0. Seneghese: A minor language variety of Sardinia

Seneghese is a minor Romance variety spoken in Seneghe, a ‘comune’ in the province of Oristano, located on the west coast of Sardinia. Seneghese is spoken by a population of approximately 1,900.

Though, informally, the variety of Seneghe may be labeled an Italian ‘dialect’, it is important to note that the minor Romance varieties, or, ‘dialects’ spoken in Italy have not evolved from Standard Italian. Instead, these numerous minor varieties spoken in Italy (including the standard variety which originated as the Florentine ‘dialect’) are modern manifestations of the many varieties of Vulgar Latin, which existed between the late antiquity and the middle-ages. Especially upon examining the languages of Sardinia, we see that certain varieties, such as Seneghese, are particularly conservative and reflect many linguistic characteristics of Latin that were lost in the development of other modern Romance languages.

My study focuses primarily on the phonetic, phonological and morphological manifestations of pronouns occupying proclitic and enclitic positions in Seneghese.

1. Clitics

Clitics are defined as morphemes that have syntactic characteristics of a word, but show evidence of being phonologically bound to another word, and are phonologically unstressed elements. However, in certain minor Romance varieties, including the dialects
of Sardinia, we find clitic-like elements that are realized as stressed elements. These elements attach to the right edge of the host word, and are commonly referred to as enclitics. We may contrast languages that display stress stability and languages that do not, but rather, display stress shift. While languages such as standard Italian, Spanish, and Catalan display stress stability (that is, after cliticization occurs, the host + clitic (+ clitic) combination is not remetrified), certain varieties, such as Neapolitan, opt to remetrify host + clitic + clitic combinations, rendering it a stress shift variety.

**Standard Italian:**

<table>
<thead>
<tr>
<th>Cliticization</th>
<th>Before Clitic</th>
<th>After Clitic</th>
</tr>
</thead>
<tbody>
<tr>
<td>['kómpralo']</td>
<td>/kómpra + lo/</td>
<td>'Buy it.' buy it</td>
</tr>
<tr>
<td>['kómpramelo']</td>
<td>/kómpra + me + lo/</td>
<td>'Buy it for me.' buy me it</td>
</tr>
</tbody>
</table>

**Neapolitan:**

<table>
<thead>
<tr>
<th>Cliticization</th>
<th>Before Clitic</th>
<th>After Clitic</th>
</tr>
</thead>
<tbody>
<tr>
<td>['kómpralo']</td>
<td>/kómpra + lo/</td>
<td>'Buy it.' buy it</td>
</tr>
<tr>
<td>['kompramélo']</td>
<td>/kompra + mé + lo/</td>
<td>'Buy it for me.' buy me it</td>
</tr>
</tbody>
</table>

Sardinian, though not a stress-shift variety, allows stressed clitics. In order to account for these peculiar cases of stressed ‘clitics’, we study the phonological, morphological and syntactic patterns of languages allowing stressed cliticization and contrast them with those of languages that do not allow stressed clitics such as standard Italian, Portuguese, Spanish and Catalan, but rather maintain stress placement on verb is regardless of the nature or number of clitics present.
(1)

**Standard Italian:**  
[kómpramelø] /kómpra + me + lo/  
‘Buy it for me.’  
\{ unstressed clitic

**Spanish:**  
[kómpramelø] /kómpra + me + lo/  
‘Buy it for me.’  
\{ unstressed clitic

**Sardinian:**  
komporamíddu /kompora + m(i) + íddu/  
‘Buy it for me.’  
\{ stressed clitic

In examining varieties allowing stressed enclitics, I hope to support the hypothesis that these stressed elements are actually not clitics at all, but rather, weak pronouns closely related to the Latin pronouns *illu* and *inde*.

More specifically, I am observing phonetic data and examining consonant length and stress patterns in order to provide evidence that there are structural differences between the proclitics and enclitics of Seneghese. All speech samples studied are recordings of native speakers of Seneghese, recorded in an interview-like setting, with use of a questionnaire. The questionnaire prompted participants to translate phrases using constructions involving clitics. The phrases translated utilized either one or two clitics, while employing both infinitive and imperative verb forms. It should be noted that in all example sets involving comparisons, the same informant (for each phrase) was used. In my analysis of this data, it will be shown that enclitics attract stress, while proclitics do not. Additionally, it will be shown that enclitic consonant lengths are longer than those of proclitics, suggesting that enclitics are more structurally complex than are proclitics.
2. Consonant length discrepancies among pronouns in Seneghese

Through *Praat* spectrogram analysis, the consonant lengths of these pronouns in various positions (proclitic and enclitic) were compared, using data collected through speech surveys. Through this comparative measurement, it will be demonstrated that these forms differ from each other in significant ways.

In this analysis, pronoun consonant length was measured in encliticized verb forms and in verbal phrases including a prolitic. The spectrograms in the section below provide strong evidence that the consonant length of pronouns realized in enclitic positions (weak pronouns) is significantly greater than that of procliticized, stand alone true clitics.

The following example sets display two phrases. In the first, the masculine, singular, accusative pronoun is procliticized, and in the second, it is encliticized. Below the phrases, the corresponding spectrograms are represented, displaying the consonant length in each of these forms. Following the spectrograms, a table is given, illustrating both phrases and the lengths of their clitic consonants, respectively.

(2) \[\text{pett}e\text{naddu}\] enclitic long length
brush it
‘Brush it.’

