is a reduced vowel; whereas the sound /əw/ is a diphthong. Even though all participants chose the options which had stress shift, the sound /mɔ/ is more similar to the sound /mu/ of central Catalan. This result might suggest that the speakers who chose the recording with /mɔ/ as acceptable might have a stronger influence from standard Catalan.

#### 4.2.4. Comparison of the results

The results of the first part of the survey for Ferreries, as stated above, in general, show that there is a high use of the shifted variant. The participants used an average of 69% of the shifted variant (see Figure 6): in the age groups under 26 and between 26 and 64 the responses are 75% respectively, while the results of the age group “above 64” are 56%. This difference showcases the importance of taking age into account as a variable in phonetic speaker surveys.



**Figure 6.** Use of the variants in Ferreries

Regarding the realisations pronounced with stress stability, it can also be observed that the older group has the higher percentage for them, whereas the other participants have percentages of 3% and 4%. The results for the omitted realisations are quite different among the three groups, whereas the results for the proclitic realisations stay stable. These results show that there is a discrepancy among the age groups: the age groups “under 26” and “26-64” have similar results, even though they differ in the omitted and proclitic realisations; however, the age group “above 64” shows less consistency in the responses and they used way more stable variants than the other two age groups. Thus, this goes against my initial hypothesis that the younger group would be influenced by standard Catalan. Most of the forms that the participants used with the unstressed weak pronouns are the ones with the pronouns *mos*, *vos*, *los*, *ho* and *hi* with either imperative or infinitive forms that have stress final pattern (*rentau-mos*, *posau-vos*, *aguantar-los*, *ajudar-vos*, *anar-hi*, *fer-ho*).

This suggests that the speakers may be confused with these pronouns and might be caused by a phenomenon called “stress clash” (Levey & Raphael 2002). This phenomenon

explains that sometimes intonation can vary depending on the syllabic structure of the following word. So stress shift is constrained by the sequence of heavy-light syllables, which is said to break the iambic metre of the Catalan sequence. For instance, in the case of *aguantar-los*, the weak pronoun *los* is influenced by the stressed syllable <tar> (see (11) and (12)).

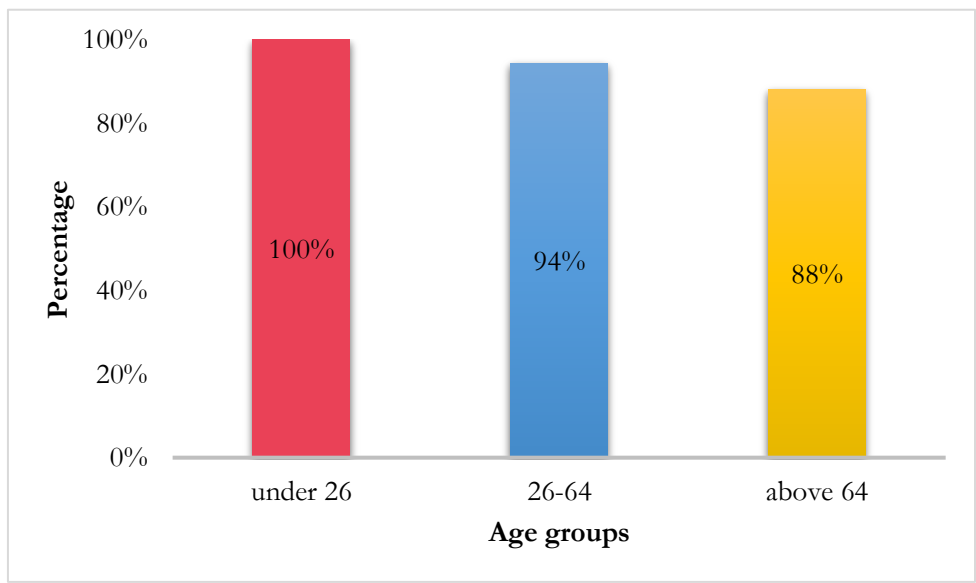
˘ = weak-accented syllable    ¯ = strong-accented syllable

(11)    can-tar        =        iambic metre  
           ˘        ¯

(12)    a-guan-tar      =        anapaest metre  
           ˘        ˘        ¯

Hence, this suggests that participants might want to prevent the union of two strong syllables (<tar> and <los>) and thus they use the stable variant, so that it is accepted by the Catalan metre.

For the acceptability survey, the results for people in Ferreries are according to what was expected: the participants were able to distinguish the sequences of central Catalan from the sequences of Menorcan Catalan and considered the Menorcan ones more acceptable. More specifically, the age group “under 26” agreed on every question (100% of acceptability). As regards the other two groups, their perception of acceptability was not quite as accurate as with younger informants: 94% and 88% for the age groups “26-64” and “above 64”, respectively (see Figure 7).



**Figure 7.** Percentage of the acceptability of the shifted variant in Ferreries

These data suggest that speakers of Ferreries do indeed perceive dialectal differences of stress shift, as most of them accepted the shifted variant as the one they would pronounce and did not accept the stable variant as their own. As I stated above, there are also differences among the age groups. The age group “above 64” might have chosen some stable variants as acceptable due to their lack of awareness of how they speak and due to their misconception that the pronunciation of central Catalan is more acceptable than the Menorcan Catalan one.

### 4.3. Alaior

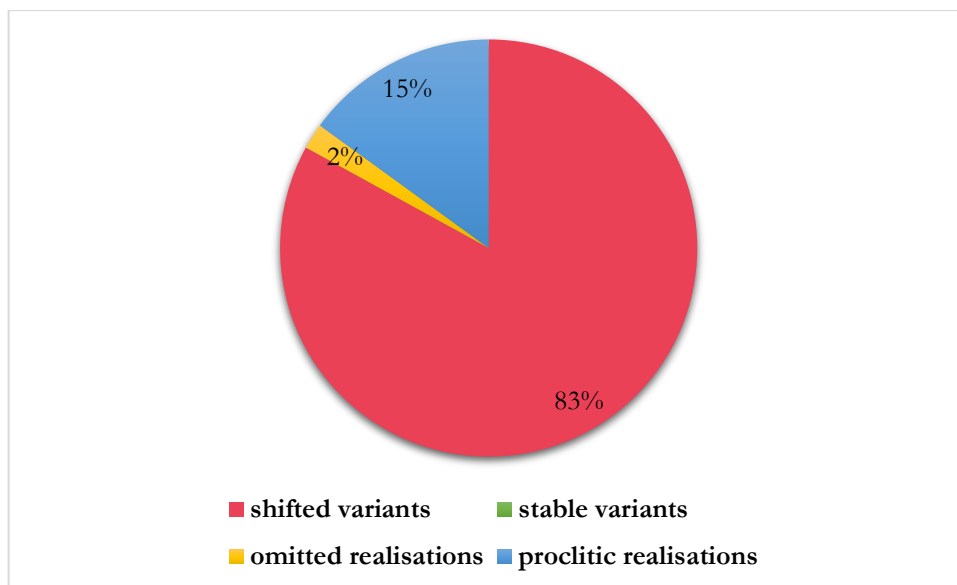
This section is concerned with the analysis of the results obtained in Alaior for the two parts of the survey. The first part had a total of 32 stimuli that the informants had to translate, and the second one had 10 questions in which the speakers had to decide which option they would pronounce in their everyday life.

#### 4.3.1. Variable “age”: under 26

Regarding the translation task for the age group “under 26” of Alaior, the informants did not produce any realisation with stress stability. In Table 6, the results for each participant can be observed (see Figure 8 for the percentages). This table shows that most of their responses (83%) correspond to the shifted variant. Concerning the omitted and the proclitic realisations, every informant used at least two realisations with a proclitic and few of them omitted the pronoun when translating the sentence. It is relevant to see that speaker 1 and speaker 5 are the participants who used most proclitic realisations and pronounced less shifted variants.

