

John Benjamins Publishing Company



This is a contribution from *Romance Linguistics 2013. Selected papers from the 43rd Linguistic Symposium on Romance Languages (LSRL), New York, 17–19 April, 2013.*
Edited by Christina Tortora, Marcel den Dikken, Ignacio L. Montoya and Teresa O'Neill.
© 2016. John Benjamins Publishing Company

This electronic file may not be altered in any way.

The author(s) of this article is/are permitted to use this PDF file to generate printed copies to be used by way of offprints, for their personal use only.

Permission is granted by the publishers to post this file on a closed server which is accessible to members (students and staff) only of the author's/s' institute, it is not permitted to post this PDF on the open internet.

For any other use of this material prior written permission should be obtained from the publishers or through the Copyright Clearance Center (for USA: www.copyright.com).

Please contact rights@benjamins.nl or consult our website: www.benjamins.com

Tables of Contents, abstracts and guidelines are available at www.benjamins.com

The phonology of postverbal pronouns in Romance languages*

Lori Repetti

Department of Linguistics, Stony Brook University (SUNY)

In many Romance varieties, the verb in imperative verb + (postverbal) pronoun phrases retains primary stress: Italian/Spanish: [kómpra]/[kómpra-melo] ‘buy!’/‘buy me it!’. However, in others varieties, stress in these phrases may be realized on a different syllable: [kompra-meló], [kompra-mélo], [kompra-mélozo]. In this paper, I address questions that have puzzled linguists for some time: Why is there a stress shift when enclitic pronouns are added to the imperative verb? How is the position of the stressed syllable determined? I propose that many factors are involved, including morpho-syntactic factors (the presence of a weak or a clitic pronoun, which are prosodized differently), phonological processes (the mapping of syntactic to prosodic structure), and phonetic processes (tonal association to metrically prominent syllables).

1. Introduction

In Italian and Spanish imperative verb + (postverbal) pronoun phrases, the verb retains primary stress.

- (1) Italian/Spanish: [kómpra]/[kómpra-melo] ‘buy!’/‘buy me it!’¹

* This paper reports on collaborative work conducted with Francisco Ordóñez (Stony Brook University), Miran Kim (Korea University), and Emily Romanello (Stony Brook University). I would like to thank them, the audience at LSRL 43, two anonymous reviewers, and the NSF for grant #0617471 awarded to Lori Repetti and Francisco Ordóñez which allowed us to conduct the field research and build the database (Repetti & Ordóñez 2011) upon which much of this research is based.

1. All imperative verbs presented in this paper are 2sg, unless otherwise noted, and all third person pronouns are masculine, unless otherwise noted. Furthermore, I indicate the boundary between a verb and pronoun, or between two pronouns, with a dash.
2. Numbers after a word or phrase, such as (31_23) for Massa di Maratea, indicates the speaker number (#31) and utterance number (#23) found in the *Clitics of Romance Languages* database (Repetti & Ordóñez 2011).

In other Romance varieties, stress in these phrases may be realized on the antepenultimate syllable (3b), the penultimate syllable (2)–(3a), or the final syllable (4).

Penultimate stress shift is common in Catalonia, southern Italy, and Sardinia (2).

- (2) stress shift to penultimate syllable:
- Massa di Maratea (Basilicata): [vénni]/[venn-illu] (31_23)² ‘sell!’/‘sell it!’
 - Anzi (Basilicata): [dá]/[da-mmídǰə] (32_13a) ‘give!’/‘give me them’
 - Formentera (Balearic Islands): [púrtə]/[purtə-mólə] (50_2) ‘bring!’/‘bring me it’
 - Siliqua (Sardinia): [beŋǰéj]/[beŋǰej-mídǰu] (21_59) ‘sell.2PL!’/‘sell.2PL me it!’

In some Sardinian varieties, we find stress realized on the antepenultimate or penultimate syllable in these constructions. If there is a final epenthetic (copy) vowel (underlined in the examples) added to avoid a word-final consonant, such as the plural /s/ marker, stress is realized on the antepenultimate syllable. If there is not a final epenthetic vowel, stress is realized on the penultimate syllable (Kim and Repetti 2013).

- (3) stress shift to (ante)penultimate syllable (Siliqua, Sardinia):
- penultimate stress:
[beŋǰej-mídǰu] (21_59) ‘sell.2PL me it!’ (=2d)
 - antepenultimate stress with final epenthetic (copy) vowel:
[beŋǰej-míduz] (21_56) ‘sell.2PL me them!’

Another stress pattern involves stress shift to the final syllable, attested in some varieties of Catalan, Ligurian, and Gascon (4).

- (4) stress shift to final syllable:
- Majorca (Balearic Islands): [ómpli]/[ompli-lozmə] (56_26) ‘fill!’/‘fill them for me!’
 - Pigna (Liguria): [dá]/[da-umé] (93_1b) ‘give!’/‘give it to me!’
 - Vallée d’Ossau (Pyrénées-Atlantiques): [baja-uzí] (82_33) ‘give it to them!’

These data raise a number of questions: Why is there a stress shift when enclitic pronouns are added to the imperative verb? How is the position of the stressed syllable determined? These questions have long intrigued linguists and have been addressed within many theoretical frameworks. In this paper, I propose that no single module of the grammar (just the phonology, just the syntax, etc.) can be responsible for the stress patterns observed. Instead, they are the result of various interacting processes: phonological processes, morpho-syntactic processes, and phonetic processes.

This paper is organized as follows. I begin by discussing the segmentation of these phrases (Section 2), and I then review the phonological approaches that have been proposed to account for the data (Section 3). I show that a purely phonological approach is untenable since morpho-syntactic factors are at play (Section 4). A model incorporating different types of pronouns (weak and clitic) is adopted to account for

the morpho-syntactic facts: some pronouns traditionally referred to as “clitics” are, in fact, “weak.” I present a prosodic analysis of these two types of pronouns that can account for the phonological patterns (Section 5). I conclude the paper in Section 6.

2. Segmentation

Before we proceed with an analysis of stress shift, the topic of segmentation needs to be addressed. In the data examined in this paper, it is not always clear whether a particular segment belongs to one pronoun or the adjacent one (5a), or where the verb ends and the clitic begins (5b).