(3) \[\text{ki } \text{du} \text{ \text{\`{i}lliada } a \text{ bart\`{e}llona}\] proclitic (standalone)
there it brings (3p. sing.) to barcellona
‘He/she brings it to Barcellona.’
short length

The spectrograms below are those corresponding with the phrases above.
### Consonant Length

<table>
<thead>
<tr>
<th></th>
<th>Consonant Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) (enclitic)</td>
<td>[pette'naḍḍu] 152.1 ms.</td>
</tr>
<tr>
<td>(3) (proclitic)</td>
<td>[ki du ³lliada a bartʃe³llona] 81 ms.</td>
</tr>
</tbody>
</table>
(4) [dzai 's iddu] (stressed)enclitic
   give him it
   ‘Give it to him.’
   long length

(5) [kentse du 'bbiede]
   without it to see
   ‘without seeing it’
   unstressed (stand-alone) proclitic
   short length

The spectrograms below are those corresponding with the phrases above.

(4')
Having measured the length of the consonant of the masculine, singular, accusative pronoun, realized in an enclitic position and in a proclitic position, we find that the length of the consonant in the stressed enclitic (141 ms) in (2) is much greater than that of the unstressed proclitic in (3) (81 ms). Similarly, we find that the length of the consonant in the stressed enclitic in (4) (177 ms) is significantly greater than that of the unstressed proclitic in (5) (67 ms). More examples included in this data set are found below, along with their respective clitic consonant lengths.

**Enclitic consonant /ɖ/ length (ms.) following stressed syllable**

<table>
<thead>
<tr>
<th>Standard Italian</th>
<th>Seneghese</th>
<th>Length (ms.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>dammelo</td>
<td>[dza’mmiɖqu]</td>
<td>131.22</td>
</tr>
<tr>
<td>‘give it (masc.) to me’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dammeli</td>
<td>[dza’mmiɖqozɔ]</td>
<td>119.06</td>
</tr>
</tbody>
</table>
'give them (masc.) to me'  
**damméle**  
[da'mmmiɖɖa]  
116.74

‘give them (fem.) to me’  
**daglielo**  
[da'ai siɖɖu]  
177.36

‘give it (masc.) to them’  
**dagliëli**  
[da'ai siɖɖo zo]  
112.179

‘give it (fem.) to them’  
**dagliela**  
[da'ai siɖɖa]  
145.889

‘sell them (masc.)’  
**vendile**  
[ben'diɖɖo zo]  
121.882

‘sell them (fem.)’  
**vendili**  
[ben'diɖɖa]  
108.656

‘sell it (masc.) to them’  
**portaglielo**  
[betti sind ɨɖɖu]  
119.479

‘sell it (fem.) to them’  
**compramelo**  
[kompora ɨmiɖɖu]  
140.982

‘buy it (masc.) for me’  
**comprameli**  
[kompora ɨmiɖɖo zo]  
114.157

‘buy it (fem.) for me’  
**compramela**  
[kompora ɨmiɖɖa]  
108.27

‘buy them (masc.) for me’  
**compramele**  
[kompora ɨmiɖɖa]  
112.36

‘brush it (masc.)’  
**pettinalo**  
[pe'tte'naɖɖu]  
152.1

‘brush them (masc.)’  
**pettinali**  
[pe'tte'naɖɖo zo]  
127.97

‘brush it (fem.)’  
**pettinala**  
[pe'tte ɨnaɖɖa]  
134.85

‘brush it (fem.) for me’  
**pettinamela**  
[pettena ɨmiɖɖa]  
130.512

‘brush it (fem.) for me’  
**pettinamelo**  
[pettena ɨmiɖɖu]  
145.208

‘there she/it (fem.) is’  
(idiom.)  
**eccola**  
[a'ɪlloɖɖa]  
132.4

‘there they (fem.) are’  
(idiom.)  
**eccole**  
[a'ɪlloɖɖa]  
118.94

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**Proclitic consonant /ɖ/ length (ms.)**

Sto a farlo  
‘I’m about to do it.’  
[ɖu ʃoe ɨfende]  
51.04

Ce li troverai…  
‘You will find them (masc.) there.’  
[ki ɖos ɨəs a...]  
70

A Barcellona.  
‘to Barcelona.’  
[ki ɖu ɨliiada...]  
81
As can be seen, the length of the consonants in the proclitic forms is approximately half the length of those in enclitic forms. In the sections that follow, I will suggest possible ways in which this pattern may be accounted for.

3. **Accounting for differences between enclitics and proclitics in Seneghese:**

In order to account for the difference in length between consonants of proclitics and those of enclitics, various approaches may be adopted. Raddoppiamento Sintattico, or ‘Syntactic Doubling’, most commonly known as the phonological process by which geminate consonants are produced from a singleton consonant input in order to satisfy well-formedness constraints on stressed syllables, may be examined. Especially considering the existence of stress-induced Raddoppiamento Sintattico in Standard Italian and in the central and southern Italian varieties, the possibility of this type of lengthening occurring in Seneghese is likely to be considered. However, we must also consider the possibility that variations in pronoun consonant length may be the result of the manifestation of deeper, underlying forms. In proposing that these pronouns are truly lexically diverse items, possessing diverse morphological and phonological characteristics, we may account for differences involving their stressability and consonant length. In the sections below, I consider each of these possible analyses.
3.1 Raddoppiamento Sintattico: Two types of lengthening

The term ‘Raddoppiamento Sintattico’ refers to a phenomenon present in the languages of Italy, by which geminate consonants are produced from a singleton consonant input. In Italian, ‘raddoppiamento’ means ‘doubling’, while ‘sintattico’ means ‘syntactic’. This process is labeled as such because it may involve doubling of consonant sounds across word boundaries (either diachronically, in presently ‘single’ lexical items which originated from separate lexical items, or synchronically). The two types of Raddoppiamento Sintattico that are typically referred to are categorized as ‘lexical’ and ‘stress-induced’ types.