**Table 6.** Individual results of age group “under 26” of Alaior

	<b>shifted variants</b>	<b>stable variants</b>	<b>omitted realisations</b>	<b>proclitic realisations</b>
speaker 1 (m)	25	0	1	6
speaker 2 (f)	29	0	0	3
speaker 3 (f)	30	0	0	2
speaker 4 (m)	27	0	2	3
speaker 5 (f)	21	0	2	9
speaker 6 (f)	27	0	1	4
speaker 7 (f)	26	0	0	6
Percentage	83%	0%	2%	15%



**Figure 8.** Percentage of the variants used by the age group “under 26” of Alaior

A distinctive variation of the speakers of Alaior is that instead of using the forms *'m* and *'t* of the enclitic pronouns *me* and *te* when placed after a vowel, they use the full form anyway: for example, instead of using *obra'm* or *vesti't*,<sup>7</sup> they use *obra-me* and *vesti-te*, with the sounds /mɛ/ and /tɛ/.

In the second part of the survey, the younger people of Alaior agreed in their responses when deciding between Menorcan Catalan and central Catalan: they would always pronounce the Menorcan Catalan sequences, that is, with stress shift on the weak pronoun. With respect to the sentence *Quan puguis, dona-m'ho*, which had four possible answers instead of two, all participants chose the form /mew/, characterised by the sound /ɛ/, particular of Alaior.

In general, it can be concluded that there is no stress stability in this group because the participants used the shifted variant in their translations and considered that the answers with stress shift of the acceptability judgements test were the most acceptable. This fact deviates from my hypothesis on the influence of standard Catalan: their responses show that they neither use the stable variant nor accept it as the one they would usually use.

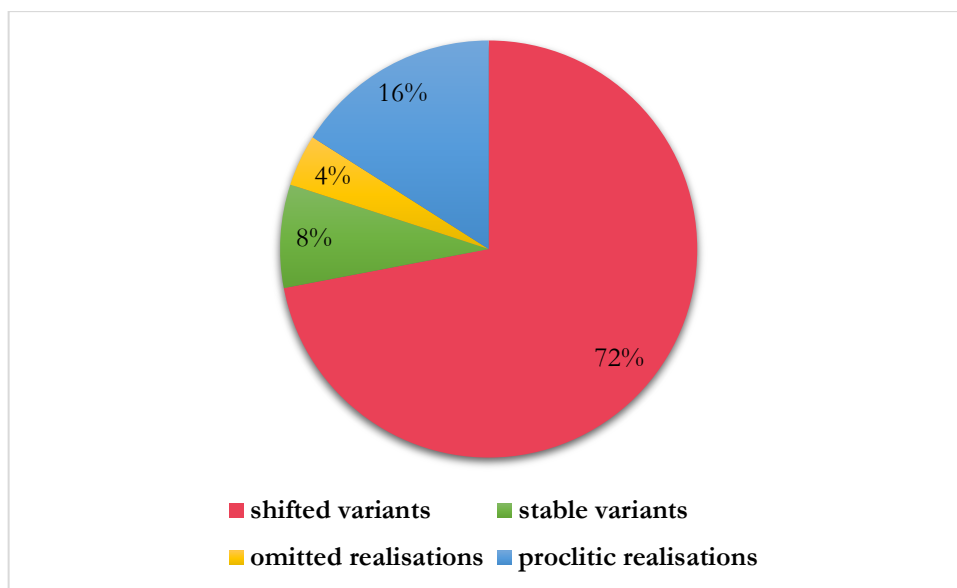
#### 4.3.2. Variable “age”: 26-64

In the first part of the survey, the participants of the middle-aged group in 72% of cases used the variant with stressed pronominals and in 8% of cases produced the sentences with stress stability (see Figure 9). These forms which the participants used with stress stability are *fes-bo*, *tallar-te*, *aguantar-lo*, *aguantar-los*, *planxar-les*, *mirar-nos*, *ajudar-vos*, *fer-bo*, *anar-hi* and *menjar-vos-*

<sup>7</sup> Forms used in Menorca for the imperative forms *obra'm* and *vesteix-te*.



les. It is also relevant to know that two participants used the form [u.βri.'mɛ] for *obra'm*, whereas the other four participants used the form [u.'βrim].



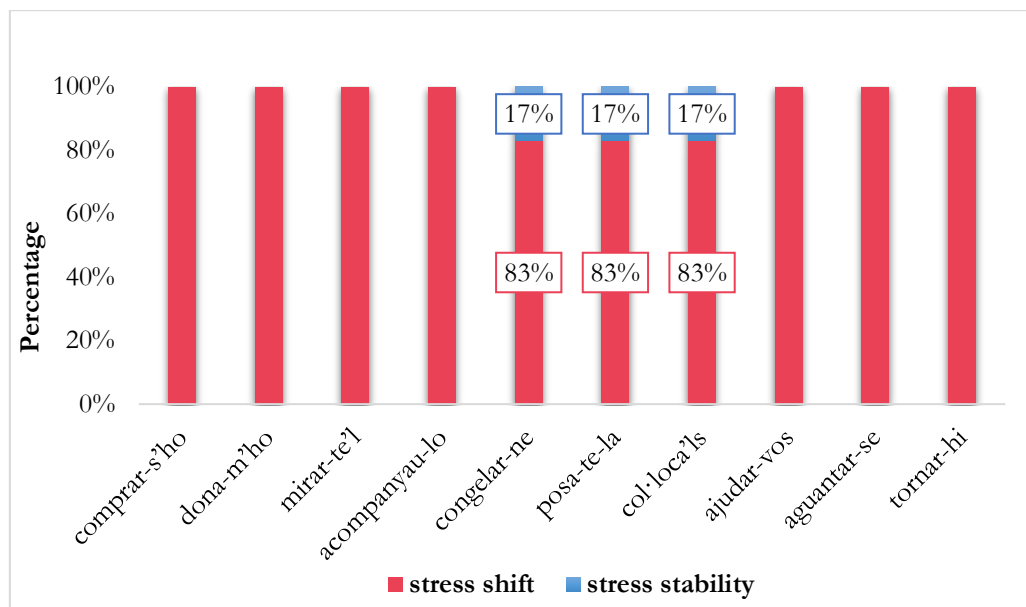
**Figure 9.** Percentage of the variants used by the age group “26-64” of Alaior

In Table 7 the results of each participant can be observed. In this age group, the number of participants who used the stable variants is comparatively high but so is the number of proclitic realisations. The results show that there is a general tendency for the shifted variant, but also for the use of proclitic realisations. It can be observed that participants have used weak pronouns on a general basis, as the percentage for the omitted realisations is 4%. However, the percentage for the stable variants is a bit higher (8%) since some participants used them regularly. In particular, speaker 1 pronounced 6 forms with stress stability, and 5 with a proclitic pronominal.

**Table 7.** Individual results of age group “26-64” of Alaior

	shifted variants	stable variants	omitted realisations	proclitic realisations
speaker 1 (f)	21	6	0	5
speaker 2 (f)	25	4	1	2
speaker 3 (f)	25	1	0	6
speaker 4 (m)	21	2	2	7
speaker 5 (m)	25	3	3	1
speaker 6 (f)	21	0	1	10
Percentage	72%	8%	4%	16%

For the acceptability judgements test, the participants of this age group were pretty consistent with their responses: out of 60 responses, only three preferred the stable variant option instead of the shifted variant: *congelar-ne*, *posa-te-la* and *col·loca'ls* (see Figure 10).



**Figure 10.** Results of the acceptability judgements test for the age group “26-64” of Alaior

Nevertheless, they were not consistent in the second question (*Quan puguis, dona-m'ho*), since they chose different options. No participant chose the answer with stress stability, but among the three responses with stress shift, the option *dona-m'ho* with /mo/ was chosen by two out of seven participants, the option with /mew/, by two out of seven, and the other participants chose /maw/. This is a surprising fact, as /maw/ is normally used in Ferreries, and not in Alaior.

The data of the age group “26-64” of Alaior show that, in general, participants can perceive the differences between the two dialects (central Catalan and Menorcan Catalan), but in specific occasions, they used the stable variant. This can also be applied to the acceptability judgements test: 95% of the participants chose the shifted variant option as the most acceptable.

#### 4.3.3. Variable “age”: above 64

The individual results of the older group of Alaior (see Table 8) show that the informants, in general produced a great number of realisations according to the shifted variant.