- (5) a. Siliqua (Sardinia): [bɛŋɔej-míɔɔu] ‘sell.2PL me it!’
 i. /bɛŋɔej-mí-ɔɔu/
 ii. /bɛŋɔej-m-íɔɔu/
 b. Massa di Maratea (Basilicata): [vɛnníllu] ‘sell it!’
 i. /vɛnní-llu/
 ii. /vɛnn-íllu/

Segmentation varies from variety to variety, and some research has been done on Neapolitan segmentation with regard to structures similar to (5a). In Neapolitan phrases like [pɔrtatíllə] ‘bring yourself it’, is the /i/ part of the first pronoun (/pɔrta-tí-llə/) or the second pronoun (/pɔrta-t-íllə/)? Vowel quality and historical evidence support the latter. Bafle (1993, 1994) points out that the quality of the stressed vowel depends on the gender of the accusative pronoun: [pɔrtatíllə] ‘bring yourself it.MAS’ ~ [pɔrtatéllə] ‘bring yourself it.FEM’: we find /i/ if the pronoun is MAS, and /é/ if it is FEM. The quality of the stressed vowel in these structures is determined by the quality of the historical final vowel (final /u/ and /i/ for MAS; final /a/ and /e/ for FEM). A final high vowel triggered raising of the stressed vowel in a type of vowel harmony called *metaphony*. If the original unstressed final vowel of the pronoun was [-high] (i. e., /a/ FEM.SG or /e/ FEM.PL) the preceding stressed vowel evolved in the usual way without raising; i. e., Latin *ī* > [e], so pronoun *illa* > [élla]. If, instead, the final vowel was [+high] (i. e., /u/ MAS.SG or /i/ MAS.PL), the preceding stressed vowel underwent metaphony and was raised: *illi* > **élli* > [ílli]. Since this process is no longer productive, we can assume that the stressed vowel is now part of the accusative pronouns: /íllə/ MAS.SG/PL and /éllə/ FEM.SG/PL. A second piece of evidence supporting the segmentation /pɔrta-t-íllə/ comes from the history of these forms (Bafle 1993, 1994), which derive from Late Latin structures like *tē+ illu*, with elision of /e/: *t’ illu*. (Note that historically Latin stressed *ē* and *ī* both evolved to /e/). These two observations support the segmentation in (5a_{ii}).

To the best of my knowledge, the segmentation of the structure in (5b) has not been addressed in the literature. If we examine the quality of the vowel in question, i.e.,

the /i/ in (5b), we find that in some cases it is of the same quality as the theme vowel of the verb.

(6)

	theme vowel: /a/	theme vowel: /e/~i/
a. Cagliari (Sardinia)	[pettináɖus] (3_42) 'comb them!'	[beŋɖíɖus] (3_20) 'sell them!'
b. Milis (Sardinia)	[kompɔɾáɖusu] (14_22a) 'buy them!'	[beŋɖíɖuzu] (14_10) 'sell them!'
c. Massa di Maratea (Basilicata)	[piʎʎállu] (31_27b) 'take it!' [akkattállu] (31_28) 'buy it!'	[venníllu] (31_23) 'sell it!' [vennílla] (31_25) 'sell it.FEM!'

In (6a) the stressed /á/ of [pettináɖus] and the stressed /i/ of [beŋɖíɖus] cannot both be associated with the pronoun (i.e., /áɖus/ and /íɖus/), since the pronoun is the same in the two examples: MAS.PL.ACC. In the former, the theme vowel of the verb is /a/, supporting the analysis of the stressed /á/ as part of the verb, and in the latter, the theme vowel is unstressed /e/~i/, supporting the analysis of the stressed /i/ as part of the verb, as in (5bi). Further support for this analysis comes from data in which the vowel in question is not the theme vowel, but part of the inflectional suffix of the verb. For example, in Massa di Maratea (Basilicata), first person plural imperatives end in /mu/, and in stress shift contexts, the /u/ is stressed, regardless of the nature of the following pronoun: [vennemúllu] (31_34) 'let's sell it.MAS!'; [vennemúlla] (31_36) 'let's sell it.FEM!'; [vennemúlli] (31_35) 'let's sell them.MAS!'; [vennemúlli] (31_37) 'let's sell them.FEM!'. These phrases must be segmented as /vennemu-llu/, /vennemu-lla/, and /vennemu-lli/.

In other dialects, the patterns are more complicated. In San Leucio del Sannio (Campania) the quality of the stressed vowel at the boundary of the verb and the pronoun may depend on two factors: the quality of the theme vowel (as in (6)) and the gender of the pronoun (as in the Neapolitan data above). If the theme vowel is /a/, that vowel surfaces regardless of the pronoun that follows: [telefonálla] (33_67) 'call her!'; [telefonállu] (33_68) 'call him!'. If the theme vowel is not /a/, the quality of the stressed vowel varies depending on the gender of the accusative pronoun. A masculine pronoun (either singular or plural) has /i/ in this context ([vənníllə] (33_28b) 'sell it.MAS!'; [vənnílli] (33_29b) 'sell them.MAS!'), while a feminine pronoun (either singular or plural) has /é/ in this context ([vənnélla] (33_30b) 'sell it.FEM!'; [vənnéllə] (33_31b) 'sell them.FEM!'). The reason for this difference in vowel quality has to do with metaphony, as with the Neapolitan data discussed above.

The San Leucio data suggest that there are two different segmentations possible—/telefoná-lla/ and /vənn-élla/—and the choice between the two is determined by an implicational hierarchy. If the theme vowel is /a/, it is stressed (/telefoná-lla/); if it is not /a/, the stressed vowel is part of the pronoun (/vənn-élla/). How can we incorporate

this observation into a unified analysis of segmentation? We can posit for the pronoun a lexical form with an initial vowel (for example, /ella/), and for the verb a lexical form with a final vowel. In the verb + pronoun phrase, the initial vowel of the pronoun is adjacent to the final vowel of the verb: /telefona/ + /ella/, /venni/ + /ella/. In hiatus contexts, a series of phonological and morphological factors decide which (if any) vowel is deleted (see Garrapa 2011). In San Leucio /a/ + vowel, or /u/ + vowel sequences, the /a/ and /u/ are retained, and the initial vowel of the pronoun is elided: /telefona/ + /ella/ > [telefona-lla]; however, in /i/ + vowel, or /e/ + vowel sequences, the final vowel of the verb is elided, and the initial vowel of the pronoun realized: /venni/ + /ella/ > [vənni-ella]. For clarification purposes, the elided vowel may be indicated as “v”: /telefona-ʋlla/, /vənni-ella/.