3.1.1 Stress-induced Raddoppiamento Sintattico

According to Repetti’s (1991) analysis of stress-induced Raddoppiamento Sintattico, the lexical forms of all words provoking this type of gemination include an extra mora that may have been inherited in early stages of Romance, or a mora added to ensure that all stressed syllables be bimoraic. The Appendix Probi, a seventh century text which served as a correction guide to spoken and written Latin (of the time) illustrates beautifully the evolutionary processes that Romance had already begun undergoing, in using consonant gemination to render stressed syllables bimoraic. The phrases found in this text show that the transition from the V: to VC: preference was well underway by the time of Vulgar Latin.

(6) ‘Camera non cammera’ ([kam.me.ra] non [kam.me.ra])
‘Draco non dracco’ ([dra.ko] non [drak.ko])
‘Aqua non acqua’ ([a.kwa] non [ak.kwa])
‘Caligo non calligo’ ([ka.li.go] non [kal.li.go])

(G. Rohlfs, Sermo Vulgaris 16)
The nature of the ‘deviations’ present at this time illustrate the fact that those writing in Latin had an auditory intuition that the consonant in question (most typically geminated in the prescriptively ‘incorrect’ form) was lengthened, although the historical accounts of older Latin indicate otherwise (and that instead, long vowels were realized).

In sum, we find that stress-induced Raddoppiamento Sintattico in the varieties at hand results from the obligatory condition that stressed syllables be heavy. One way of satisfying this requirement is by means of consonant gemination, as opposed to vowel lengthening.

3.1.2 Lexical Raddoppiamento Sintattico

Lexical doubling in Standard Italian is induced by a relatively small group of words without stress on the last syllable. Among the items triggering this type of gemination are the standard Italian word *dove* ‘where’, and the preposition *a* ‘to’.

(7) /a + casa/ \(\rightarrow\) [a#k:aza]

a casa ‘to/at home’

It is not only in Standard Italian, however, that we find lexical triggers for Raddoppiamento Sintattico. In Bullock’s (2000) article, *Consonant Gemination in Neapolitan*, she describes the prevalence of a peculiar sort of lexical doubling in the Italian variety spoken in Naples, Italy.

In the Neapolitan variety, Bullock describes, Raddoppiamento Sintattico occurs in significantly stricter environments than it does in Standard Italian. Whereas in Standard Italian, Raddoppiamento may be lexically or stress induced, in Neapolitan it may be

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1 Additionally, there is a very small set of lexical items in Neapolitan which possess lexical geminate initial consonants, regardless of the syntactic environment in which they occur, such as [bb]uona ‘good’, and [kk]ię ‘more’.
triggered only by a closed set of lexical items, provided that these lexical items occur in particular syntactic environments. Oftentimes, the gemination-triggering quality of these items serves morphological functions, such as distinguishing gender and number of articles and pronouns. As we examine the Neapolitan masculine definite article and direct object pronoun, we find that they are identical, in isolated surface form, to the neuter definite article and direct object pronoun. However, the neuter function words trigger Raddoppiamento Sintattico, while the masculine items do not. This is demonstrated in table (8).

(8)

<table>
<thead>
<tr>
<th>(RS) Neuter article</th>
<th>/o/</th>
<th>[o n'niru] (\text{the black})</th>
</tr>
</thead>
<tbody>
<tr>
<td>(RS) Neuter pronoun</td>
<td>/o/</td>
<td>[o b'bid'] (\text{1 see it})</td>
</tr>
<tr>
<td>(-RS) Masculine article</td>
<td>/o/</td>
<td>[o i'kan'] (\text{the dog})</td>
</tr>
<tr>
<td>(-RS) Masculine pronoun</td>
<td>/o/</td>
<td>[o i'vid'] (\text{1 see it})</td>
</tr>
</tbody>
</table>

Furthermore, we find that the words /che/ `che` (St. It.) `that/what` (Eng.) and /pecche/ `perche` (St. It.) `because/why` (Eng.) trigger Raddoppiamento Sintattico when serving as interrogatives, but not when used as complimentizers.

(9)  'che bbuò?' [kebbwO]

\[\text{[what]}_{\text{inter.}} \text{does he/she want?}\]

'che lu a fatto?' [ke Iu' fatt']

\[\text{[that]}_{\text{comp}} \text{he did}\]

(Bullock, 2001)

It must be noted that there are rather strict syntactic conditions which must be met in order for these lexical items to trigger gemination. In order to provoke gemination, the
items at hand must be syntactically tied (that is, one must specify the other). In order to account for the behavioral discrepancy between these items (seemingly identical items behaving differently with regards to triggering gemination), Bullock proposes an explanation that entails both the etymology and abstract phonological properties of the element. Bullock suggests that function words in Neapolitan may be parsed as either individual Prosodic Words (and thus triggering RS), in and of themselves, or, as clitics, being parsed into a Prosodic word as a syllable (and in turn, not provoking RS).

