Suprasegmental Structure in Meridional French and its Provençal Substrate

Alex Chabot
University of Virginia
email: amc8m@virginia.edu

1 Introduction

Southern French, also called Meridional French or Français du midi, has been recently recognized as a language variety separate from Standard French which deserves to be studied on its own (Brun, 1931; Séguy, 1950; Durand, 1995; Watbled, 1995; Rizzolo, 2002; Coquillon, 2005; Eychenne, 2006). Meridional French differs from Standard French in its pattern of mid vowel alternation, the common penultimate stress in lexical items, a preponderance of schwa resulting in mostly open syllables, and the presence of post vocalic nasal consonants (Durand, 1988; Coquillon, 2005).

The language spoken in southern France prior to the introduction of French is known as Occitan, another daughter language of Latin. The term Occitan designates the collection of Romance languages spoken in the South of France, and is essentially the result of the Vulgar Latin spoken by Roman soldiers and colonists in Occitania, and the languages spoken there before the arrival of the Romans (Bec, 1963). A dialect of Occitan, known as Provençal, is spoken in an area that corresponds, more or less, to the modern French région of Provence-Alpes-Côtes d’Azur. Specifically, it is this dialect of Occitan that is used as a model in this discussion, though the conclusions drawn are thought to apply generally to Southern French.

For political and economic reasons, Provençal was slowly abandoned in favor of French in a process of language shift. This process lasted quite some time, and it was likely not until universal scholarization in the late 19th century that perfect bilingualism in French and in Provençal was common (Brun, 1927). The first generation of French language learners would have learned French “imperfectly,” applying the knowledge of their language, Provençal, to the new language, French, resulting in characteristic divergences. These divergences were then passed down through the generations, resulting the characteristic Meridional French accent.

It is widely recognized that many of the features which make this dialect different from that of Standard French are due to the Occitan substrate (Séguy, 1950). However, most analyses of Meridional French give relatively little attention to the nature of the substrate. Nevertheless, an investigation of the phonetics of Provençal reveals some striking phonological similarities with Meridional French.

Meridional French’s most salient characteristics, as discussed above, can in fact be traced to two suprasegmental structures in Provençal: the syllable, and the metrical foot. Such an analysis recognizes the importance of language contact in the synchronic structure of a language, at the same time as it gives us new insight into said language, permitting new generalizations to be made.

2 Suprasegmental Structures

Coquillon (2004) has shown in experimental data that speakers of Meridional French can be identified by speech which has been treated by a low-pass filter. In the experiment, 35 native French speakers were played a prerecorded conversation between two people, including five people from the city of Marseille with typical Meridional accents. The recordings were then passed through a low-pass filter, which reduces the amplitude of frequencies above the F0 formant. This fundamental frequency is thought to correlate with suprasegmental prosodic features such as stress. The importance of suprasegmental structures in speech is demonstrated by the fact that 75.2 percent of French speakers could identify Meridional French speakers uniquely by prosody.

1This document is based on a longer thesis which can be found at http://www.eggparm.com/AChabotMAthesis.pdf
2I would like to thank Gladys Saunders and Lise Dobrin for the enormous amounts of time they both spent discussing this project with me, as well as the great insight they both offered.
2.1 Provençal Syllables

Provençal syllables can be characterized, in contrast to those of Standard French, as light syllables of the shapes V or CV, as in code ‘pebble’ [kɔ.de], iue ‘eye’ [jø], and emé ‘with’ [e.me]. Multisyllabic words are parsed into syllables in accordance with the CVCV alternation, as in abîho ‘bees’ [a.bi.jo] (Blanchet, 1992).

However, not all Provençal syllables follow this characterization. There are instances of consonantal syllable codas, although the segments permitted as codas are highly restricted. One segment commonly realized in coda position is [N]. This segment is thought, following Goldsmith (1990), to be licensed by the coda. This will have important repercussions in the discussion that follows.