3. Phonological Approaches

The phonological motivation for the patterns described in (2), i.e., stress shift to the penult, has been discussed widely in the Romance literature, analyzed within many theoretical frameworks (rule-based, Lexical Phonology, Prosodic Phonology, Optimality Theory, etc.), and can be summarized as follows: the stress shifts to the penultimate syllable to repair a suboptimal metrical structure (Anderson 2005; Bafle 1993, 1994; Bonet 2009; Kenstowicz 1991; Klavans 1995; Loporcaro 2000; Monachesi 1996; Nespor and Vogel 1986; Peperkamp 1997; Torres-Tamarit 2010; Vogel 2009). The argument roughly goes as follows. Many Romance languages have what is called the “three-syllable window” of stress assignment (i.e., stress falls on one of the final three syllables of the word), and the stressed syllable in forms like /kómpra-melo/ falls outside of the “three-syllable window”. Languages like Spanish and Italian tolerate this suboptimal structure (1), but others use a repaired form with stress on the penultimate syllable: /kompra-mélo/ (2). (Note that the repair does not result in a form with antepenultimate stress, except in those Sardinian cases in (3b) discussed in §1.) The languages that repair suboptimal forms fall into two groups: those that tolerate antepenultimate stress in these structures, and those that do not. The latter includes varieties like San Leucio del Sannio (Campania), in which antepenultimate stress is (optionally) banned in verb + enclitic structures: if the addition of a single enclitic or an enclitic cluster would result in antepenultimate stress (or pre-antepenultimate stress), a form with stress on the penult is instead used (7)–(9). (Note, however, that antepenultimate stress is tolerated lexically as in (8a).)³

3. *Raddoppiamento sintattico* (RS), or the gemination of an initial consonant when preceded by a stressed vowel across certain morpho-syntactic boundaries, has been invoked to account for the geminate consonant; however, Bafle (1993, 1994) shows that the consonant length

- (7) San Leucio del Sannio (Campania) (Repetti and Ordóñez 2011; Iannace 1983)
- | | | |
|----|------------------------------|---------------|
| a. | [vínna] | ‘sell!’ |
| b. | *[vínna-lə]; [vənn-ílla] | ‘sell it!’ |
| c. | *[vínna-mələ]; [vənnə-mílla] | ‘sell me it!’ |
- (8) San Leucio del Sannio (Campania) (Repetti and Ordóñez 2011; Iannace 1983)
- | | | |
|----|-----------------------------------|--------------------|
| a. | [péttəna] | ‘comb!’ |
| b. | *[péttəna-lə]; [pəttəna-ílla] | ‘comb him!’ |
| c. | *[péttəna-mələ]; [pəttəna-mmélla] | ‘comb her for me!’ |
- (9) San Leucio del Sannio (Campania) (Repetti and Ordóñez 2011; Iannace 1983)
- | | | |
|----|--------------------------|---------------|
| a. | [dá] | ‘give!’ |
| b. | [dá-mmə] | ‘give me!’ |
| c. | *[dá-mmələ]; [da-mmílla] | ‘give me it!’ |

Other Romance varieties, such as Neapolitan, allow antepenultimate stress in these contexts (10b), but not pre-antepenultimate stress (10c).

- (10) Neapolitan (Campania) (Bafile 1993, 1994)
- | | | |
|----|------------------------------|----------------------|
| a. | [pórta] | ‘bring!’ |
| b. | [pórta-lə] ⁴ | ‘bring it!’ |
| c. | *[pórta-tələ]; [pórta-tílla] | ‘bring yourself it!’ |

While this explanation accounts neatly for the San Leucio data and the Neapolitan data in (10), it only works for Neapolitan if the verb has penultimate stress. If, instead, we examine a verb with final stress or antepenultimate stress, the explanation breaks down. We expect antepenultimate stress to be tolerated in these phrases in Neapolitan, as in (10b); however, this is not always what we find. Neapolitan does not tolerate antepenultimate stress in these phrases if the verb is monosyllabic (i.e., it has final stress) (11) (Bafile 1993, 1994; Kenstowicz 1991; Peperkamp 1997).

- (11) Neapolitan (Campania) (Bafile 1993, 1994; Peperkamp 1997)
- | | | |
|----|------------------------|-------------------|
| a. | [fá] | ‘do!’ |
| b. | [fá-lla] | ‘do it!’ |
| c. | *[fá-tələ]; [fa-tílla] | ‘do yourself it!’ |

of the clitic in Neapolitan is not the result of a productive phonological process (see also Peperkamp 1997). There is strong evidence that this claim also holds for most other varieties considered in this paper (Loporcaro 1997). We will not address consonant length in this paper.

4. Optional stress shift in this context is also attested: /astúta/ + /la/ > [astúta-la]~[astutá-lla] ‘turn it off!’ (Ledgeway 2009, 34). See §6 for discussion.

Equally unexpected, Neapolitan allows pre-antepenultimate stress in phrases containing a verb with antepenultimate stress followed by a pronoun (12b) (Bafile 1993, 1994; Kenstowicz 1991; Peperkamp 1997).

- | | | |
|------|------------------------------------|-------------------------------------|
| (12) | Neapolitan (Campania) | (Bafile 1993, 1994; Peperkamp 1997) |
| | a. [pétina] | ‘comb!’ |
| | b. [pétina-lə] ⁵ | ‘comb them!’ |
| | c. *[pétina-tələ]; [pettina-tilla] | ‘comb yourself them!’ |

In order to account for the ungrammaticality of the form in (11c) with antepenultimate stress, and the surprising acceptability in the form in (12b) with pre-antepenultimate stress, it has been proposed that these forms are in some way exceptional and are marked in the lexicon (Bafile 1993, 1994; Kenstowicz 1991; Peperkamp 1997). Others have noticed that stress assignment is sensitive to the number of enclitics, whereby in varieties like Neapolitan stress shift takes place with two enclitics but not with one, and have accommodated this fact within the frameworks of metrical and prosodic phonology (Monachesi 1996; Peperkamp 1997). We will see in the next section that a purely phonological approach, even with ad hoc accommodations, cannot handle the facts once all of the data are considered. But first we will briefly examine stress shift to the antepenultimate and final syllables.

The analysis of stress shift to the antepenultimate syllable in Sardinian can be accounted for in the same way as stress shift to the penultimate syllable, modulo the paragogic vowel found after a phrase-final consonant. The epenthetic final vowel is not involved in stress assignment either because it is invisible to metrical processes, or because it is inserted after metrical structure has been established (3) (Kim and Repetti 2013).