Upon exploring the Latin etymons of the Neapolitan words at hand, we find that the etymon for the masculine singular article and pronoun, /o/ is *illu(m)*. The etymon for the neuter article and pronoun /o/ is *illud*. The final /m/ of the masculine singular article and pronoun deleted, yet the /d/ of the neuter article and pronoun remained, leaving an extra mora, and, eventually, leaving an extra mora position unfilled. Thus, despite the superficial similarities of these items, their morphologies and underlying phonological (prosodic) properties differ quite significantly. Furthermore, upon examining the etymons of the interrogative and complimentizer /che/, we find that the interrogative etymon is /quid/, whereas the complimentizer’s etymon is /quia/. Not surprisingly, it is the /che/ interrogative (which previously possessed a (moraic) consonant coda) which triggers Raddoppiamento Sintattico in Neapolitan.

In order to account for the apparent inconsistencies in behavior between seemingly identical surface representations, Bullock suggests the notion that certain lexical items possess a ‘double prosody’, by which grammars may permit mismatching between the surface structure of a syllable and its weight. Through the possession of ‘double prosody’, words are given license either to trigger gemination, or not to trigger
gemination, depending on their phonosyntactic nature (and therefore, the prosodic structure that they employ in a given context). It is through possession of double prosody, Bullock argues, that CV syllables (underlyingly) maintain bimoracity and that word final vowels remain short. As demonstrated by the Latin etymons, above, it is suggested that over time, syllable weight of a lexical item may become lexically encoded in one’s grammar, and may not, necessarily, seem to ‘agree’ with its surface syllable structure. It is not suggested that speakers have diachronic knowledge of lexical items, but rather, knowledge of an item’s underlying syllable weight, and the manner of that weight scansion in various syntactic environments, which gives rise to the surfacing of geminated forms. This follows from Rohlfs’s (1966) and Leone’s (1984) arguments that lexical Raddoppiamento Sintattico in Standard Italian may be accounted for through a diachronic study illustrating that certain words carry more weight (in terms of morae) and that the present day realizations of these words are less phonemically rich than they once were, but remain just as moraically endowed as they have always been.2

3.2 Accounting for differences between enclitics and proclitics in Seneghese: A phonological approach

In this section, I explore the argument that the clitic consonants ([ɖ]) are lexically singleton in both proclitic and enclitic forms, and, that in certain contexts, gemination of

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2 For example, it is suggested that *ad*, which once carried two morae and two phonetic elements now carries only one phonetic element, yet still carries two morae in its lexical form. As, over time, the realization of [d] has been lost, the bimoraic rhyme to which it belongs lacks phonetic material to fill the second (rightmost) mora position. It is here that the repair strategy of gemination is employed. The empty mora position is filled by means of duplicating the following consonant sound, causing [k] to fill not only the onset position of the syllable [ka], but also the coda position of [ak], agreeing with the moraic theory of syllabification (Hayes (1989)), by which a geminate forms the coda of one syllable and the onset of the next.
this consonant is realized in order to satisfy the well-formedness constraints on stressed syllables.

We find that enclitics of Seneghese attract stress, and that in host+clitic combinations, regardless of the number of clitics involved, stress always falls on the penultimate syllable (in terms of phonological input). That is, if two monosyllabic enclitics are present, the first clitic of the cluster will bear stress. If only one enclitic is present, the stress will fall on the last syllable of the host word. This is demonstrated below.

\[(10)^3\]

a. \[\text{[pettVna]}\]
   brush
   ‘Brush’ (imp.)

b. \[\text{[pette\text{'}naddu]}\]
   brush it
   ‘Brush it.’

c. \[\text{[pettina\text{'}middu]}\]
   brush me it
   ‘Brush it for me.’

It is imperative to note, when considering a phonological analysis, that the plural forms of the enclitics at hand possess a final vowel (such as in [pette\text{'}naddzo]), which shall not be considered in the lexical input for reasons described in section 3.2.1.1.

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\(^3\) In examining this example, in particular, we note that there is a change in the quality of the second vowel of each word (in the second example, it is [e], and in the third example, the vowel preceding the stressed syllable by two syllables, it is [i]). In order to determine the cause of this variation, examining the uncliticized form (unattested, in this data set) /pettVna/ would be useful. It is possible that (b) and (c) have different foot structures (that of (b) being bisyllabic and that of (c) being trisyllabic). In being trisyllabic, (c) and (a) share the same foot structure, and in doing so, should share the realization of [i] in the second syllable.
3.2.1 Stress-induced Raddoppiamento Sintattico applied to enclisis in Seneghese

In order to account for the Raddoppiamento Sintattico phenomenon causing gemination in enclitics of Seneghese, an Optimality Theory (Prince & Smolensky 1993) analysis may be used. In Standard Italian, stress may fall on any one of the word’s last three syllables, though the majority of words bear penultimate stress (as a result of the conflict between the constraint requiring that main stress falls on the right edge of the word and the constraint prohibiting word final stress). Is it stress that happens to fall on heavy syllables? Or, must syllables predisposed (or somehow marked) for stress be made heavy?

We find that it is the latter. In the case of enclitics in Seneghese, lexical stress (of the clitic) must be maintained. In arguing that Seneghese utilizes a process of gemination in order to achieve well-formedness (satisfying a certain constraint requiring heavy syllables in stressed positions), we must assume that a certain syllable is chosen or marked for stress previously (maintaining faithfulness to the lexical input). First, the stressed syllable of the HOST+CL(+CL) combination must be determined. After this has been established, we may continue to examine the way in which the lengthening process is accounted for.