What is clear is that Provençal syllable shapes are predominately open, ending in a vowel. In fact, Blanchet (1999:69) notes that “une autre caractéristique forte de réduction du rôle des consonnes en provençal réside dans l’absence quasi totale de consonnes finales.” To put it precisely, Blanchet cites an earlier study which found that between 83 and 93 percent of the thousand most common words in the Provençal lexicon end in a vowel (Blanchet, 1999).

Provençal’s core syllable structure can be generalized schematically as in (1):

(1)  \[
\sigma \leftarrow←←←←←←←\uparrow↑↑↑↑↑↑↑\text{onset} \quad \text{rhyme} \quad \text{C peak} \quad \text{V}
\]

2.2 Meridional French Syllables

Meridional French is also a language which seems to have a core syllable of CV. In part, this is due to the common realization of schwa, which has a syllable opening effect, as seen in natte ‘pleated hair’ (2) and tête ‘head’ (3):

(2)  a. Standard French: [nat]  
    b. Meridional French: [na.ta]  

(3)  a. Standard French: [tɛt]  
    b. Meridional French: [tɛ.tə]

For Séguy (1950) the effect of orthography was one of the primary reasons for the stability of schwa in Meridional French. Since French was inculcated to the people of Provence through clerks, scribes, and the justice system, most people’s exposure to French was through what they read. As a result, they interpreted Standard French’s final orthographic e as a final, atonal vowel.

However, this vowel is not always realized in accordance with orthography. For example, the word boue ‘mud’ is realized as [bu] not *[bu], and the word vraie ‘true (fem.)’ is realized as [vre] not *[vre]. It an can also appear where there is no orthographic ‘e’, such as in aveau ‘with’ realized by some speakers as [avɛko].

Séguy (1950) made explicit the link between orthography and schwa in Meridional French, but also recognized phonetic underpinnings which “supported” the realization of schwa. In other words, the high frequency of Provençal words which end in an atonal vowel, very similar in realization to that of schwa, facilitated the pronunciation of final e in Standard French words. Provençal did not lose Latin’s word final, atonal vowels. This preference for words which end in a neutral vowel served as a support for the word final schwas of Meridional French. Schwa in Meridional French has a close connection to orthographic e, which results in the frequent realization of words with the syllable contour of CV. It is my position that this was facilitated by the Provençal preference for an open syllable of the shape CV.

It must be acknowledged that words like lac ‘lake’ [lak], bac ‘ferry’ [bak], and roc ‘rock’ [rok], are indisputably a part of the Meridional French lexicon. On the other hand, the number of words in Meridional French that are of the shape CVC is extremely small and such examples are atypical examples of Meridional French words, which as I have shown are generally CV words. Meridional French is thought to have a prohibition against codas, being modeled on Provençal’s core syllable.
To account for this, a structure known as a degenerate syllable is posited. Accordingly, in Meridional French consonants are always in the position of syllabic onsets, including those with no following vowel. Following Raimy (to appear), a degenerate syllable has the same branching structure of a normal CV syllable, but has no nucleus at all as in (4):

\[
\sigma \leftarrow \sigma
\]

\[\sigma \leftarrow \sigma \]

\[\nu \quad c \quad k\]

This analysis borders on the abstract. However, empirical evidence from language typology and from Meridional French itself indicates that it is a valid analysis. Speakers have adopted several strategies to reduce the realization of degenerate syllables.

For example, Brun (1931) noted that some words, for example *avek* ‘with’ which is pronounced in Standard French as *[avɛk]*, can be realized without any final consonant at all in Meridional French, as in *[ave]*. He also says that in word internal clusters, syllable final consonants are commonly dropped. In Standard French the words *affection* ‘affection’ and *facteur* ‘mailman’, are realized *[afɛksjɔ̃]*, *[faktœʁ]* respectively, but are realized without syllable final *[k]* in Meridional French, resulting in open syllables. All this demonstrates that in many ways, codas are defective in Meridional French.