Stress shift to the final syllable in imperative phrases is problematic for any phonological approach since final stress is not the unmarked stress patterns in these languages (4). This type of stress shift has been addressed in Argentinian Spanish, in which imperatives are optionally pronounced either with stress on the verb or with stress on the final vowel of the enclitic(s): [dámelo] ~ [dameló] (Colantoni, Cuervo, and Hualde 2010; Moyna 1999; Huidobro 2005). Given the optionality of the phenomenon, most researchers have addressed the question of the semantic motivation for stress shift, but some phonological issues have also been raised, including the prosodic constraints involved, the type of stress (whether the shifted stress is primary or secondary), and why the stress shifts to the final vowel. As with the exceptional Neapolitan cases discussed above, ad hoc constraints resulting in final stress are invoked.

5. Forms with the expected stress shift are also attested: /frávəka/ + /lə/ > [frávəka-lə] ~ [fravəká-lə] ‘build it!’ (Ledgeway 2009, 34). See Section 6 for discussion.

4. Morpho-Syntactic Factors

Despite the attempts to account for these cases of stress shift within a phonological framework, when the full range of data is taken into consideration, we see that a purely phonological approach is untenable (Ordóñez and Repetti 2006, 2008). For example, the type of pronoun may affect stress shift: in Lucanian a single 3rd person postverbal pronoun is involved in stress shift, but a single 1st/2nd person pronoun is (optionally) not (Gioscio 1985; Lüdke 1979; Ruggieri and Batinti 1992). In Cabras (Sardinia) we find 3rd person pronouns involved in penultimate shift ([telefɔná-dì] ‘call him/her/them!’ 2_27), and 1st/2nd person pronouns involved in final shift ([telefɔna-zì] ‘call us!’ 2_28).

The relative order of the pronouns in a cluster may be correlated with the type of stress shift (i.e., penultimate or final stress shift). With ACC-DAT order of enclitics, we never find penultimate stress shift, only final stress shift.

- (13) (=4) ACC-DAT order of enclitics and final stress
- a. Majorca (Balearic Islands): [ómpli]/[ompli-lozmá] (56_26) ‘fill!’/‘fill them for me!’
 - b. Pigna (Liguria): [dá]/[da-umé] (93_1b) ‘give!’/‘give it to me!’
 - c. Vallée d’Ossau (Pyrénées-Atlantiques): [baja-uzì] (82_33) ‘give it to them!’

The number of enclitics may correlate with the presence/absence of stress shift. A single postverbal pronoun in Neapolitan does not affect the position of stress, regardless of how far the stressed syllable is from the end of the word: [fá-llə] ‘do it!’, [pórta-lə] ‘bring it!’, [pétina-lə] ‘comb them!’. However, a postverbal pronoun cluster always triggers stress shift: [fa-ttíllə] ‘do yourself it!’, [pórta-tíllə] ‘bring yourself it!’, [pétina-tíllə] ‘comb yourself them!’.

Additionally, the verb form may be correlated with the presence/absence of stress shift: in many varieties, 2SG imperatives with enclitics undergo stress shift, while 1PL imperatives do not. For example, in the dialect of Albano di Lucania (Basilicata), a 2SG imperative verb + MAS.SG.ACC enclitic undergoes stress shift, while a 1PL imperative verb + MAS.SG.ACC enclitic does not (Romanello and Repetti 2014).⁶

- (14) Albano di Lucania (Basilicata) (Manzini and Savoia 2005)
- [cáma] ~ [cam-íllə] ‘call him!’
 [camámmə] ~ [camámmə-lə] ‘call.1PL him!’

6. The verb form is correlated not only with the presence/absence of stress shift, but also with the lexical form of the enclitic pronoun. For example, in Anzi (Basilicata) the MAS.PL.ACC enclitic is realized either as [íddə] or as [lə]. The former is used with 2SG imperatives ([vənn-íddə] ‘sell.2SG them!’), while the latter is found with 1PL imperatives ([vənní:mə-lə] ‘let’s sell them!’) (Romanello and Repetti 2014).

The constraints on stress shift outlined above are not phonological, but instead are morpho-syntactic in nature: the type of pronouns, the order of pronouns in a cluster, the number of pronouns, the form of the verb. A purely phonological approach cannot handle these data. The phonology should not care if a syllable is associated with the 1st vs. 2nd/3rd person form of the pronoun, or the 2SG vs. 1PL form of the verb, nor should it care if a syllable is associated with a DAT vs. ACC pronoun, or indeed a pronoun vs. verb suffix.

It has been proposed that two different types of morpho-syntactically distinct pronouns are involved in these encliticization processes: true clitics and weak pronouns (Ordóñez and Repetti 2006, 2008, 2014). A number of diagnostics has been proposed for distinguishing between clitic and weak pronouns. These diagnostics are syntactic, morphological, and phonological in nature. Syntactically, weak pronouns are described as syntactically lower than clitic pronouns, and they land in a Spec position while clitics land in a head position. Weak pronouns are morphologically more complex than clitic pronouns, and weak pronouns can be stressed, while clitics cannot (Cardinaletti and Starke 1999; Cardinaletti and Repetti 2008; Ordóñez and Repetti 2006, 2008, 2014). Based on these studies, I adopt the following morpho-syntactic tests for a pronoun's status as a clitic or weak pronoun.

- (15) diagnostics for clitic pronoun vs. weak pronoun
- 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.

As shown elsewhere (Ordóñez and Repetti 2006, 2008, 2014), some Romance postverbal pronouns (including the partitive, but also the locative) meet the criteria of weak elements. The morpho-syntactic evidence has been detailed in Ordóñez and Repetti (2006, 2008, 2014), namely, in mixed clusters, the order of pronouns is clitic + weak, some postverbal pronouns land in a Spec position while others are in a head position, and those that land in Spec are morphologically more complex. Crucially, these are precisely the pronouns that can be stressed, as predicted by the phonological diagnostic of weak pronouns proposed by Cardinaletti and Starke (1999).

How can we accommodate the morpho-syntactic factors involved in stress shift with the weak vs. clitic pronoun proposal? The type of pronoun may affect stress shift because two types of pronouns are involved: weak pronouns affect stress shift (they consist of a foot), while clitics do not (they do not consist of a foot). The number of postverbal pronouns may affect stress shift because in some dialects imperatives can attract at most one clitic, so when two pronouns are used, the lower probe attracts a weak pronoun (Ordóñez & Repetti 2014). The verb form may affect whether or not

there will be stress shift because certain verb forms (i.e. inflectional projections) host weak pronouns while others host clitics (Ordóñez and Repetti 2014).⁷

In the next section I investigate how weak pronouns vs. clitics are incorporated into prosodic structure, accounting for the stress shift facts.