3.2.1.1 Stressed syllable selection

In order to provide an Optimality Theory account of how the stressed syllable of a prosodic word (assuming that the HOST+CL (+CL) combination forms a PrWd), we must consider various constraints (described below, in table 11).
(11)

<table>
<thead>
<tr>
<th>Constraint</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-Finality</strong></td>
<td>The final syllable of a word may not be contained in a foot</td>
</tr>
<tr>
<td><strong>ALIGN-FT-RT</strong></td>
<td>Penalizes instances in which the right edge of the grammatical word does not coincide with the right edge of a syllable.</td>
</tr>
<tr>
<td><strong>Parse σ</strong></td>
<td>Penalizes the non-parsing of syllables by feet</td>
</tr>
<tr>
<td><strong>ALIGN FT-L</strong></td>
<td>Penalizes instances in which the left edge of the grammatical word does not coincide with the left edge of the prosodic word</td>
</tr>
<tr>
<td><strong>STRESSTOWEIGHT</strong></td>
<td>Penalizes instances in which a stressed syllable is not heavy</td>
</tr>
<tr>
<td><strong>DEP-C</strong></td>
<td>Penalizes insertion of a consonant</td>
</tr>
<tr>
<td><strong>DEP-µ (or, DEP-V)</strong></td>
<td>Penalizes insertion of a vowel (or mora)</td>
</tr>
</tbody>
</table>

I suggest that the constraint Non-F, prohibiting the final syllable of a word from being contained in a foot, is most highly ranked along with Foot-Type-Trochaic. These constraints will compete against ALIGN-FT-RT, which causes feet to be aligned as far to the right edge of the prosodic word as possible. Parse σ and ALIGN FT-L are ranked least highly and are both violable by the optimal candidate.
We find that candidate (a) violates the Non-F constraint against feet being final in a prosodic word, along with lesser highly ranked constraints such as Parse $\sigma$ and ALIGN FT-L, ensuring alignment to the left edge of the prosodic word. Candidate (b), the optimal one, violates the constraint ensuring alignment to the right, by one syllable, along with less highly ranked constraints, Parse $\sigma$ and ALIGN FT-L. Candidate (c) violates the constraint on foot type, as it is not trochaic, but instead, iambic. Additionally, it violates the less highly ranked constraints.

It should be noted that the plural clitic forms would appear identically to the those in the singular forms, despite the fact that they possess an additional final syllable on the surface, /zo/. For example, for the host+clitic+clitic combination [kom.po.ra.mi.do.zo], the lexical input assumed is /kom.po.ra.mi.doz/, as the word final /o/ is considered a non-cyclic morpheme (Kenstowicz 1997) suggesting that after this epenthetic vowel is added, the prosodic word to which it belongs shall not be re-syllabified.

3.2.1.2 Consonant Lengthening by stress-induced Raddoppiamento Sintattico

Once the stressed syllable of a prosodic word is selected, we may apply constraints in order to determine which candidate will serve most optimally. In Seneghese, as in standard Italian, short vowels bear one mora, while long vowels bear two. Furthermore, consonant codas bear one mora, however consonant onsets bear none. It is of utmost importance that stressed syllables be heavy (bimoraic), for this is the motivation for stress-induced gemination. This is not only the case in Seneghese, but for many of the world’s languages. It has been noted by Vennemann’s ‘The Weight Law’ (1988) and has been described in Prince’s constraint STRESSTOWEIGHT, used to
ensure that all stressed syllables be heavy. Using STRESSTOWEIGHT will serve us best, as we have already determined which syllable bears stress.

<table>
<thead>
<tr>
<th>/komporamidu/</th>
<th>IDENT-IO (stress)</th>
<th>STW</th>
<th>DEP-V (µ)</th>
<th>DEP-C</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. [kom.po.ra.(mid).du]</td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>b. [kom.po.ra.(mi).du]</td>
<td></td>
<td></td>
<td></td>
<td>*!</td>
</tr>
<tr>
<td>c. [kom.po.ra.(mii).du]</td>
<td></td>
<td></td>
<td></td>
<td>*!</td>
</tr>
<tr>
<td>d. [(kóm).po.ra.mi.du]</td>
<td></td>
<td></td>
<td></td>
<td>*!</td>
</tr>
</tbody>
</table>

STRESSTOWEIGHT (STW) will be ranked most highly, competing with the faithfulness constraints DEP-µ (or, DEP-V) and DEP-C, which prohibit insertion of a vowel (or mora) or consonant⁴. DEP-V and DEP-C must be ranked crucially against each other, with DEP-V ranked higher, as Seneghese does not choose vowel insertion in order to achieve well-formedness according to STW, but rather, consonant insertion, violating the least highly ranked constraint, DEP-C. Furthermore, any candidate that does not maintain stress on the pre-determined syllable (regardless of its weight) will violate the most highly ranked constraint, IDENT-IO (stress), or the higher ranked metrical constraints.

3.2.2 Accounting for differences between enclitics and proclitics in Seneghese: A lexical approach

In proposing that the proclitics and enclitics which surface in Seneghese presently belong to lexically distinct pronominal categories, I, following Ordóñez & Repetti

⁴ (µ) is specified only in DEP-V, because no mora must be formally ‘inserted’ in coda consonant insertion, as coda consonants carry weight due to their nature.
(2006), suggest that the proclitic forms represent true clitics, while enclitics are best categorized as weak pronouns. In claiming that some enclitics of a particular variety are actually weak pronouns, we must establish a clear understanding of precisely what a weak pronoun is, and how it differs from a true clitic. Examples of strong pronouns, weak pronouns, and true clitics are given below, using standard Italian.