**Table 8.** Individual results of age group “above 64” of Alaior

	shifted variants	stable variants	omitted realisations	proclitic realisations
speaker 1 (f)	21	2	3	6
speaker 2 (f)	12	0	3	17
speaker 3 (f)	22	5	5	0
speaker 4 (f)	25	0	2	5
speaker 5 (f)	29	1	0	2
Percentage	68%	5%	8%	19%

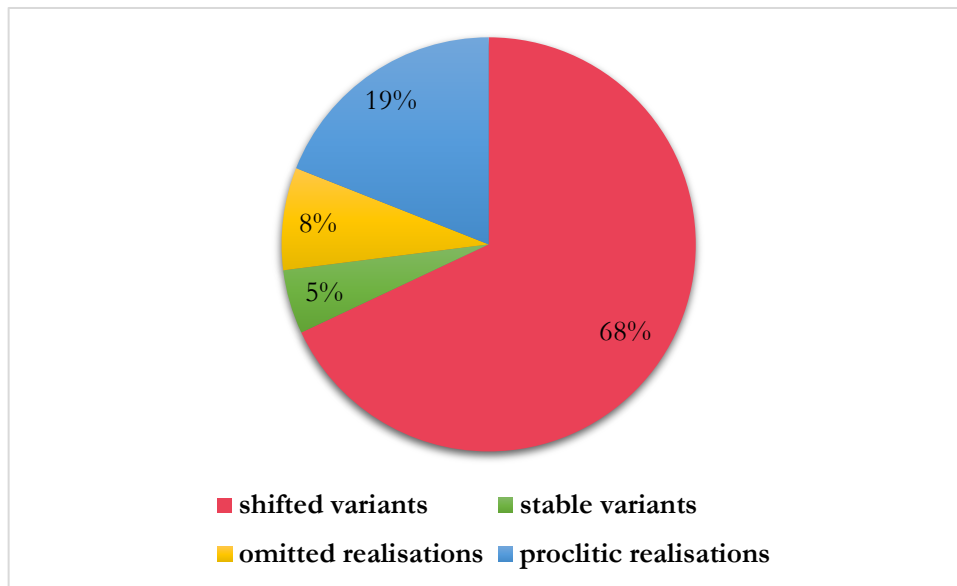
Comparing this group with the other two groups of Alaior, the speakers of the group “above 64” omitted way more weak pronouns than the other speakers. This fact can be due to the influence of the Spanish language on the translation since the participants might have been concentrated on translating the sentence correctly and thus, they did not pay attention to clitics. Furthermore, the pronouns *en* and *hi*, for instance, do not exist in Spanish and for this reason, the stimuli did not have these explicit pronouns (see examples (13) and (14)).

- (13) **Stimulus:** María ha comprado gambas, me gustaría comprar yo también.  
**Grammatical translation:** La Maria ha comprat gambes, m’agradaria comprar-*ne* jo també.  
**Speakers’ translation:** La Maria ha comprat gambes, m’agradaria comprar- $\emptyset$  jo també.  
**Translation:** Maria has bought prawns; I would also like to buy some.
- (14) **Stimulus:** Si quieres ir, ve ya.  
**Grammatical translation:** Si hi vols anar, vés-hi ja.  
**Speakers’ translation:** Si  $\emptyset$  vols anar, ves- $\emptyset$  ja.  
**Translation:** If you want to go there, go immediately.

Concerning the other group of proclitic realisations, participants used the weak pronoun before the verb, rather than after it, as was expected. As they were asked to translate the sentence in a natural way, sometimes they changed the order and even the verbs of the stimuli (see example (15) below by speaker 2).

- (15) **Stimulus:** Ya he limpiado el pescado. Fríelo cuando quieras.  
**Expected translation:** Ja he fet net el peix. Fregi'l<sup>8</sup> quan vulguis.  
**Speaker's translation:** Ja he fet net el peix, *el* fregeixes quan vulguis.  
**Translation:** I have already cleaned the fish, fry it whenever you want.

With respect to the realisations, 68% of the answers were produced with stress shift, whereas a 5% were pronounced according to the stable variant (see Figure 11).

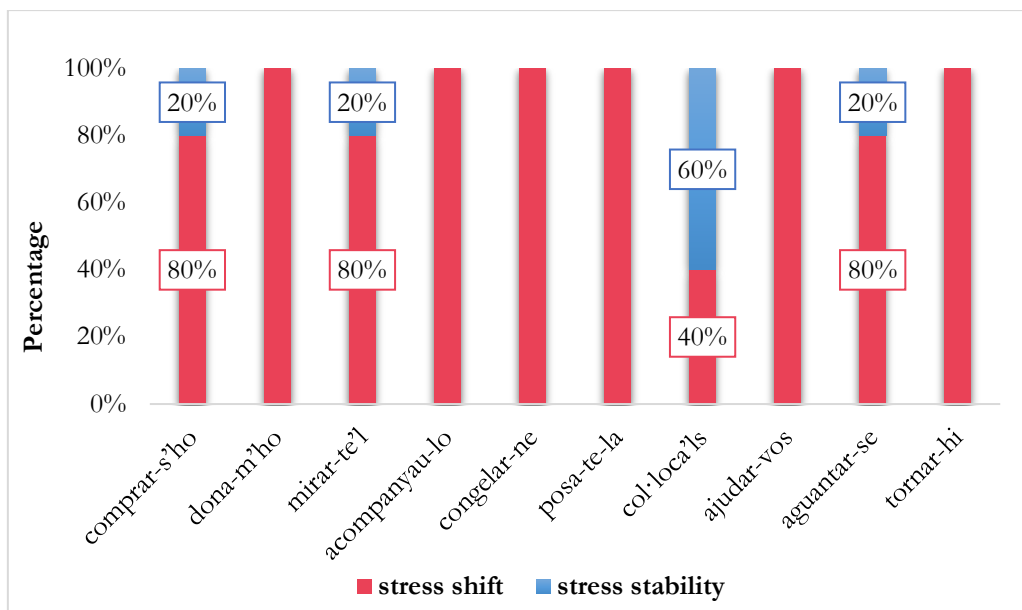


**Figure 11.** Percentage of the variants used by the age group “above 64” of Alaior

Inside this 5% of stable variants, the forms produced with stress stability are *fes-bo*, *pentinar-me*, *planxar-les*, *mirar-nos*, *ajudar-vos*, *fer-bo* and *anar-bi*. Sequences with the same weak pronouns than in the other age groups. This coincidence with the same weak pronouns pronounced with stress stability in both towns and in every age group might be related to the phenomenon of stress clash, as argued in Section 4.1.4.

Regarding the acceptability judgements test, the participants chose the shifted variant an average of 88% of times. The remaining 12% corresponds to the forms *comprar-s'ho*, *mirar-te'l* and *aguantar-se*, chosen by the same participant, and to the form *col·locals*, chosen by three different speakers (see Figure 12 for the results).

<sup>8</sup> Form used in Menorca for the imperative form *fregeix-lo*.