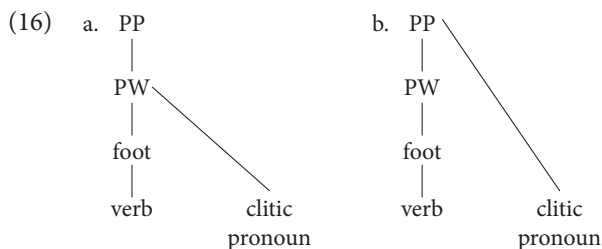
5. Prosodic Analysis of Verb + Clitic/Weak Pronoun(s)

How can clitic and weak pronouns be incorporated into a prosodic analysis? The constraints regulating the syntax to prosody mapping proposed by Selkirk (1995) include alignment constraints on prosodic words (PWs) and lexical words (i.e., syntactic units). Since clitics are function words, not lexical words, those alignment constraints do not apply to them. Weak pronouns are also function words, but they have not yet received as thorough a prosodic investigation as clitics. We will assume that weak pronouns, as opposed to clitics, have prosodic structure associated with them lexically, namely, a foot. While a full constraint-based analysis is beyond the scope of this paper, the approach using alignment constraints is easily captured in the representations below. In the following paragraphs, we will see how function words that consist only of a segment (or segments) but no metrical structure (i.e., clitic pronouns) are mapped to prosodic structure, and how function words that consist of segments *and* foot structure (i.e., weak pronouns) are incorporated into prosodic structure. In neither case is the foot structure of the verb altered, thanks to output-output correspondence constraints; in other words, in both cases the pronoun is incorporated into prosodic structure above the level of the verb's foot structure.

We begin with clitics. Since clitics are usually defined as *unstressed* elements (Halpern 1998), we can assume they are not incorporated into a foot. This means that clitics are adjoined to prosodic structure at a higher level than the foot, either the Prosodic Word (PW) level or the Phonological Phrase (PP) level. (I do not consider a representation with a recursive PW since I have found no evidence supporting that structure.) In the data under consideration here, this means that clitics are incorporated into the verb phrase as in (16a) or (16b).⁸

7. The role of clitic order (ACC-DAT vs. DAT-ACC) in stress shift is currently being investigated in Ordóñez and Repetti (in progress).

8. Preverbal object pronouns are always clitics, i.e., they are never weak pronouns. What is the evidence for this claim? Proclitics are never stressed and are not involved in any type of stress shift, and, to the best of my knowledge, the morpho-syntactic form of the verb never correlates with different forms of proclitics. Proclitics may be identical to non-stress shifting postverbal pronouns: Italian: *mi parla/parlami* 's/he speaks to me/'speak to me!'; Northern Italian dialects: [ɔt-bev]/[bev-ɔt] 'you.sg drink/'do you.sg drink?'. In each case, the preverbal



The main difference between these two structures is that the clitic pronoun is in the same PW as the verb in the former, but is outside of the verb's PW in the latter. In other words, in the structure in (16a) the lexical word (i.e., the verb) is not right-aligned with the PW, while in (16b) it is. Crucially, in both cases, the clitic lies outside of foot structure as it does not interact with stress assignment.

The prosodic analysis of Romance imperative verb + pronoun phrases in Loporcaro (2000) and Bonet and Lloret (2005) assumes the structure in (16a). (Loporcaro 2000 assumes the same prosodic structure in stress-shifting and non stress-shifting contexts, the difference being that postlexical stress reassignment is permitted in the former but not the latter.) Peperkamp (1997) suggests the structure in (16b) for non-stress shifting enclitics.

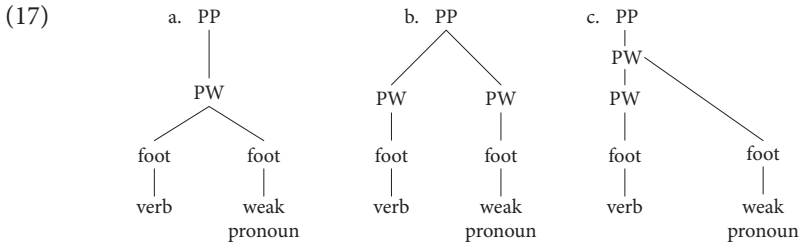
We will see below that some of the pronouns that meet the criteria for clitics must be analyzed as in (16a). Further support for this model (over (16b)) comes from the fact that no other PWs (only another clitic pronoun) can intervene between the verb and the clitic.⁹

We have already noted that weak pronouns can be stressed, and I have proposed that they have a foot as part of their lexical representation. The foot associated with the weak pronoun is part of the same PP as the imperative verb, but how is that foot incorporated into the PP? There are many possible analyses. The foot of the weak pronoun can be part of the same PW as the verb (17a), or it can be its own Prosodic Word separate from the verb (17b), or it can adjoin recursively to the Prosodic Word (17c). (A fourth possibility is that the foot skips the PW and adjoins directly to the

and postverbal pronouns are analyzed as the same lexical item realized in different syntactic positions (Cardinaletti and Repetti 2008), and they can be represented as in (16), modulo the position of the pronoun relative to the verb. For similarities and differences between proclitics and enclitics, see Benincà and Cinque (1993), Cardinaletti (2010), Cardinaletti and Repetti (2008), Ordóñez and Repetti (2014), Peperkamp (1997).

9. This does not necessarily apply to all verb + clitic structures. For example, indicative verb + postverbal subject clitic pronouns in interrogative structures in northern Italian dialects are argued to have the structure in (16b) since the subject clitic pronoun cannot be analyzed as part of the same PW as the verb (Cardinaletti and Repetti 2008).

PP. That option is not discussed here as there appears to be no evidence supporting it.)



Note that the structure in (17a) is comparable to the structure in (16a), the difference being that in (16a) the pronoun is not part of a foot, while in (17a) it is, and, therefore, it is involved in stress assignment. Monachesi (1996) proposes a structure similar to (17b) for verb + enclitic pronoun clusters, and Peperkamp (1997) adopts the structure in (17c) for grammars like Neapolitan, which have stress stability with one enclitic and stress shift with two. Note also that the outer PW in (17c) is similar to the Clitic Group or Composite Group (Nespor & Vogel 1986; Vogel 2009).

An important difference among the various structures in (16) and (17) is that the verb + enclitic pronoun(s) form a single PW in (16a), (17a), and (the outer PW of) (17c) (i.e., the lexical word is not aligned with the PW), but there is a PW boundary between the verb and pronoun in (16b), (17b), and (17c) (i.e., the lexical word is aligned with the PW). We can use this difference to help select the best representations to account for the data. In the next paragraphs we will see that in at least one of the languages under investigation, verb + postverbal pronoun phrases consist of two words (thereby supporting the models in (17b) and (17c)), and in another there is PW boundary between the verb and the postverbal pronouns (thereby supporting the models in (16b), (17b), and (17c)).