(12)

**Standard Italian:**

- strong pronoun: Chiedo a loro. ‘I ask them.’
- weak pronoun: Chiedo loro. ‘‘
- clitic pronoun: Gli chiedo. ‘‘

As illustrated by Cardinaletti & Starke (1999), a tripartition of pronominal clitics can be made, separating weak pronouns, strong pronouns, and true clitics. Weak pronouns are known to affect or carry stress, and are structurally more complex, whereas true clitics may not be stressed, and are typically structurally ‘deficient’. In the following sections, arguments supporting the existence of two lexically distinct pronominal categories pertaining to clitic-like elements in Seneghese (that of true clitics and that of weak pronouns) are illustrated.

Following Bullock’s analysis of lexical Raddoppiamento Sintattico in Neapolitan, I examine the possibility of ‘gemination’ by means of double prosody, with regards to the proclitics and enclitics of Seneghese. As in Neapolitan, it is possible that in Seneghese, the morpho-syntactic process of gemination may be triggered by a certain class of function words-namely, clitic pronouns, which possess a ‘double’ prosodic structure, under certain syntactic circumstances. I suggest that the pronominal elements of Seneghese have the option of occupying diverse syntactic landing spots requiring
morphological (and possibly phonological) feature checking. Unlike the items possessing double prosody in Neapolitan, however, I explore the possibility that those of Seneghese possess an underlyingly moraic onset (brought about by an underlying geminate, deriving from the Latin –LL-), rather than an underlyingly moraic coda. Although at the surface level, these lexical items seem to consist of either monomoraic (/du/) or bimoraic (/doz/) syllables, it is possible that they are endowed with a moraic onset, suggesting that due to diachronic ‘residue’, they are lexically encoded with a weight heavier than their current surface forms might suggest. As Bullock describes, following from Selkirk’s Alignment Based Theory describing the contrast in phonological properties between lex and func words, function words may be classified as clitics, or as prosodic words, in and of themselves. Those being classified as true clitics, independently occurring pre-verbally, will be parsed into a prosodic word as a syllable (as shown in diagram 14). Those being classified as weak pronouns, occurring verb-finally, will be parsed into a foot (as shown in diagram 13.)

(13)  
\[ \begin{array}{c} \text{PPh} \\ \downarrow \\ \text{PWd PWd} \\ \downarrow \\ \varphi \\ \downarrow \\ \text{lex} \\
\end{array} \]

5 Pre-verbally, a structurally less-complex true clitic achieves the feature checking required for this landing spot. Post-verbally, two potential landing spots may exist—one requiring a more complex (weak pronominal) element, checking certain morphological and phonological features, and one (unemployed by Seneghese, but used by other varieties such as Cabrarese and Standard Italian) which does not require checking of such complex morphological features, but instead, may be simply checked by less complex pronominal items—namely, true clitics.
If we assume that the pronouns of Seneghese possess ‘double prosody’ and may be scanned as possessing a moraic onset (due to an underlying geminate structure deriving from the Latin geminate), as illustrated below, we may begin to explain this peculiar case of gemination in certain syntactic environments.

(15) Underlying moraic structure:

\[(d)d \quad u/\]

Assuming the underlying weight of the pronouns of Seneghese to include a moraic onset, I propose that pre-verbally, the pronoun is parsed as a Prosodic Word as its own foot (given the lack of phonetic material to its left and preference to accept a ‘floating’ mora, rather than augmenting its base). Alternatively, when the pronoun occurs in a post-verbal position, I believe it to be parsed into a foot (with the verbal form which specifies it). This hypothesis sheds light onto why pronouns occurring pre-
verbally are able to resist gemination, producing a singleton consonant, rather than a
geminate, giving rise to the shorter, less structurally-rich proclitic form. Furthermore,
using this approach, it is made clear why, much like certain lexical items of Neapolitan,
post-verbal pronominals in Seneghese are unable to resist gemination, yielding a more
structurally rich form.

3.3 Phonology of Weak Pronouns and Clitics

It is commonly held that weak pronouns may be stressed, whereas clitic pronouns
may not be (Cardinaletti & Starke 1999:172). Since the data show that proclitics of
various minor Romance varieties including those of Seneghe, Sardinia do not bear nor
affect word stress, their classification as clitics follows. However; we find that enclitics
of these varieties do affect word stress. In the below example, taken from the Seneghese
data, two phrases are given. The phrase in 16a employs an enclitic, whereas the pronouns
in phrase 16b occupy the proclitic position.

(16a) *Enclitic affecting stress:*

\[
[\text{tele}^{\text{l}}\text{efona}]
\]

telephone (you:sg)
'telephone (v)'

\[
[\text{telefo}^{\text{1na}} \quad \text{mmi}]
\]

telephone (you:sg) me
'telephone me'

\[
[\text{pettina}^{1} \quad \text{mmiddu}]
\]

brush for me it (m. sing.)
'brush it for me'

(16b) *Proclitics not affecting stress:*

\[
[\text{mi} \quad \text{du} \quad \text{e} \quad \text{ffende}]
\]
me it is (3.sg) doing

’He is doing it for me.’

[po ki mi du 1dzeðe]
for that me it to give
’to give it to me’

As illustrated by the above data, stress shift occurs only in the presence of an enclitic. In order to account for this, we suggest that the realizations of proclitics and enclitics of Seneghese are phonologically and morphologically distinct.

Remaining faithful to the definition of a clitic, we may not claim that the pronoun in (16a) is a true clitic. Instead, we argue that it is a weak pronoun, while those in (16b) may be considered as clitics. (For a discussion against a purely phonological approach to stress placement in these varieties, see Ordóñez & Repetti (2006)).