Furthermore, Durand et al. (1987:990) note, in their study of a variety of French from Languedoc, that generally speaking, “word-final consonants when released can be followed by a short schwa for example in *sept* that may be perceived as different from a full schwa (as in Sète), but not so unambiguously as not to put the analyst in a quandary in a few instances.” This echo of schwa is inserted as a strategy to partially repair degenerate syllables. While it is not always fully realized, the resulting syllable is.

I also observed, in the speech of a native Meridional French speaker, a tendency to resyllabify words that end in a final consonant when they are followed by another word which begins with a vowel, such as *lac alpin* ‘Alpine lake,’ which was realized *[lak.al.pɛn]*. This is a strategy to realize well formed syllables, since the final consonant in *lac* is realized as the onset of the second syllable, and not as a coda.

It is clear then that Provençal and Standard French differ significantly in their possible syllable codas and that the same differences hold true for speakers of Meridional French, which has the same phonotactic restraints as Provençal does. The syllable is recognized according to this analysis as a psychologically real structure, which was transferred intact from Provençal into French.

2.2.1 Post Vocalic Nasal Consonants in Provençal and Meridional French

We have seen that Provençal, in addition to the core syllable CV, admits syllables which have *[ɲ]* as their coda. This can be rendered schematically as in (5):

\[
\sigma
\]

\[\sigma
\]

\[O \quad R
\]

\[C \quad N \quad C
\]

\[V \quad ɲ
\]

This structure is taken to be more marked for Provençal speakers than the core syllable of CV.

It is also a well known fact of Meridional French that where Standard French has a phonemic nasal vowel, Meridional French has a variably nasalized vowel\(^4\) followed by a full nasal consonant, as shown in (6):

\[a. \text{ Standard French: } \textit{pain} \text{ ‘bread’ } [pɛ̃]\]

\[^3\]It is true that many Provenceaux pronounce these words with syllable final consonants today. However, knowing that these constraints were more widespread in the past, it can be reasonably assumed that as Standard French becomes more and more widespread, even in Provence, the Provençal substrate and prohibition on final codas is waning and being replaced by Standard French structures.

\[^4\]Durand (1988) notes that for some speakers, the vowel which precedes this nasal consonant lacks nasalization altogether. In others, the amount of nasalization ranges from slight to large.
b. Meridional French: pain ‘bread’ [pény]

There has been some discussion about the status of this segment as a phoneme. I will follow Durand (1988) in assuming that such nasal consonants are true phonemes in Meridional French, and that the nasalized vowels which precede them are nasalized only phonetically.

I have said that the corresponding segment in Provençal is licensed by the coda. It is suggested that when the syllable was transferred from Provençal into Meridional French, only the unmarked core syllable, CV, was transferred. Speakers generalized based on the core syllable, and excluded the other, more rare syllable shapes from their generalizations, resulting in an absolute prohibition against codas. We would thus represent the word pain ‘bread’ [pény] the same way as any other word in Meridional French, with the nasal consonant constituting the onset of a degenerate syllable, as in (7):

(7) \[ \sigma \quad \sigma \]
\[ p \quad \hat{e} \quad \eta \]

However, the situation is somewhat more complex than this. This phenomenon, and its implications for the analysis here, will be further explored in the discussion that follows.

3 Mid Vowel Alternations

The Provençal syllable has important effects on the phonology of Meridional French. One such effect is on the phonetic realization of mid vowels. One of the most salient characteristics of Meridional French, and the one which has arguably attracted the most attention from linguists, is the pattern of mid vowel alternation which it exhibits. This phenomenon has been treated a number of times in several different frameworks, from traditional generative work to the non-linear approaches of Selkirk and Durand, and most recently by Rizzolo and Eychenne. Drawing on insights from all of their work, I present here a new analysis of this phenomenon, based on stress patterns inherited from the Provençal substrate.

In Meridional French, there are essentially three mid vowels, /E, Œ, O/. Mid vowels are underspecified, since as Blanchet (1992) says, their exact realization is dependent on whether or not they are realized in open or closed syllables. Traditional explanations have the open variant appearing in closed syllables, and the close variant appearing in open syllables.