Bafle (1993, 1994) analyzes the Neapolitan phrase in (10c) as containing two primary stressed syllables, and, therefore, for our purposes, two PWs. Her analysis proceeds as follows: the penultimate syllable (i.e., the postverbal pronoun) of the phrase [pɔrta-tillə] is perceived as having primary stress, but the lexically stressed vowel of the verb stem must also be analyzed as being stressed since it can have a quality which is only found in primary stressed syllables, such as /ɔ/. (Note that stressed /ɔ/ raises to /u/ when stress is shifted, but this is not what is found in phrases like (10c): *[purta-tillə].) This analysis of Neapolitan supports the models in (17b)-(17c), i.e., the verb + pronoun phrase consists of two PWs.

Sardinian offers another test case that also supports the representations in (17b)-(17c). A diagnostic for PW boundaries in some Sardinian dialects suggests that there is a PW boundary between the verb and some postverbal pronouns. A paragogic vowel

is found after the final stressed vowel of monosyllabic words in some Sardinian dialects: /dá/ > [dá*i*] ‘give!’ (18a) (Bolognesi 1998, 66; Lai 2002, 2004; Pittau 1972, 18–19). (I use a bold italicized *i* to represent the paragogic vowel.) It may also be found after a monosyllabic verb that is followed by an enclitic pronoun cluster, suggesting that the verb is aligned with the right edge of a PW (18b). However, when only one pronoun follows the verb, the paragogic vowel is not present, suggesting that the verb is not right-aligned with a PW (18c). (See Kim and Repetti 2013, 292–293.)

- (18) Nuorese Sardinian
- | | | | |
|----|---|---------------|--------|
| a. | /dá/ > [dá <i>i</i>] | ‘give!’ | |
| b. | /dá/ + /mi + ilu/ > [da <i>i</i> -mílu], *[dá-mílu] | ‘give me it!’ | (16_4) |
| c. | /dá/ + /mi/ > [dá-mi], *[dá <i>i</i> -mi] | ‘give me!’ | (16_1) |

We can analyze these facts as follows: /mi/ is a clitic and /ilu/ is weak. The 1SG pronoun in (18c) should be analyzed as a clitic since it meets the morpho-syntactic criteria for clitics outlined in (15): it is morphologically less complex than weak pronouns (clitic /mi/ 1SG vs. weak /ilu/ 3SG.MAS.ACC), and it precedes a weak pronoun in a cluster (/mi/ + /ilu/, */ilu/ + /mi/). Crucially, it does not trigger stress shift ([teléfo*n*a-mi] (16_26) ‘telephone me!’, [kómpo*r*a-mi] (16_3) ‘buy me!’, [píka-mi] (16_17) ‘get me!’). If it is a clitic, it is represented by one of the structures in (16). Since there is not a paragogic vowel *i* after the verb in (18c), signaling a PW boundary, we can assume that the pronoun is part of the same PW as the verb, as in (16a).

The cluster /milu/ (18b) should be analyzed as consisting of a clitic /mi/ plus a weak pronoun /ilu/.¹⁰ The pronoun /ilu/ meets the morpho-syntactic criteria for weak pronouns: it follows the clitic /mi/, it is morphologically more complex than clitics (weak /ilu/ vs. clitic /lu/, see Footnote 10), and it is involved in stress shift. Therefore, it is represented by one of the structures in (17). We know that the clitic pronoun clusters prosodically with the weak pronoun and not with the verb, because there is an epenthetic *i* between the verb and the clitic pronoun in (18b), marking a PW boundary (as in (17b) or (17c)). And we know that object pronouns can enter a cluster configuration syntactically with each other (Cardinaletti 2008; Cattaneo 2009; Pescarini 2013).

10. There are two 3SG.MAS.ACC pronouns in Nuorese Sardinian: clitic /lu/ and weak /ilu/. In preverbal position and as a single postverbal pronoun, the 3SG.MAS.ACC pronoun is clitic /lu/: [lu pottu fákerε] (16_51) ‘I can do it’, [péttena-lu] (16_32) ‘comb him!’. These forms cannot be analyzed as deriving from /ilu/ via initial vowel deletion since there is no independent evidence of /i/ deletion in these contexts: we find phrase initial /i/ ([inu é maría] (16_74) ‘where is Maria?’), as well as /ail/ sequences at the boundary of verb + enclitic pronoun units ([mannikáilu] (16_42) ‘eat.2PL it!’). In postverbal clusters, the 3SG.MAS.ACC pronoun is analyzed as weak /ilu/, as in (18b), and not as clitic /lu/ (as in */mi + lu/) for the reasons discussed above.

While the cluster in (18b) is represented as a clitic + weak pronoun, it is not the case that every pronoun cluster consists of a clitic + weak pronoun: in standard Italian or Spanish single pronouns and pronouns in clusters appear to be true clitics. Similarly, while the single enclitic in (18c) is analyzed as a clitic, it is not the case that all single postverbal pronouns are clitics. There are Sardinian dialects, such as the dialect of Laconi, which have single postverbal pronouns that are stressed ([benɟe-mía] (7_16) 'sell me.DAT!'), suggesting they are weak pronouns. In addition, in these dialects we find a paragogic *i* between a monosyllabic verb and a single postverbal pronoun: [dʒai-mía] (7_1) 'give me.DAT!', signaling a word boundary between the two elements.¹¹ The preverbal 1SG.DAT pronoun is not stressed and is lexically different from the postverbal one: [mi-práʃi] (7_112) 'I like it (it pleases me)'. Given these facts, the postverbal pronoun in Laconi is best analyzed as a weak pronoun and represented with the structure in (17b) or (17c), while the preverbal one is a clitic. It has been argued elsewhere (Ordóñez and Repetti 2014) that the choice of a single clitic vs. weak pronoun in postverbal position, or the choice of elements that make up postverbal clusters (such as clitic + weak, or clitic + clitic) depends on the inflectional projection that hosts them.

Since penultimate stress is considered the default stress pattern in these varieties (i.e., stress is assigned by the formation of a right-aligned trochaic foot), this model allows us to account for both penultimate and antepenultimate stress (in which the final vowel is epenthetic) in these structures. However, final stress shift is problematic since an iambic foot is not the foot structure in those varieties with final stress shift. Therefore, the motivation for final stress must be sought elsewhere.