3.4 Structural Differences Among Clitics and Weak Pronouns:

In languages such as Lucanian, Altamura, Corsican, Neapolitan, Sardinian and Gascon, which have shift stress with enclitic pronouns, the proclitic and enclitic forms often differ morphologically. We find that the enclitic form is always more structurally complex than that of the proclitic. For example, in Lucanian, masculine singular accusative proclitic pronouns are realized as [u], but enclitic pronouns as [áll].

Furthermore, it so happens that stress shift occurs only when the enclitic form [áll] is present (suggesting that the fuller forms are truly weak pronouns and that weak pronouns may carry or attract stress).

(17) Lucanian:  
[u píggjø] ‘it takes’
[píggjállø] ‘take (you:sg) it’
These data show that lexical forms of enclitics are more structurally complex and closer to the Latin form *illu* than their proclitic counterparts. This helps support the hypothesis that the enclitics of Seneghese (just as in Lucanian) are weak pronouns, while the proclitics are true clitics.

### 3.5 Syntactic Position of Clitics and Weak Pronouns

If the position of the verb relative to that of clitics (i.e., causing distinction between proclisis and enclisis) is due to verb movement (rather than proposing different syntactic positions designated to weak pronouns and true clitics), we might expect to find the same form of the pronoun regardless of whether it appears as a proclitic or an enclitic. It is illustrated in (12a) and (12b) that this is not always the case. It appears as though weak pronouns appear syntactically lower than proclitics. Our hypothesis is that in these minor Romance varieties, we find true clitics preverbally, while post-verbally, we may find either true clitics or weak pronouns, and that the weak pronouns bear stress.

As exemplified above, Seneghese employs both enclitics and proclitics. I suggest that the position of these pronouns differs as a result of potential landing sites allowing different morphological features (satisfied by either true clitics or weak pronouns) to occupy them. If verb movement alone were responsible for these positional differences of pronouns relative to the verb, we would expect both the enclitic and proclitic forms to be the same. Considering the structural differences of proclitics and enclitics illustrated in the sections above, we presume that this is not the case.

My analysis is confirmed by data from Cabrarese, a variety quite similar to Seneghese, spoken in a nearby ‘comune’ and province. We find that proclitics and
enclitics take the same phonetic and morphological forms. This is illustrated in the section below.

4. Cabrarese

We find that in Cabrarese, the form of enclitics and proclitics is similar. The table below illustrates the consonant lengths of proclitics and enclitics, respectively.

**Proclitics:**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>[s\text{e du} keru man’da:e]</td>
<td>‘I want to send it to him’</td>
<td>89 ms.</td>
</tr>
<tr>
<td>[p\text{o si du} ‘narrede]</td>
<td>‘to tell it to him’</td>
<td>92 ms.</td>
</tr>
<tr>
<td>[s\text{i du komporauzu}]</td>
<td>‘we buy it for him’</td>
<td>70 ms.</td>
</tr>
</tbody>
</table>

**Enclitics:**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>[dza`miduzu]</td>
<td>‘give them (m.) to me’</td>
<td>81 ms.</td>
</tr>
<tr>
<td>[dza`mida]</td>
<td>‘give it (m.) to me’</td>
<td>72 ms.</td>
</tr>
<tr>
<td>[dza`midaza]</td>
<td>‘give them (f.) to me’</td>
<td>92 ms.</td>
</tr>
<tr>
<td>[dzai`sidaza]</td>
<td>‘give it (f.) to him’</td>
<td>96 ms.</td>
</tr>
<tr>
<td>[ben`didaza]</td>
<td>‘sell them (f.) to them’</td>
<td>80 ms.</td>
</tr>
</tbody>
</table>

I propose that the proclitic pronouns of Cabrarese belong to the same lexical category as the proclitics of Seneghese, as they do not bear nor attract stress, and are relatively short in length. The enclitics of Cabrarese, however, I claim also to be true clitics, differing from the enclitic-like pronouns of Seneghese. I propose that the underlying syntactic structures of both of both Seneghese and Cabrarese must allow for insertion of a weak pronoun or true clitic in (distinct) low enclitic positions. Seneghese opts to utilize the weak pronoun position, whereas speakers of Cabrarese employ the position sufficiently checked by features of true clitics.
5. Synchronic and historical evidence for the clitic/weak pronoun distinction in Seneghese:

5.1 Synchronic Evidence

In arguing for two lexically distinct pronominal groups to which the proclitics and enclitics of Seneghese belong, we may look to both synchronic and diachronic evidence. We find cases of lexical Raddoppiamento Sintattico (such as in [dza'mi₇u]).

Furthermore, referring to section (3), in which a stress-induced analysis of clitic consonant lengthening is examined, we must consider that cliticization does not typically trigger stress-induced Raddoppiamento Sintattico (nor any other phonological processes). In Monachesi’s (1996) analysis of intervocalic s-voicing in Northern Italian varieties, it is illustrated that in various contexts (including morpheme-internal, before verb inflection, before affixation, end of prefix), this type of voicing occurs. We find, however, that there are also many contexts in which this voicing does not occur (demonstrated by section 18b).

(18a)

Morpheme-internal: /isola/ ‘island’ → [izola]

Before verb inflection: /caus + ava/ ‘he/she was causing’ → [cauzava]

Before infixation: /cas + in + a/ ‘little house’ → [cazina]

End of prefix: /dis + uguale/ ‘unequal’ → [dizugwale]

(18b)

After prefix: /ri + salire/ ‘to leave again’ → [risalire]

Between compounds: /porta + sigarette/ ‘cigarette case’ → [portasigaret:e]
Before enclitics: /lavando + si/ \(\rightarrow\) [lavandosi]

After proclitics: /la + sera/ \(\rightarrow\) [la sera]

In phrase: /bella + sera/ \(\rightarrow\) [bel:a sera]

Nespor and Vogel (1986) argue that the rule of intervocalic s-voicing is not productive in contexts other than within the Prosodic Word. For this reason, it is productive in the first example set and not in the second.