This has often been generalized as a simple allophonic relationship based on syllable shape. However, two major problems prevent this generalization from being an accurate representation of the facts in Meridional French. The first is that, as has been noted by Durand et al. (1987) and Watbled (1995), mid vowels which are followed by syllables containing schwa are realized as the mid-open varieties, although due to word final schwa’s syllable opening effect, we would expect these vowels to be realized as their close variants, since they are found in open syllables. But instead of faire ‘to do’ [ʃɛʁ] and bête ‘animal’ [bɛt], we have [ʃɛʁ] and [bɛt]. The second is a typological concern: as explained by Rizzolo (2002), no language known presently exhibits such behavior. This would make Meridional French unique in the world’s languages as one which has this particular pattern of lax/tense alternations based on syllable shape.

Durand et al. (1987) use as a criterion for identifying schwa its tendency to lower mid vowels. This leads us to posit the following generalizations about the mid vowels:

(8) Mid vowels are realized as mid-close when in open syllables, and mid-open when in closed syllables or when preceding a syllable whose nucleus is schwa.

The problem with this analysis, as noted by Durand (1995), Rizzolo (2002), and Eychenne (2006), is its disjunctiveness; closed syllables and open syllables followed by schwa do not have anything in common that could plausibly result in the pattern of vowel alternation exhibited by Meridional French.

One solution that was put forth very early by Selkirk (1978) for Standard French is that schwa, being incapable of bearing stress, requires a strong element with which it can join to form a metrical foot.
Languages vary as to how many syllables constitute a foot, and in the case of Standard French, Selkirk (1978) showed that every foot is composed of one syllable only, except for schwa joined with a strong syllable to form a bi-syllabic foot.

Watbled (1995) drew upon Selkirk’s theory of French Feet for describing this effect in Southern French. Rather than lowering mid vowels directly, schwa combines in a hierarchical suprasegmental structure, a metrical foot, in which mid vowels are realized as their open variants.

The word galette ‘cake’ [galɛt] as pronounced by a Meridional French speaker, would then be, according to Watbled, represented suprasegmentally by (9):

\[
\begin{array}{ccc}
Σ & Σ & \\
σ & σ & σ \\
g & l & e & t \\
\end{array}
\]

The strong syllable in a foot composed of multiple syllables is that which is stressed. As the head of a syllable is always its most sonorant segment, the head of a foot is the syllable which carries stress. Since schwa cannot be stressed, it is dominated by the preceding syllable. In other words, following Selkirk (1978), the weak syllable of a foot is dependent on the strong syllable. According to this analysis, the head of a foot is treated as a closed syllable as far as mid vowels are concerned. In such situations the mid vowels /E Œ O/ are realized as their open variants, although they are realized in open syllables lower down on the prosodic structure.

However, this analysis has the same problem as the Law of Position: there is a disjunctiveness which is problematic for generalizations. According to this analysis, mid vowels are realized as mid-open when in closed syllables or when the first element of a metrical foot whose weak element is schwa.

A new analysis is suggested here, based on the Provençal substrate. The theory of the foot can still be used to describe the distribution pattern of mid vowels in both Provençal and Meridional French. I have described how the Provençal syllable played a big role in the interpretation of French words in Provence. If the syllable is to be recognized as a hierarchical structure which was transferred from Provençal to French, then it is not hard to realize that the Provençal metrical foot, composed of syllables, was also transferred into French. Indeed, since the two structures are inherently related, the Provençal foot was transferred into French along with the structure of the syllable as a matter of course.

It is known that the metrical foot plays an important part in the assignment of word stress. It is my position that it is stress in the metrical foot which is responsible for the pattern of mid vowel alternations in Meridional French. When a mid vowel, /E Œ O/, is realized as the head of a strong syllable of a syllabic trochee, it will be realized as its mid-close vowel variant, [ɛ, œ, ø].

Foot formation in Meridional French has been thought to be the same as in Standard French, as discussed above. However, there is reason to believe that foot formation is both more common in Meridional French, and iterative. In contrast to Standard French, Meridional French has a tendency to form trochaic feet and these feet are responsible for Meridional French’s different stress and prosody patterns, as well as the pattern of mid vowel alternation. These syllabic trochees were imported into French from Provençal.