Although it is beyond the scope of this paper to analyze the cases of final stress shift, a possible approach can be found in Kim and Repetti (2013) in which (ante)penultimate stress shift in Sardinian is analyzed *not* as a shift in stress, but as the association of each tone of a bitonal pitch accent (HL*) with a metrically prominent syllable, resulting in the perception of a stress shift: the leading H tone is associated with the lexically stressed syllable of the verb, and the starred L tone with the rightmost metrically prominent syllable, i.e., the (ante)penultimate syllable belonging to the weak pronoun. The final stress shift data might be analyzed along these lines: the pitch accent is associated with a metrically prominent position, but its secondary association is with the right edge of the verb + enclitic pronoun phrase, resulting in a change of tone at the right edge of the word which is perceived as a final stress shift. (See also Grice 1995; Grice, Ladd, and Arvanit 2000; Pierrehumbert and Beckman 1988; Prieto, D'Imperio, and Fivela Gili 2005.)

11. In Laconi, paragogic *i* is also present between monosyllabic verbs and enclitic clusters: [dʒai-míɟu] (7_4) 'give me it!', [dʒai-zíɟu] (7_8) 'give him it'.

Using the representations in (16) and (17), we can make a number of predictions. For example, we would *not* expect to find a language that prosodizes clitics as in (16b) (i.e., clitics are not part the same PW as the verb, suggesting that the constraint enforcing the alignment of PWs and lexical words is high ranked) and weak pronouns as in (17a) (i.e., weak pronouns are part of the same PW as the verb, suggesting that the constraint enforcing the alignment of PWs and lexical words is low ranked). I have not found any data that falsify these predictions.

6. Conclusions

We have seen that so-called stress shift in imperative phrases is the result of many factors, including morpho-syntactic factors, such as the presence of a weak vs. clitic pronoun. The presence of one vs. the other has phonological implications. A weak pronoun consists of a foot, which affects the metrical structure of the phrase by adding a metrically prominent syllable to the right of the lexically stressed syllable of the verb, which, however, retains its metrical structure. On the other hand, a clitic has no metrical structure associated with it, and is prosodized as part of the same PP as the verb, although outside of the verb's foot structure.

There is another factor affecting stress assignment in imperative verb + enclitic pronoun phrases (and also other phrases with enclitics, such as locatives, partitives, and possessives). The original phonological analyses of this phenomenon (see §3) were correct: stress shift can be a strategy to repair metrical violations. Those original analyses were wrong only in over-generalizing their claims. We have seen 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 (19).

- (19) Nuorese (Pittau 1972: 20–21, 82–83)
- | | | |
|----|--|-------------|
| a. | /nára/ + /lu/ > [nára-lu] | 'say it!' |
| b. | /bókina/ + /lu/ > [bókina-lu], [bokiná-lu] | 'call him!' |

In these varieties, stress is not shifted with one enclitic, *unless* the resulting structure would have pre-antepenultimate stress, in which case it is optionally shifted to the penult. These data can be accounted for in the following way: the single enclitic is a true clitic and is not expected to be involved in stress shift. However, when stress is in an illegal pre-antepenultimate position, it is (optionally) reassigned to the "default" penultimate position, if the grammar allows for postlexical stress reassignment (Loporcaro 2000) or the formation of phrase-level syllables (Cardinaletti and Repetti 2009). (See also footnotes 4–5.)

The realization of metrical prominence in imperative verb + pronoun phrases involves the complex interaction of morpho-syntactic, prosodic, phonetic, and other

factors. Only by studying this phenomenon from various perspectives can we have a complete and accurate understanding of it.

References

- Anderson, Stephen. 2005. *Aspects of the Theory of Clitics*. Oxford: Oxford University Press.
DOI: 10.1093/acprof:oso/9780199279906.001.0001
- Bafle, Laura. 1993. *Fonologia prosodica e teoria metrica*. Ph.D. dissertation, University of Florence.
- Bafle, Laura. 1994. "La riassegnazione postlessicale dell'accento nel napoletano." *Quaderni del dipartimento di linguistica dell'università degli studi di Firenze* 5: 1–23.
- Benincà, Paola and Guglielmo Cinque. 1993. "Su alcune differenze tra enclisi e proclisi." *Omaggio a Gianfranco Folena*, 2313–2326. Padova: Editoriale Programma.
- Bolognesi, Roberto. 1998. *The Phonology of Campidanian Sardinian: A Unitary Account of a Self-organizing Structure*. Dordrecht: ICG Printing.
- Bonet, Eulàlia. 2009. "Stem Extensions in Catalan Encliticized Imperatives." Manuscript.
- Bonet, Eulàlia and Maria-Rosa Lloret. 2005. "More on Alignment as an Alternative to Domains: The Syllabification of Catalan Clitics." *Probus* 17: 37–78. DOI: 10.1515/prbs.2005.17.1.37
- Cardinaletti, Anna. 2008. "On Different Types of Clitic Clusters." In *The Bantu -Romance Connection*, ed. by Cécile De Cat, and Katherine Demuth, 41–82. Amsterdam: John Benjamins. DOI: 10.1075/la.131.06car
- Cardinaletti, Anna. 2010. "Morphologically Complex Clitic Pronouns and Spurious *se* Once Again." In *Movement and Clitics: Adult and Child Grammar*, ed. by V. Torrens, et al., 238–259. Newcastle: Cambridge Scholars Publishing.
- Cardinaletti, Anna and Lori Repetti. 2008. The Phonology and Syntax of Preverbal and Postverbal Subject Clitics in Northern Italian Dialects. *Linguistic Inquiry* 39: 523–563.
DOI: 10.1162/ling.2008.39.4.523
- Cardinaletti, Anna and Lori Repetti. 2009. "Phrase-level and Word-level Syllables: Resyllabification and Prosodization of Clitics." In *Phonological Domains: Universals and Derivations*, ed. by Janet Grijzenhout, and Baris Kabak, 79–104. Berlin: Mouton de Gruyter.
DOI: 10.1515/9783110219234.2.79
- Cardinaletti, Anna and Michael Starke. 1999. "The Typology of Structural Deficiency: A Case Study of the Three Classes of Pronouns." In *Clitics in the Languages of Europe*, ed. by Henk van Riemsdijk, 145–233. Berlin: Mouton de Gruyter.
- Cattaneo, Andrea. 2009. *It Is All About Clitics: The Case of a Northern Italian Dialect Like Bellinzonese*. Ph.D. dissertation, NYU.
- Colantoni, Laura, Maria Cristina Cuervo and José Ignacio Hualde. 2010. "Stress as a Symptom." Paper presented at LSRL 40, University of Washington, March 26–28, 2010.
- Garrapa, Luigia. 2011. *Vowel Elision in Florentine Italian*. Bern: Peter Lang.
- Gioscio, Joseph. 1985. *Il dialetto lucano di Calvello*. Stuttgart: Steiner.
- Grice, Martine. 1995. *The Intonation of Palermo Italian: Implications for Intonation Theory*. Tübingen: Niemeyer.
- Grice, Martine, D. Robert Ladd and Amalia Arvaniti. 2000. "On the Place of Phrase Accents in Intonational Phonology." *Phonology* 17: 143–185. DOI: 10.1017/S0952675700003924