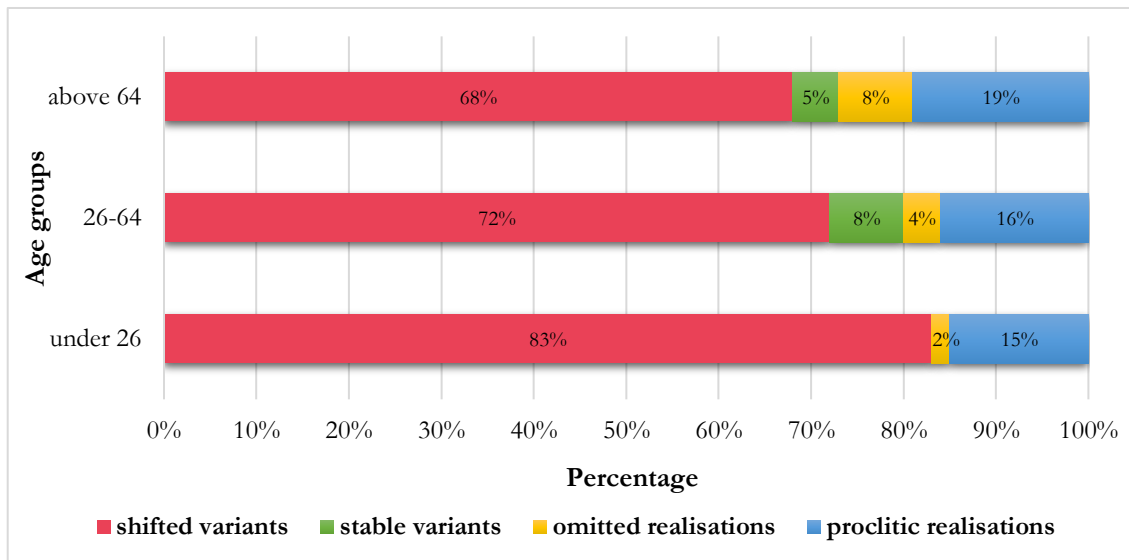


**Figure 12.** Results of the acceptability judgements test for the age group “above 64” of Alaior

The results of the age group “above 64” of Alaior show that speakers pronounce in the majority of cases the shifted variant and that they think it is the acceptable form of pronouncing the sequences of verb + weak pronoun. Nonetheless, there is a small percentage of speakers that used these sequences with stress stability. This can be caused by the influence of central Catalan on some particular speakers or by the stress clash phenomenon.

#### 4.3.4. Comparison of the results

The results of the translation task of participants in Alaior show that there is an average use of 74% of the shifted variant. More specifically, the age group “under 26” produced sentences with stress shift in 83% of the occasions, whereas the age groups “26-64” and “above 64” produced them in 72% and 68% of the cases, respectively (see Figure 13 for the results). These results suggest that there are differences among the age groups of Alaior again underlining the importance of taking age into account as a sociolinguistic variable. The speakers from middle-aged group seem to show more use of the stable variant, even though most of them did not speak Catalan during their years at school, due to the repression of the Franco regime against the Catalan language.

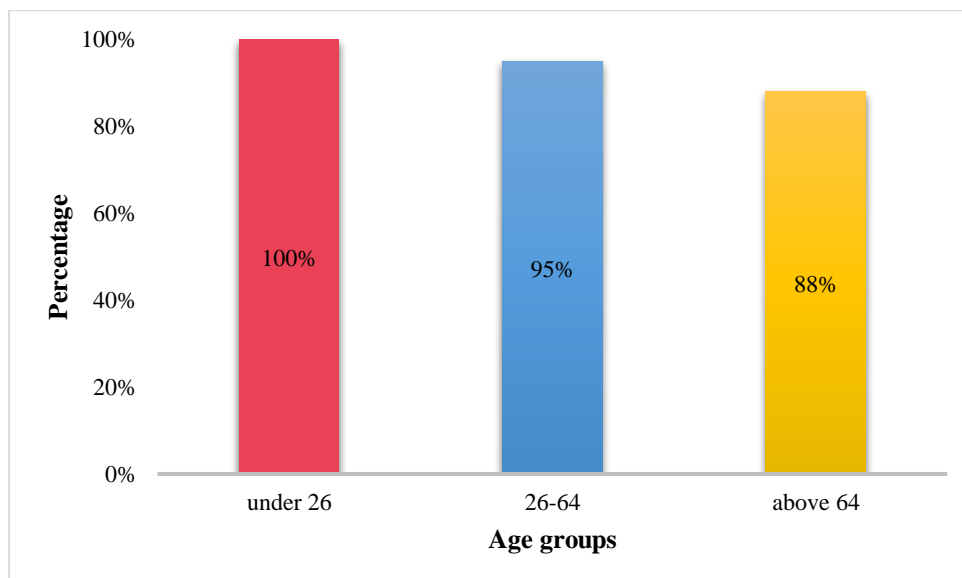


**Figure 13.** Use of the variants in Alaior

It has been observed as well that the sequences pronounced with stress stability in the age groups “26-64” and “above 64” are repeatedly the ones with the same weak pronouns: *hi, ho, mos, vos, los* and *les*. This is not a coincidence, as the phenomenon of stress clash of metrical phonology has an influence on them and speakers resist to pronounce two strong successive syllables, and thus they use an unstressed weak pronoun, rather than a stressed one, as it is usual in Menorcan Catalan.

It is also relevant to consider that the participants of Alaior systematically used the aforementioned phenomenon of gemination in some forms when translating the sentences: [kum.pran.'ne] for *comprar-ne* or [kri.ðəl.'lɛ] for *cridar-la*. This process affects the syllable weight and lengthens the consonant duration. In this case, the sounds /n/ and /l/ are doubled due to the transition between alveolar sounds: /r/ to /n/ and /l/, respectively.

The results for Alaior for the acceptability survey show a high acceptance for the shifted variant (see Figure 14). 100% of the responses to the acceptability survey of the age group under 26 years old agreed that the Menorcan Catalan option —the shifted variant— was the most acceptable for them. The results are similar for the middle-aged group, which agreed on 95% of the responses, only three answers were for the central Catalan option. Regarding the age group “above 64”, the percentage is also high, but not like the two others: 88% of the responses chose the shifted variant as the acceptable one.



**Figure 14.** Percentage of the acceptability of the shifted variant in Alaior

In general, the results show that the people in Alaior are able to distinguish between the two dialects and see their variant as the most acceptable. The data show that there is no clear signal that standard Catalan has had a strong influence neither on the youth nor on the middle-aged adults and elderly people. Perhaps this influence affects only some particular speakers, not the whole group itself.

These results are also useful to address the fourth research question. It has been observed that in the forms pronounced with stress stability, the stress always stays on the verbal forms and does not change (see (16)), whereas in the forms pronounced with stress shift, the stress is placed on the pronoun (see (17)).

(16) Verbal form with stress stability      vés-hi      [ve.'zi]

(17) Verbal form with stress shift      vés-hi      ['ve.zi]

Thus, as the stress shift variant is used in Menorca, it can be argued that this dialect would have weak pronouns and that central Catalan has clitics, as defined by Nadeu et al. (2017). This topic will be broadly addressed in Section 5.

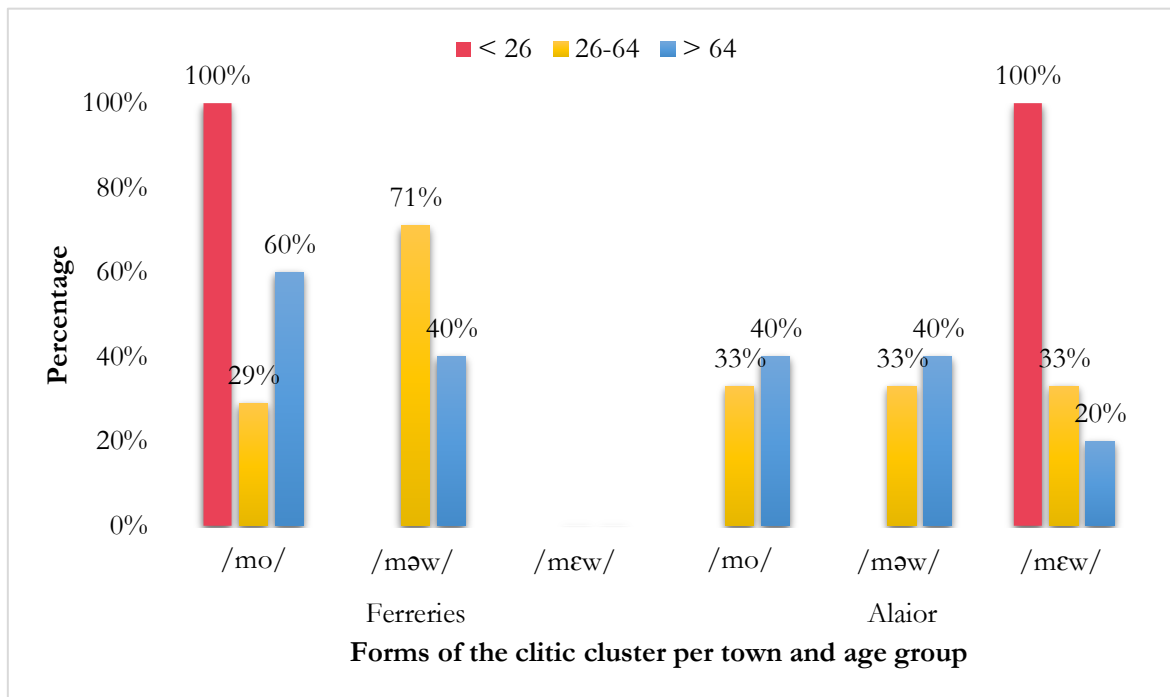
#### 4.4. Comparison between Ferreries and Alaior

This section will first address the second research question on the differences of the varieties spoken in Ferreries and Alaior regarding the stress-shifting pronominal encliticisation phenomenon in Menorcan Catalan and then the third question on age differences.