3.1 Stress in French and Meridional French

French is said to be a syllable timed language, where the position of stress is non-contrastive, and minimal pairs are never distinguished by stress (Walter, 1977). Instead, where stress falls in a word is entirely predictable, since it always falls on the last syllable of a word.

In contrast, stress in Meridional French does not always fall on the final syllable, but sometimes on the penultimate. This is a widely recognized characteristic of Meridional French and is said to make the accent sound like “singing” by speakers of Standard French.
There seem to be at least three situations in which stress falls on the penultimate syllable of words: in situations where the last syllable's nucleus is schwa and therefore incapable of bearing stress; in situations of lexical borrowing where words borrowed from the Provençal lexicon were borrowed with their stress pattern intact; and situations in which French and Provençal lexical items are very similar.

In words from the Standard French lexicon, stress still falls on the last syllable when possible, as in décolorer ‘to shell’ [dekɔʁe]. However, the realization of schwa in word final position will cause the accent to fall on the penultimate syllable. We can see the effect in lectrice ‘female reader.’ In Meridional French, this word will be realized with an unrestressable word final schwa due to orthographic and morphophonemic interference from the Provençal substrate, and as a consequence stress will fall on the penultimate syllable, [lɛktris].

In the second situation, Provençal words which were incorporated into Meridional French may retain their native stress patterns. If these words were stressed on the penultimate syllable in Provençal, they will often be stressed on the penultimate syllable in Meridional French. Thus aïoli ‘garlic, egg, and olive oil sauce’ is realized [aˈjɔli].

Finally, the two lexicons share a certain number of very similar items, such as colis ‘package’ [kolis], which can be pronounced variably with Provençal penultimate stress intact, or Standard French final stress.

The syllables in these words can be characterized as trochaic feet, in which one stressed beat is followed by one unstressed beat.

According to this analysis, tête would be represented schematically as in (10):

\[(10) \quad \Sigma \rightarrow \sigma_s \rightarrow \sigma_w \rightarrow t \rightarrow e \rightarrow t \rightarrow \sigma\]

Aïoli pronounced with its Provençal stress pattern intact would be represented as in (11):

\[(11) \quad \Sigma_w \rightarrow \Sigma_s \rightarrow \sigma_s \rightarrow \sigma_w \rightarrow a \rightarrow j \rightarrow \sigma \rightarrow l \rightarrow i\]

Although stress rules generally apply as in Standard French, stress which falls on the penultimate syllable forms a trochaic foot, which can be easily predicted. Furthermore, it is precisely the mid vowels which occur as nuclei in trochaic feet which are subject to the mid-open/mid-close alternation. In the next section we will see that this effect is in many respects like a similar phenomenon in Provençal.

3.2 Stress in Provençal

Unlike French, in which stress is predictable, Provençal makes important lexical distinctions based on stress. Blanchet says there are two possible places for stress: the final syllable, and the penultimate syllable (Blanchet, 1992). There are many minimal pairs that are contrastive only in where the stress falls, as in the minimal pair shown in (12):

\[(12) \quad \begin{align*}
a. & \quad \text{calo} \quad \text{‘fish bone’} \quad [ˈkalo] \\
b. & \quad \text{calo} \quad \text{‘big stick’} \quad [ˈka.lo] \quad (Blanchet, 1992)
\end{align*}\]

Since Provençal makes distinctions based on relative prominence of syllables, and not their weight, I take the basic foot in Provençal to be the syllabic trochee as in (13):

\[(13) \quad \Sigma \rightarrow \sigma_s \rightarrow \sigma_w \rightarrow k \rightarrow á \rightarrow l \rightarrow o \quad \text{calo ‘fishbone’}\]

The vowel inventory of Provençal is of course somewhat different from that of Standard French. Generally speaking, vowels which in the Provençal inventory correspond to French vowels, such as /ɔ/ for
instance, are realized more open than their French counterparts (Blanchet, 1999). The main difference between the two inventories, however, lies in the distribution of Provençal vowels, whose exact phonological status is somewhat unclear, due to the way they behave when stressed (Blanchet, 1992).