- Halpern, Aaron L. 1998. Clitics. In (eds.), *Handbook of Morphology*, ed. by Andrew Spencer, and Arnold M. Zwicky, 101–122. Oxford: Blackwell.
- Huidobro, Susana. 2005. “Phonological Constraints on Verum Focus in Argentinian Spanish.” Manuscript.
- Iannace, Gaetano. 1983. *Interferenza linguistica ai confini fra stato e regno: Il dialetto di San Leucio del Sannio*. Ravenna: Longo.
- Kenstowicz, Michael. 1991. “Base-Identity and Uniform Exponence: Alternative to Cyclicity.” In *Current Trends in Phonology: Models and Methods (vol. 1)*, ed. by J. Durand and B. Laks, 363–393. Manchester: ESRI.
- Kim, Miran and Lori Repetti. 2013. “Bitonal Pitch Accent and Phonological Alignment in Sardinian.” *Probus* 25: 267–300.
- Klavans, Judith. 1995. *On Clitics and Cliticization: The Interaction of Morphology, Phonology, and Syntax*. New York: Garland.
- Lai, Jean-Pierre. 2002. *L'intonation du parler de Nuoro (Sardaigne)*. Ph.D. dissertation, Université Stendhal (Grenoble).
- Lai, Jean-Pierre. 2004. “Le sarde de Nuoro au sein du nouvel Atlas Multimédia Prosodique de l'Espace Roman (AMPER).” *Gólinguistique* 9: 145–187.
- Ledgeway, Adam. 2009. *Grammatica diacronica del napoletano*. Tübingen: Max Niemeyer. DOI: 10.1515/9783484971288
- Loporcaro, Michele. 1997. *L'origine del raddoppiamento fonosintattico: saggio di fonologia diacronica romanza*. Tübingen: Francke.
- Loporcaro, Michele. 2000. “Stress Stability under Cliticization and the Prosodic Status of Romance clitics.” In *Phonological Theory and the Dialects of Italy*, ed. by Lori Repetti, 137–168. Amsterdam: John Benjamins. DOI: 10.1075/cilt.212.09lop
- Lüdke, Helmut. 1979. *Lucania*. Pisa: Pacini.
- Manzini, Maria R., and Leonardo M. Savoia (2005). *I dialetti italiani e romanci: Morfosintassi generative (3 volumes)*. Alessandria: Edizioni dell'Orso.
- Monachesi, Paola. 1996. “On the Representation of Italian Clitics.” In *Interfaces in Phonology*, ed. by U. Kleinhenz, 83–101. Berlin: Akademie Verlag.
- Moyna, María Irene. 1999. “Pronominal Clitic Stress in Rio de la Plata Spanish: An Optimality Account.” *The SECOL Review* 23: 15–44.
- Nespor, Marina and Irene Vogel. 1986. *Prosodic Phonology*. Dordrecht: Foris.
- Ordóñez, Francisco and Lori Repetti. 2006. “Stressed Enclitics?” In *New analyses in Romance linguistics*, ed. by Jean-Pierre Montreuil, and Chiyo Nishida, 167–181. Amsterdam: John Benjamins. DOI: 10.1075/cilt.276.13ord
- Ordóñez, Francisco and Lori Repetti. 2008. “Morphology, Phonology and Syntax of Stressed Enclitics in Romance.” Paper presented at NYU Workshop on Clitics, New York, May 2–3. Manuscript.
- Ordóñez, Francisco and Lori Repetti. 2014. “On the Morphological Restriction of Hosting Clitics in Italian and Sardinian Dialects.” *Italia dialettale* 75: 173–199.
- Ordóñez, Francisco and Lori Repetti. in progress. “Clitic Order and Stress Shift.”
- Peperkamp, Sharon. 1997. *Prosodic Words*. The Hague: HAG.
- Pescarini, Diego. 2013. “The make-up of clitic clusters in the history of (Gallo-)Romance.” Talk presented at LSRL 43.
- Pierrehumbert, Janet and Mary Beckman. 1988. *Japanese tone structure*. Cambridge, Massachusetts: MIT Press.

- Pittau, Massimo. 1972. *Grammatica del sardo-nuorese: Il più conservativo ei parlari neolatini*. Bologna: Pàtron.
- Prieto, Pilar, Mariapaola D'Imperio and Barbara Fivela Gili. 2005. "Pitch Accent Alignment in Romance: Primary and Secondary Associations with Metrical Structure." *Language and Speech* 48: 359–396. DOI: 10.1177/00238309050480040301
- Repetti, Lori and Francisco Ordóñez. 2011. *Clitics of Romance Languages (CRL)*. <http://crl.linguistics.stonybrook.edu/>.
- Romanello, Emily and Lori Repetti. 2014. "Special Characteristics Involving Imperatives in Romance Varieties Spoken in Italy." *Italian Journal of Linguistics* 26: 135–163.
- Ruggieri, Donato and Antonio Batinti. 1992. *Lingua e dialetto ad Anzi: Potenza*. Potenza: Il Salice.
- Selkirk, Elisabeth. 1995. "The Prosodic Structure of Function Words." In *Papers in OT (UMOP 18)*, ed. by Jill N. Beckman, Laura Walsh Dickey, and Suzanne Urbanczyk, 439–469. Amherst: GLSA.
- Torres-Tamarit, Francesc. 2010. "Stress Shift under Encliticization in Formenteran Catalan: A Case of an Unmarked Stress Pattern." Manuscript.
- Vogel, Irene. 2009. "The Status of the Clitic Group." In *Phonological Domains: Universals and Deviations*, ed. by Janet Grijzenhout and Baris Kabak, 15–46. Berlin: Mouton de Gruyter. DOI: 10.1515/9783110219234.1.15