As it has been seen in the previous sections (4.1 and 4.2), the speakers of both Ferreries and Alaior used the shifted variant in more than 65% of the occasions, which means that the two towns are quite similar in this aspect (69% for Ferreries and 74% for Alaior), although the percentage is higher for Alaior. However, if we look inside the results of the shifted variant, Alaior shows more variability than Ferreries. As I stated above, whereas the variety of Ferreries is characterised by the sound /ə/, Alaior is characterised by the sound /ɛ/. Speakers of Ferreries translated the sentences using this sound systematically ([gə.'fən] or [ə.ʏə.'fən] for *agafa'n*), whereas speakers of Alaior used both vowels, instead of the open-mid one: out of eighteen speakers in total of Alaior, five of them pronounced [gə.'fən] or [ə.ʏə.'fən] for *agafa'n* and thirteen of them, [ɛ.ʏə.'fən] or [ə.ʏə.'fən].

Regarding the second part of the survey, the acceptability judgements test, the results are similar for both towns: 94% of acceptability of the shifted variant in Ferreries and 94% in Alaior. Even though there is no variability between the two varieties in this aspect, there is indeed variability when choosing among different clitic clusters. As I explained above, the second question of this part of the survey (*Quan puguis, dona-m'ho*), instead of having two possible answers to choose from, had four: one with stress stability with the form /mo/, one with stress shift with the form /mo/, one with stress shift with the form /məw/, and one with stress shift with the form /mɛw/. No participant chose the first option with stress stability, so the Figure 15 shows only the forms with stress shift. It can be observed that in Ferreries no speaker chose the option /mɛw/, since this sound is not usually used in this town, but only in Alaior. 100% of the age group “under 26” chose the realisation with /mo/. For the middle-aged group, 29% of them chose /mo/ and 71% chose /məw/. The clitic cluster /mo/ was accepted by 60% of the age group “above 64” and /məw/ by 40 of them. In Alaior, however, there is more variability. Like in Ferreries, all the younger participants decided on the same option, this time /mɛw/, but the adults and the elderly did not agree with their responses. For the age group “26-64”, three participants chose /mo/, three chose /məw/ and three chose /mɛw/, and in the age group “above 64”, /mo/ and /məw/ were chosen by two participants each and /mɛw/ by one.





**Figure 15.** Results for the acceptability of the pronunciation of *m'bo*

To sum up, this data has made clear that there are clearly visible differences between Ferreries and Alaior: none of the towns had more than a 75% of use of the shifted variant, but speakers in Alaior showed a higher use of it. Moreover, people in Ferreries tended to translate more sentences without pronominals than speakers in Alaior. The use of the stable variant also has more presence in Ferreries than in Alaior, 7% and 4%, respectively. These results might be due to the Spanish and the central Catalan influence on these Menorcan Catalan speakers.

Turning to the third research question, the differences in age, it has been observed in both parts of the survey that the younger group is the one that shows less use of the stable variant: in the translation task, a high percentage of the participants (79%) used the shifted variant, and in the acceptability test, 100% of speakers of both Ferreries and Alaior chose the answers with stress shift. This suggests that the younger group of speakers of Menorca are capable of perceiving differences between central Catalan and Menorcan Catalan. These results disclaim my initial hypothesis that young people would use more stable variants due to their exposure to standard Catalan. However, as they have always used Catalan at school, they might have acquired a higher linguistic awareness of the dialects and can indeed distinguish them more easily. These results show that it is important to discriminate the phenomenon by age.

As regards the second age group, the use and acceptance with the shifted variant is not as high as the age group “under 26”: the average use of the shifted variant of both speakers of Ferreries and Alaior is 72%. In the acceptability judgements test the speakers of this age

group in some particular cases (*col·loca'ls*, for instance, as explained above) did show an agreement on which option they considered more acceptable. From these results, it can be inferred that, on a general basis, these participants indeed perceive the difference of stress between central Catalan and Menorcan Catalan. However, they might sometimes be confused when pronouncing certain sequences due to the stress clash phenomenon and the lack of self-confidence with the social acceptance of their dialect.

The age group “above 64” is the group that shows more variability in their responses: in the translation task they used the shifted variant on a 62% of the occasions, and the recordings with stress shift were chosen in the acceptability judgements test by an 88% of the participants.

In short, it has been noticed that the age differences that exist regarding this aspect are quite big and have a strong impact on the use of stress shift in Menorca. Whereas participants of the younger group use the shifted variant on a general basis, the speakers of the older group used it way less. This makes me refute the hypothesis that the youth is influenced by central Catalan and produces enclitic pronominals with stress stability. It is surprising that it is the age group “above 64” the one which used more stable variants, since informants of this group are not exposed to standard Catalan in their everyday life.

Concerning the differences between the two towns, it has been observed in this analysis that speakers of Alaior have higher percentages of use of stress shift. Moreover, even though the results for the acceptability judgements test show that speakers of both towns accept the shifted variant, the responses of the participants of Ferreries show more tolerance for central Catalan. This aspect is visible in the aforementioned sentence *Quan puguis, dona-m'ho* where eleven out of nineteen participants of Ferreries chose the form /mo/, which is more similar to the central Catalan /mu/, rather than the diphthongs /məw/ and /mɛw/. Speakers of Alaior, however, generally used the clitic cluster /mɛw/. The particularity of this form is that instead of having a reduced vowel like /mo/, it has two stressed vowels and cannot be reduced. For this reason, it can be argued that the clitic cluster /mɛw/ is the farthest form from central Catalan.

Young speakers' tendency to exhibit more stress shift might be a distinguishing feature to separate themselves from the older generation by exaggerating a feature perceived as particularly Menorcan, or, by the same token, speakers from Alaior might want to distinguish themselves from the rest of the island or from non-Balearic speakers. This aspect can be related to the findings by Labov (1972) on Martha's Vineyard: an island off the north east coast of the United States. He found out that the middle-aged and older inhabitants of that

island, especially the fishermen, were consciously changing particular vowel sounds ([əu, əi]) in order to separate themselves from the tourists that frequented the island (see Labov 1972 for more information). Thus, these findings can be related to the findings of this study: the speakers' pronunciation might be influenced by their attitude towards the language. In short, the observed phenomenon of this research might not be due to an unconscious influence from standard Catalan, but due to a conscious or semi-conscious attempt by the speakers to distinguish themselves from it, especially in young speakers.

The difference regarding stress shift might also be related to the voting behaviours of the inhabitants of the two towns. The municipal elections in 2015 showed differences in the votes in both towns. Ferreries was led by a left-wing party, l'Entesa de Ferreries, whereas Alaior was led by Partido Popular (PP), a right-wing party (see IBESTAT 2016*a*; 2016*b*). The recent elections on the 26th of May 2019 have shown similar results: PP is the main force in Alaior, as l'Entesa is in Ferreries (see Menorcainfo 2019). There is a general tendency in the Balearic Islands of the right-wing parties to claim that Menorcan Catalan is a language different from Catalan, rather than a dialect; whereas the left-wing parties defend the union of the different dialects as Catalan. Hence, it can be argued that Alaior inhabitants seem more sympathetic to right-wing parties, they might want to distinguish Menorcan Catalan from central Catalan by exaggerating the stress-shift phenomenon.