As in Standard French, there is a clear alternation between open and close vowels, but the conditioning environment for the open variant is a stressed syllable, not a closed syllable. This is demonstrated by the following verbal paradigms:

(14)  
a. creba ‘to burst’ [kæ'ba]  
b. crèbo ‘he/she bursts’ [kærbo]

(15)  
a. crèsi ‘believe 1s’ [kærzi]  
b. cresêtz ‘believe 2p’ [kær'ez]

The features of mid vowels are somewhat underspecified, the result being that they can be realized higher or lower depending on the context, the deciding factor for any of the variable phonemes being that of stress. Stressed vowels tend to be realized more open, while unstressed vowels are realized more close.

The pattern is not an absolute one. Because [e] and [ɛ] are in free variation, there are several examples of words stressed on the penultimate and are realized variously with both variants, such as careto ‘cart’ is variably realized as [karet] and [kare'to] depending on the speaker. On the other hand, [ɛ] is only possible in stressed syllables.

There is also a strong tendency for this phenomenon to take place in trochaic feet, as seen when (16) is compared to (17):

(16)  
Σ  
|  
|  
|  
Σ

(17)  
Σ

The word ‘attached to a cart’ [kare'tado] demonstrates that what is underlyingly /e/ is on occasion opened to [ɛ] when stressed, as in (18):

(18)  
Σ

So we see in the second syllable that the [ɛ] is realized when stressless, while [e] is only realized when stressed, as in the examples above, and that when that syllable is moved out of the domain of metrical foot stress by the addition of the morpheme -ado, [e] is realized. Generally, apart from some lexically conditioned exceptions, we can see that [ɛ] is realized when it is the head element of a syllabic trochee.

4 Metrical Feet in Meridional French

Meridional French does not assign stress by trochee. Rather the rightmost syllable is always stressed as in Standard French and when a syllable which cannot bear stress, such as a syllable whose nucleus is schwa or a syllable which has no nucleus, is present, that syllable joins up with a strong syllable to its left. This forms the syllabic trochee. If a mid vowel is the nucleus of the strong element in a trochee, it will be realized as mid-open, as can be seen in (19).
If it is the nucleus of a degenerate foot, then the opening effect does not take place, as in (20):

(20) \[
\begin{array}{c}
\Sigma_w \\
\sigma_s \\
f e t a \\
\end{array} \quad \begin{array}{c}
\Sigma_s \\
\sigma_s \\
f e t e \\
\end{array} \\
\sigma_w \\
f etard 'party'
\]

Degenerate syllables are considered to be weak, and will join up with syllables to their left to form trochaic feet as expected, like in (21):

(21) \[
\begin{array}{c}
\Sigma \\
\sigma_s \\
\sigma_w \\
u e k \\
\end{array} \\
roc 'rock'
\]

The effect of stress can be seen very clearly in a series of words in Meridional French which have variable stress. We have already seen one example of this in aioli, a word imported directly from the Provençal lexicon. Following Watbled (1995), there are two ways of pronouncing this word; with Provençal stress pattern intact, or with Standard French syllable final stress:

(22) a. With Standard French final syllable stress: aioli [ajoˈli]

b. Provençal trochaic foot intact: aioli [aˈjoli]

When pronounced with standard French stress, the mid vowel in the second syllable, which is unstressed, is realized mid-close. When it is pronounced with the native Provençal trochee intact, it is the head of the stressed syllable and realized as mid-open. What is demonstrated by this example is the lowering effect stress has on mid vowels.

It is not only in borrowings that this is seen. Some native French words that are contrastive become nearly homophonous in Meridional French because of schwa. The contrastiveness is maintained in some cases based on where the stress falls.