5.2 Historical Evidence:

Additionally, we find that Latin lexical geminates (particularly –ll- \(\rightarrow\) –ɖɖ-) have been well preserved in all attested varieties of Seneghese. The example below illustrates a phrase involving multiple –ll- geminates, (spoken in the province of Oristano):

\[19\]

‘a chi ha cervello non manca capello’
[a ka á karbeɖɖu no manka kapeɖɖu]

(Rohlfs, 1968)

Furthermore, the difference in the consonant sound realized between Latin (-LL-) and modern Seneghese (-ɖɖ-) is accounted for by Ferrer (1984: 20), who writes,


‘The development of Latin –LL- into /ɖɖ/: …on the treatment of the geminate Latin liquid: in fact, in the three Mediterranean areas (Sardinia, Sicilia, and Corsica), -LL- developed into a retroflex sound, characterized by a type of alveo-palatal articulation.’

These two crucial points being presented, it should come as no surprise that modern Seneghese employs, still today, the full lexical geminate of the Latin geminate demonstrative, ILLU in creating its weak pronouns just as it employs the full lexical forms of other Latin words containing geminates. Furthermore, it stands to reason that
this geminate –LL- is realized as –ɖɖ- given various accounts of the development of Latin into the Sardinian varieties, including that of Ferrer (1984).

6. Conclusion

Through this study, I have found that the position of the pronoun relative to the verb (proclitic or enclitic) certainly has an effect on stress, as we find that only enclitics in Seneghese may cause stress shift. This supports the hypothesis that proclitics and enclitics of this variety are truly different lexical items. Through data and spectrogram analysis, I have found that clisis and stress shift certainly do have an effect on consonant length. The consonant length of the pronouns realized as enclitics is nearly double that of the proclitics. This difference fully corresponds with Cardinaletti and Starke’s proposal that weak pronouns are structurally more complex than clitic pronouns, as we find that due to specific syntactic conditions coupled with a peculiar phonological process of lexical doubling (perhaps more accurately described as ‘moraic filling’), enclitics have more access to the underlying moraic structure of the pronoun (and manifest this through consonant length) than do proclitics. Furthermore, my findings involving the Sardinian variety of Cabrarese support the notion that two, low, post-verbal, syntactic positions exist; one designated to weak pronouns and other other to true clitics. We find that a purely phonological analysis of consonant length in the pronouns of Seneghese may not account for the differences exhibited, especially considering the fact that stress-induced Raddoppiamento Sintattico is not present in any other context in the variety of Seneghese. I argue that these findings support the analysis of these pronouns as different lexical items, defined as weak pronouns and true clitics. Additionally, my conclusion corresponds with Rohlf's (1968:167) claims that the enclitic forms, causing stress shift,
particularly those containing variants of /ll/ and /nn/, are closer to the Latin forms *illu* and *inde* than are the proclitic forms, which do not affect stress.
References:


Appendix:

In this section, I include samples and glosses of the Seneghese and Cabrarese phrases used as data.

(1) \([\text{dzai } \overset{1}{s} \text{ idda}]\)
    give him it (f.)
    ‘Give it to him.’

(2) \([\text{dzai } \overset{1}{s} \text{ iddozo}]\)
    give him them (m. pl.)
    ‘Give them to him.’
(3) \[\text{dza} \quad \text{middaza}\]
    give me them (f. pl.)
    ‘Give them to me.’

(4) \[\text{bend} \quad \text{iddozo}\]
    sell them (m. pl.)
    ‘Sell them.’
(5) [po si du 'narrede]
   for him it tell
   'to tell it to him.'

(6) [betti 'siddu]
   bring him it
   'Bring it to him.'
(7) [dza ˈmiddu]
tell me it
‘Tell it to me’

(8) [bettisin ˈdeddu]
bring us it
‘Bring it to us.’
(9) [kompora 'middozo]
    buy    me    the
    ‘Buy them for me.’

(10) [kompora 'midda]
    buy    me    it
    ‘Buy it for me.’
(11) [kompora ʰmiddaza]
    buy me them
    ‘Buy them for me.’

(12) [pette ʰnaddu]
    brush it
    ‘Brush it.’
(13)  [pete 'naddozo]
     brush   them
     ‘Brush them.’

(14)  [pete 'nadda]
     brush   it
     ‘Brush it.’
(15) [pettina 'mi\dd\a]
brush me it
‘Brush it for me.’

(16) [pettina 'mi\dd\u]
brush me it
‘Brush it for me.’
(17) [a'lloɖɖa] ‘here it (f. sing.) is’

(18) [ki ɖos 'as a...] ‘you will find them there…’
(19) [po si du ‘narrede]
for to him it to tell
‘to tell him it.’

(20) [du joe ɪfende]
it I am to do
‘I’m about to do it.’
(21) \[\text{kɛntse ðu ëbbiède} \]
without it to see
‘Without seeing it.’

(1) \[\text{dzai ëmida} \]
give me it
‘Tell it to me’
(2) [dzai 'midu]
give me it
‘Tell it to me’

(3) [po si du ‘narrede]
for to him it to tell
‘to tell it to him’
(4) [dzai 'midaza]
give me them
‘Tell them to me’

(5) [si du komporauzu]
to him it we buy
‘we buy it for him’
(6) [dzai 'miduzu]
   give me them
   ‘Tell them to me’