## 5. DISCUSSION OF THE RESULTS

This section is concerned with the comparison of the results with prior studies and investigations on the stress-shifting pronominal encliticisation phenomenon. The findings of this study are directly in line with previous conclusions by Grimalt (2002) and Pons-Moll & Torres-Tamarit (2018). Speakers of Menorcan Catalan use stress shift pronominals on a general basis, despite gender or place of residence.

However, throughout the analysis of the results of this research, the findings confirm that there are some particular phenomena which have a strong influence on stress shift in Menorcan Catalan and which have not been studied in great depth by previous research: consonant gemination and stress clash.

With respect to the consonant gemination phenomenon, in the analysis it has been observed that this process is usual in Menorcan Catalan. Geminated consonants are frequent in Catalan, that is, the sound of a consonant is repeated and thus lengthened. The most well-known geminate consonant in Catalan is geminate <l·l> (*libèl·lula* ‘dragonfly’). However, there are other consonants which are geminated in Catalan, such as nasal sounds like /m/ and /n/: *emmagrir* ‘to lose weight’ and *innat* ‘innate’.

Gemination has been studied by different authors, such as Lacreu (2002) and Fabra (2008), but not exactly related to verbal forms with weak pronouns concerning alveolar sounds. These authors have argued that gemination is a frequent process whenever a dental alveolar sound is placed before lateral and nasal sounds (2002: 53; 2008: 24). For instance, the word *atleta* ‘athlete’, instead of being pronounced like [ət.‘le.tə], is pronounced with a geminate /l/: [əl.‘le.tə]. This means that alveolar sounds assimilate to the following consonant, in this case a nasal or lateral sound. The Institut d’Estudis Catalans (2016*c*) has also studied gemination but applied to the sounds /bl/ and /gl/. For instance, the word *poble* ‘town’ is pronounced [‘pə.b.tə].

In this study it has been observed that gemination is present in alveolar sounds, such as /n/ and /l/, but also in bilabial ones, like /m/. So, this aspect could be related to the sandhi phenomenon, which is a morphophonological phenomenon consisting of a “phonological change occurring at word boundaries when words are juxtaposed”, e. g. in encliticisation (Booij et al. 2000: 383) (see Wheeler 1986 for more information on sandhi in Catalan). Hence, it can be argued that the sandhi phenomenon could have an effect on the assimilation in the manner of articulation. The gemination produces a lengthening of these sounds (see (18), (19) and (20)).

- (18) /n/ comprar-ne [kum.prən.'nə]  
 (19) /l/ aguantar-lo [ə.ɣwən.təl.'lo]  
 (20) /m/ mirar-mos [mi.rəm.'moz]

In these examples it can be noticed that in infinitive forms, the sound /r/ is in contact with the sounds /n/, /l/ and /m/, a fact which makes the alveolar tap disappear, so that the other consonant increase their duration and convert into geminate sounds. This phenomenon has been investigated by Bonet & Lloret (1998: 149) and Pons-Moll (2007: 118) and it has been argued that this aspect should be called “regressive manner assimilation”. More specifically, according to Bonet & Lloret (1998), they claim that this assimilation of manner of articulation can only take place under the condition that the sounds are from the same manner of articulation, which they call “homorganicity of the involved elements” (1998: 149, my translation). However, in this study, it has been observed that not all assimilations occur in the same manner. It does happen between the sounds /r/ and /n/ and /l/, but not between /r/ (alveolar sound) and /m/ (bilabial sound) (see (20)). This makes me seriously question the definition of the phenomenon by Bonet & Lloret (1998). So, according to my data, assimilation also takes places in non-homorganic contexts.

Concerning stress clash, as seen above in Section 4, this phenomenon occurs when two stressed syllables are in contact. This process is said to be avoided by speakers, as it is not easy to pronounce two adjacent stressed syllables. This phenomenon has been observed in this study since some participants pronounced certain verbal forms with stress stability, which is not frequent in Menorcan Catalan. More specifically, in the form *ajudar-vos*, the stressed syllable is <dar> and in Menorcan Catalan the weak pronoun *vos* is also stressed. This means that there are two adjacent stressed syllables. Hence, some speakers of Menorcan Catalan might want to avoid this presence of stressed syllables as it challenges the pronunciation of the word and thus pronounce the weak pronoun without stress. That is, they pronounce the sequence of verb and enclitic with stress stability to avoid stress clash.

The Optimality Theory applied to verbal forms + enclitics assumes that all circumstances and contexts are the same. However, in this study it has been observed that this is not true because the stress clash phenomenon can occur. Usual stressed pronominals in Menorcan Catalan can turn into unstressed weak pronouns due to the contact of two stressed syllables. For this reason, it can be argued that there needs to be a constraint in the Optimality Theory to prevent this phenomenon.

As seen in Section 2.3 and answering the fourth research question I acknowledge that there are considerable discussions among researchers as to whether Balearic Catalan has true

clitics or weak pronouns. For this reason, a theoretical approach of this topic will be addressed in this discussion.

As I stated above, this discussion has been analysed from different perspectives, such as from phonological (see Pons-Moll & Torres-Tamarit 2018), morphological (see Ordóñez & Repetti 2006 and Nadeu et al. 2017), morphophonological (see Loporcaro 2000, Repetti 2013 and Manzini 2014) and based on syllable length approaches (see Hedgedorn 2009). My discussion, however, will be focused on the morphological side.

It has been observed that stress of the verbal forms is assigned depending on the enclitic used, a fact which varies among Romance languages and also among the different varieties of these languages. In particular, the analysis of Menorcan Catalan of this study has shown that on a general basis, speakers of this variety shift stress to the enclitic pronoun, so the stress is placed on the last syllable. However, whenever there is a clitic cluster or two enclitics, the stress can be placed either on the last syllable or on the penultimate, while still exhibiting stress shift (see (21)).

(21)	1 weak pronoun	poseu-vos	[pu.zəw.'vɔz]
	2 weak pronouns	mengeu-vos-ho	[mən.ʒəw.'vu.zo]
	2 weak pronouns	torneu-nos-la	[tur.nəw.mɔz.'lə]

Varieties from central Catalan, however, never place stress on the enclitics but on the verbal form (see (22)).

(22)	1 weak pronoun	poseu-vos	[pu.'zɛw.vɔz]
	2 weak pronouns	mengeu-vos-ho	[mən.'ʒɛw.vu.zu]
	2 weak pronouns	torneu-nos-la	[tur.'nɛw.nɔz.lə]

From these examples it can be observed that stress in central Catalan always stays stable and at the same position (see (20)), regardless of the number of enclitics used in the verbal form, whereas stress in Menorcan Catalan is placed at the enclitics and varies whenever there is more than one single pronoun (see (19)). For this reason, it can be argued that central Catalan has clitics, as its behaviour goes along with the definition of true clitics: “true clitics are systematically unstressed —i. e. they may not receive stress on their own, and they may not affect the position of stress when attached to a host, as they always are” (Nadeu et al. 2017: 124). Following the definition of Nadeu et al. (2017) for weak pronouns, Menorcan Catalan has them, since the stress of the verbal forms shifts whenever a pronoun is placed at the right

of the host and may vary with clitic clusters (2017: 124). Hence, true clitics are simple morphologically, whereas weak pronouns from Menorcan Catalan are more complex due to these inner properties of shifting stress.

## 6. CONCLUSIONS

This study has found that speakers of Menorcan Catalan are able to perceive the dialectal differences that set apart central Catalan and Menorcan Catalan concerning the phenomenon of stress-shifting pronominal encliticisation. Furthermore, the present findings confirm that there are noticeable differences between Ferreries and Alaior: Alaior uses way more stress shifted forms than Ferreries and shows more variability in the pronunciation of different vowels and in the use of different clitic clusters. The results have also shown that there are dissimilarities among the three age groups: the younger people tend to be more consistent in the use and acceptance of the shifted variant, due to a possibly larger linguistic awareness. The middle-aged and older groups show more use and more acceptance of the stable variant compared to the younger group. This observation shows the importance of the variable age in this study.

The limitations of the present study naturally include the lack of a large number of participants, a fact which is related to the lack of time for conducting this study. Even though I included more participants than previous studies did, a greater number of participants would build a representative sample for the research. My findings are based on nearly twenty participants per town but considering the total population of more than 4,000 and 9,000 in Ferreries and Alaior, respectively, this sample seems to count for little. For this reason, I believe that it would have been better to have more than 100 participants per town.