(23) a. Final Syllable: heureux ‘happy’ [œˈuʃ]

b. Penultimate Syllable: heure ‘hour’ [œˈer]

Underlyingly these words are given the representation [ŒœE] and [Œœa], respectively. We see that when an unstressed syllable forms a trochaic foot with a stressed one, the expected mid-vowel opening occurs.

Weak syllables will not join with another syllable to its left if that syllable is also degenerate. Instead, foot parsing skips that syllable and continues normally, as in (24):

(24) \[
\begin{array}{c}
\Sigma_s \\
\sigma_s \\
p e u t e \\
\sigma_w \\
t e \\
\end{array} \quad \begin{array}{c}
\Sigma_w \\
\sigma_w \\
\sigma_w \\
\end{array} \\
perte 'loss'
\]

Such an analysis accounts for the entirety of the Meridional French lexicon, and perfectly predicts where each mid vowel variant will be realized. Most importantly, it does away with the disjunctiveness that was inherent in earlier analyses.

4.0.1 Postvocalic Nasal Consonants: Codas or Syllable Onsets?

I have suggested that nasal consonants act as syllable onsets in Meridional French, and thus provoke the
construction of syllabic trochees. We can see such a structure in (25):

(25) \begin{align*}
\Sigma & \vdash \sigma_s \vdash \sigma_w \\
p & \hat{e} & \nu
\end{align*}

However, the pronunciation of words which end in nasal consonants is known to be variable, as per Durand (1988) and Eychenne (2006), who note that the vowel in question can also be realized mid-close in some speaker’s idiolects, giving [pêŋ]. In such a case, it is clear that a trochaic foot has not been formed, since /E/ is realized as [e]. In the case of speakers who do realize such vowels as mid-close variants, it is suggested that the more marked Provençal syllable shape, CVN, was imported into Meridional French at the same time as the core syllable, CV. This would mean that pain ‘bread’ [pêŋ] would be given the representation as in (26):

(26) \begin{align*}
\sigma & \vdash \Omega \vdash \sigma_w \\
\hat{e} & \nu
\end{align*}

This meshes nicely with both the generalizations made here about Provençal syllable structure, and those about Meridional French codas. Where syllable final nasal consonants are licensed by the Meridional French syllable structure (inherited, as in the case of the core syllable, from Provençal), no foot is created and mid vowels are realized mid-close like in (26), as expected. However, for many speakers, they are syllabified as the onset of degenerate feet, in which case a foot is created, and the expected mid-open vowel variant is realized, like in (25).

5 Conclusion

The advantage of the analysis developed above lies in its predictive power, and in the fact that it is a motivated solution. It perfectly predicts where mid-open vowels will be realized, and it takes into account the situation of language contact which is at the origin of Meridional French. In addition, it allows us to explain all of the most salient characteristics which make Meridional French different from Standard French, including the preponderance of open syllables, the realization of mid vowels, the common occurrence of penultimate stress and the singing prosody of the dialect. It was shown that differences between the two language varieties can all be traced back to suprasegmental structures in Meridional French’s substrate language, Provençal.

This analysis justified both because of its theoretical elegance and the fact that it takes into account the situation of language contact in Southern France, which as we saw was far reaching and in fact still exists to certain extent right up to the present day. It allows us to describe a number of phenomena in Meridional French that make it distinct from the standard variety. It also allows us to generalize in a new way about the pattern of alternation in Meridional French’s mid vowel inventory. Previous solutions to this problem had presented a disjunctive solution which was typologically questionable. Instead, this solution relies on stress assigned by suprasegmental structures, which both eliminates the need for a disjunctive solution, and is a typologically common situation.

The present analysis is not thought to be an exhaustive account of Provençal’s effects on Meridional French. It is chiefly an examination of the effect of the substrate on Meridional French’s phonology. As such, there is naturally some room for further study of its lexicon, morphology, and syntax. Mostly, however, there is room for further study on suprasegmental structures larger than the syllable and foot, for example in the framework established by Nespor and Vogel. A more detailed study of phrasal stress and intonation, and their respective patterns in Meridional French and Provençal, is certainly conceivable.
6 References