Another limitation of this study, which is related to the small quantity of participants, is that an equal number of female and male speakers should be considered. This fact would also give a more representative vision of the phenomenon and would help to see whether there are real differences in the use of stress shift between male and female speakers of Menorcan Catalan, a point which has not been addressed in this or any previous studies.

As mentioned in Section 5, future research should consider the potential effects of the stress clash phenomenon of stress-shifting pronominalisation more carefully, since until now it has rarely been analysed in Menorcan Catalan. Future studies could fruitfully explore this issue further by comparing it with the Optimality Theory. The OT, as seen above, suggests that all circumstances are the same, but it has been noticed that stress clash challenges this argument. For this reason, these future studies should consider the option of adding more contexts and constraints instead of studying words in isolation when analysing stress shift in enclitic pronominalisation since the actual analyses are not accurate when it comes to gemination and stress clash.



As also recommended above, another future research could examine the consonant gemination phenomenon. In this study it has been noticed that this process, along with stress clash, might affect the pronunciation of certain verbal forms and this fact can thus impact on stress placement and on the number of syllables. There are no previous investigations that focus on both stress-shifting pronominal encliticisation and consonant gemination on the Balearic Islands. Hence, it is important for future research to investigate this gap in Catalan phonological processes.

To sum up, this study has addressed the theoretical discussion on weak pronouns and true clitics and has eventually argued that Menorcan Catalan has weak pronouns because of their inner morphological properties of stress shifting. However, perhaps a new denomination should be considered since weak pronouns in Menorcan Catalan are not weak at all, but stressed.

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# Appendix

## A. Recording consent



### CONSENTIMENT D'ENREGISTRAMENT I TRACTAMENT DE DADES

Autoritzo l'alumna Júlia Florit, del grau en Llengües Aplicades de la Universitat Pompeu Fabra, a enregistrar les meves intervencions, en el marc del Treball de Final de Grau.

Així mateix, autoritzo que els meus enregistraments es puguin difondre, publicar i/o comunicar, de forma íntegra o parcial, amb finalitats de recerca i suport.

Júlia Florit com a responsable del Treball de Final de Grau es compromet a mantenir el meu anonimat en la transcripció escrita de l'enregistrament, en què substituirà el meu nom per un codi alfanumèric, i a eliminar qualsevol referència o interpel·lació directa a altres persones que pugui tenir lloc durant l'enregistrament.

Nom i cognoms: \_\_\_\_\_

DNI: \_\_\_\_\_

Signatura

Lloc: \_\_\_\_\_ Data: \_\_\_\_\_

## B. Survey

### 1. First part of the survey: translation task

#### Instructions for this part:

A continuació llegiràs unes frases en castellà. Les has de traduir i pronunciar en català i mentrestant, s'enregistrerà la teva veu.

Ho has de dir tal com ho diries en una conversa habitual amb família o amics.

Aquesta enquesta és anònima. Les dades obtingudes s'utilitzaran per a fins purament acadèmics.

Gràcies per la teva participació.

#### List of stimuli used in the first part of the survey:

1. ¡Ábreme la puerta, por favor!
2. ¡Vístete que llegamos tarde!
3. Ya he limpiado el pescado. Fríelo cuando quieras.
4. La librería, cuélgala bien.
5. Todo lo que me has explicado, cuéntaselo también a Juan.
6. Todos los vasos están sucios: lávalos, por favor.
7. Las llaves, cógelas cuando salgas.
8. ¡Lavadnos la ropa!
9. ¡Poneos la chaqueta!
10. Juan y María te dejaron 2500 euros, devuélveles el dinero.
11. Si quieres caramelos, coge unos cuantos.
12. Si tienes ganas de hacerlo, hazlo.
13. Si quieres ir, ve ya.
14. Suelo peinarme antes de ir a dormir.
15. Deberías cortarte las uñas.
16. Este bote de pintura pesa mucho y me cuesta aguantarlo.
17. Recuerda que tienes que llamarla más tarde.
18. Cuando llegue tu hermano, deberás abrirle la puerta.
19. Estos paquetes pesan mucho y me cuesta aguantarlos.
20. Traigo las camisas para plancharlas.
21. Estos chicos no paran de mirarnos.
22. Siempre hemos querido ayudaros con el trabajo.
23. ¿Quieres comprarles un regalo?



24. María ha comprado gambas, me gustaría comprar yo también.
25. ¿Estás seguro de que quieres hacerlo?
26. Me gustaría ir.
27. Si tanto te gusta, pónitelo.
28. ¡La camisa, devuélvenosla limpia!
29. ¿Ya has terminado los ejercicios? Enseñámelos.
30. No he sido capaz de acabármelo.
31. Hay muchas patatas; no sé si podréis coméros las todas.
32. Cuando tengas los papeles, ¿podrás mandármelos?

## 2. Second part of the survey: acceptability judgements test

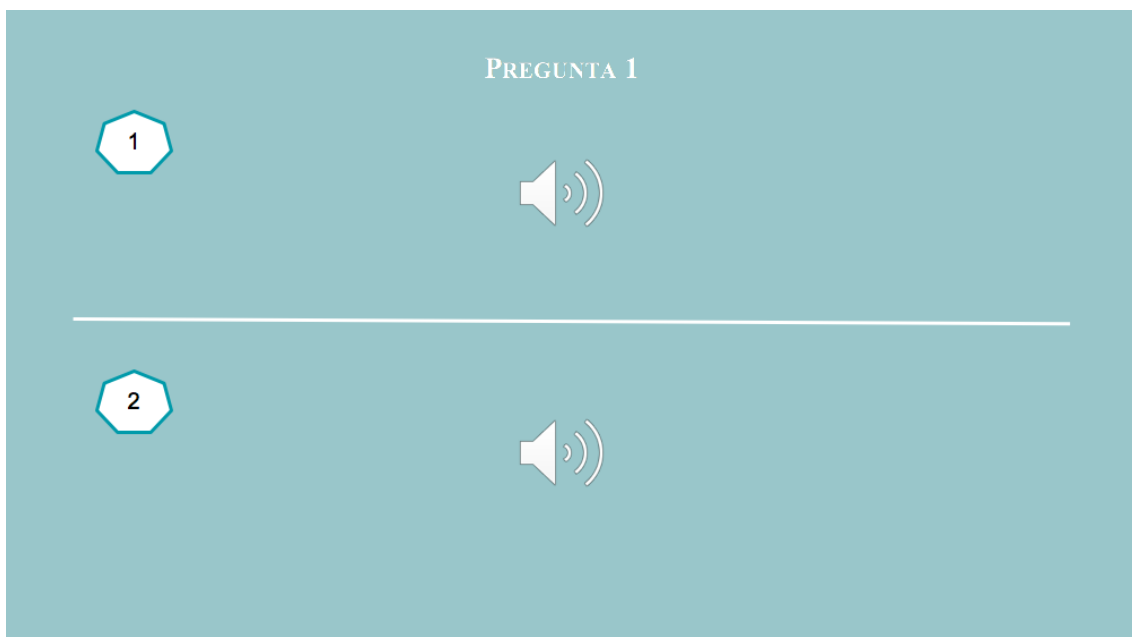
### Instructions for this part:

A continuació trobaràs deu diapositives. A cada una hi haurà dos, tres o quatre àudios i hauràs d'escollir el que et soni més natural en el teu dialecte. És a dir, l'opció que seria més probable que tu diguessis.

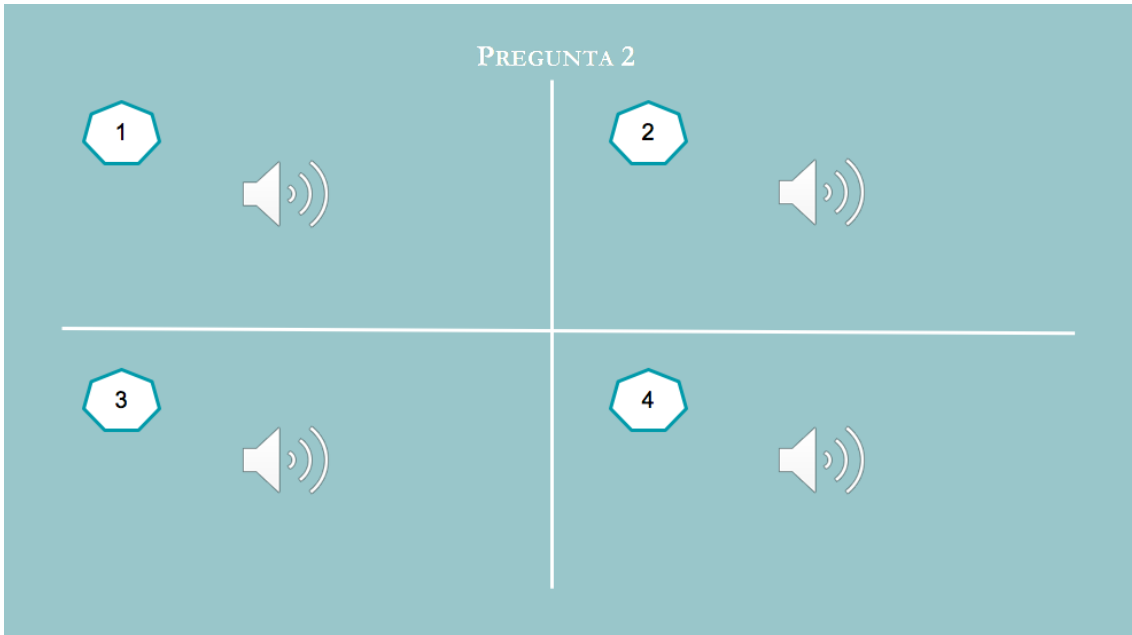
Aquesta enquesta és anònima. Les dades obtingudes s'utilitzaran per a fins purament acadèmics.

Gràcies per la teva participació.

### Example images of the display for this part:



**Figure 16.** Image of the first question of the acceptability judgements test



**Figure 17.** Image of the second question of the acceptability judgements test, with four possible options.

If you wish to access the recordings used in this part of the survey, see Appendix C.

### **C. Recordings of the survey**

Both the recordings of speakers in the first part of the survey and the recordings I showed the participants in the acceptability judgements test can be accessed via this link:

<https://drive.google.com/drive/u/0/folders/1w8meIdi1T9jyzBHPkV9sdxGktwQT01c>

## D. Total results of the survey

**Table 9.** List of stimuli and enclitic transcriptions used by participants in the first part of the survey

Stimuli	Catalan form	Enclitic transcriptions used by participants
ábreme	obra'm	[u.'βrim] - [u.βri.'mɛ] - [ 'ə.βrəm]
vístete	vesteix'te	[vəz.'tit] - [vəz.ti.'tɛ] - [vəz.'tɛf.tɛ]
fríelo	fregeix-lo	[frə.'zil] - [frə.'ʒəf.lu]
cuélgala	penja-la	[pən.ʒə.'lɛ] - [pən.ʒə.'lɛ] - [ 'pen.ʒə.lə]
cuéntaselo	explica-li, conta-li	[əks.pli.kə.'li] - [kun.tə.'li] - [əks.'pli.kə.li] - [ 'kon.tə.li]
lávalos	renta'ls, fes-los net	[rən.'təlz] - [ 'fəlz] - [rən.'tɛlz] - [ 'fɛlz] - [ 'ren.təlz] - [ 'fəs.luz]
cógelas	agafa-les	[ə.ɣə.fə.'ləz] - [gə.fə.'ləz] - [ə.ɣə.fɛ.'ləz] - [gə.fɛ.'ləz] - [ə.'ɣa.fə.ləz]
lavadnos	renteu-nos, feis-nos net	[rən.təw.'noz] - [rən.təw.'noz] - [ 'fəiz] - [ 'feiz] - [rən.'təw.noz]
poneos	poseu-vos	[pu.zəw.'voz] - [pu.'zɛw.voz]
devuélveles	torna-lis	[tuɾ.nə.'liz] - [ 'toɾ.nə.liz]
coge	agafa'n	[ə.ɣə.'fən] - [gə.'fən] - [ə.ɣə.'fɛn] - [gə.'fɛn] - [ə.'ɣa.fən]
hazlo	fes-ho	[ 'fɛw] - [ 'fɛ.zu]
ve	ves-hi	[ve.'zi] - [ 've.zi]
peinar-me	pentinar-me	[pən.ti.n:əm.'mə] - [pən.ti.n:əm.'mɛ] - [pən.ti.'nar.mə]
cortarte	tallar-te	[tə:.'ət.'tə] - [tə:.'ət.'tɛ] - [tə'lar.tə]
aguantarlo	aguantar-lo	[ə.ɣwən.təl.'lo] - [ɣwən.təl.'lo] - [ə.ɣwən.'tar.lo]
llamarla	telefonar-la, cridar-la	[tə.lə.fu.nəl.'lə] - [tə.lə.fu.nər.'lə] - [kri.ðəl.'lə] - [kri.ðər.'lə] - [tə.lə.fu.nəl.'lɛ] - [tə.lə.fu.nər.'lɛ] - [kri.ðəl.'lɛ] - [kri.ðər.'lɛ] - [tə.lə.fu.'nar.lə] - [kri.'ðar.lə]

<b>abrirle</b>	obrir-li	[u.βril. 'li] - [u. 'βrir.li]
<b>aguantarlos</b>	aguantar-los	[ə.ɣwən.təl. 'los] - [ɣwən.təl. 'los] - [ə.ɣwən. 'tar.los]
<b>plancharlas</b>	planxar-les	[plən.ʃəl. 'ləs] - [plən.ʃəl. 'ləs] - [plən. 'ʃar.ləs]
<b>mirarnos</b>	mirar-nos	[mi.rəm. 'mos] - [mi.rən. 'nos] - [mi. 'rar.nos]
<b>ayudaros</b>	ajudar-vos	[ə.ʒu.ðə. 'vos] - [ə.ʒu. 'ðar.vos]
<b>comprarles</b>	comprar-los	[kum.prə. 'lis] - [kum. 'prar.los]
<b>comprar</b>	comprar-ne	[kum.pran. 'nə] - [kum.pran. 'nɛ] - [kum. 'prar.nə]
<b>hacerlo</b>	fer-ho	[fe. 'ro] - [fə. 'ro] - ['fe.ru]
<b>ir</b>	anar-hi	[ə.nə. 'ri] - [nə. 'ri] - [ə. 'na.ri]
<b>póntelo</b>	posa-t'ho	[pu.ze. 'to] - [pu.ze. 'təw] - [pu.ze. 'təw] - ['po.za.tu]
<b>devuélvenosla</b>	torneu-nos-la	[tur.nəw.moz. 'lə] - [tur.nəw.moz. 'lɛ] - [tur. 'nɛw.noz.lə]
<b>enséñamelos</b>	mostra-me'ls, ensenyà-me'ls	[muz.trə. 'mɛls] - [ən.sə.ɲə. 'mɛls] - [muz.trə. 'mɛls] - [ən.sə.ɲə. 'mɛls] - [məz. 'trə.mɛls]
<b>acabármelo</b>	acabar-m'ho	[ə.kə.βəm. 'mɔ] - [ə.kə.βəm. 'məw] - [ə.kə.βəm. 'mɛw] - [ə.kə. 'βar.mɔ]
<b>coméros las</b>	menjar-vos-les	[mən.ʒəð.vu. 'ləs] - [mən.ʒə.vuz. 'ləs] - [mən.ʒəð.vuz. 'ləs] [mən.ʒəð.vu. 'lɛs] - [mən.ʒə.vuz. 'lɛs] - [mən.ʒəð.vuz. 'lɛs] - [mən.ʒar. 'vuz.ləs]
<b>mandármelos</b>	enviar-me'ls	[ən.vi.əðm. 'mɛls] - [ən.viəm. 'mɛls] - [ən.viəðm. 'mɛls] - [ən.viəm. 'mɛls] - [ən.vi. 'ar.mɛls]