

The Initial Position in Southern French: Elision, Suppletion, Emergence

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1 Introduction

Although there is a body of literature on Southern French (SF hereafter, see Brun 1931; Durand 1976; Durand et al. 1987; Séguy 1951 *inter alia*) many aspects of its phonology still remain unexplored. In this paper, we investigate the behaviour of ‘schwa’ in phrase-initial and word-initial position. Based on a corpus of 20 speakers from the *département* of Aveyron, we show that the deletion of the vowel in these positions preferably occurs in frequent words and constructions. We show that this lexical conditioning is better captured in an exemplar-based framework.

2 The behaviour of schwa

French schwa is generally understood as the alternation between [œ] (or [ø]) and zero, which is historically derived from a phonetic reduction process of the vowel corresponding to <e> in the spelling. However, the phonology of schwa in SF is different from that of Northern French (NF hereafter), partly because SF developed mainly from the spelling (Séguy, 1951): final schwa (or ‘mute e’), although it had disappeared early in NF, was reintroduced, supported by the prosodic pattern of Occitan. Durand (1995: 40-1) gives four criteria which define schwa in SF. First, the vowel is systematically deleted before another vowel (e.g. *écriv(e) à*). Secondly, it is phonetically realised at the end of a word as [ə], [œ] or [ø], or even as [ʌ] or [e]. Thirdly, this vowel is never stressed word-finally (e.g. *père* [pɛ.ʁə] not *[pɛ.ʁə]). Lastly, schwa always triggers the lowering of preceding mid vowels, a phenomenon known as ‘loi de position’ (position law): closed mid vowels occur in open syllables (e.g. *paix* [pe], *peau* [po]) whereas open mid vowels occur in closed syllables (e.g. *pair* [pɛχ], *port* [pɔχ]) or in open syllables followed by a schwa (e.g. *paire* [pɛ.ʁə], *pore* [pɔ.ʁə]). From a descriptive point of view, it is widely accepted that the latter context is a trochaic foot, and a number of approaches have been proposed to reduce the disjunctive context ‘closed syllable/trochee’ (see Durand 1995; Eychenne 2006 and references therein).

While there seems to be little doubt that word-final <e>’s correspond indeed to phonological schwas, it must be noted that not all schwas occur in the dependent syllable of a trochee: clitics such as *je*, *me*, *te*... form a unary foot (see Eychenne 2006 and references therein), and in these words the vowel is always realised [ø] (not *[ə]) when the pronoun is proclitic (e.g. *je vais* [ʒøve]). One may be tempted to deny that such vowels are schwas at all, but there is evidence that they are. First, they alternate with zero, as reflected by the spelling (e.g. *j’ai*, [ʒe] and not *je ai* *[ʒøe]). Secondly, subject pronouns can be enclitic in interrogative form, in which case they are added as a suffix and trigger position law, e.g. *vais-je* [vɛ.ʒə], neither *[vɛ.ʒə] nor [vɛ.ʒø] (Durand, 1995: 42). They thus display important properties of schwas; their phonetic quality is due to the fact that, when they are proclitic, they cannot attach to a previous syllable within their prosodic domain and must form a foot on their own. It is a well known cross-linguistic fact that phonetic schwas are avoided in strong positions (van Oostendorp, 1995).

With that background in mind, we can now consider the word-initial position. In conservative SF, the vowel which corresponds to <e> in the spelling is never dropped and is always realised as [ø]: thus, forms like (*vous*) *meniez* '(you) lead (IMPARFAIT)' and *meunier* 'miller' are homophonous and are both pronounced [mønje]. The question is whether these <e>'s correspond to phonological schwas as well, or whether they have been reanalysed as stable vowels. In NF, most of these <e>'s can be pronounced or not (e.g. *semaine* [sœmɛn] ~ [smɛn]), which makes it possible to postulate a phonological schwa. In conservative SF, this argument is void since the vowel never deletes; therefore Durand et al. (1987) suggest that it is a stable /ø/. Indirect evidence in support of this reanalysis is given by the behaviour of this vowel in prefixes: forms like [βøuvvɛʒ] instead of the expected [βuvvɛʒ] (*rouvrir*, 'to reopen') suggest that at least some speakers have reinterpreted the [ø] in the prefix *re-* as a full vowel, which explains why it is not deleted before another vowel (Durand p.c., see also Eychenne 2006: 220). Another argument is provided by the behaviour of southerners who migrated to Paris. Martinet (1969: 216) reports that they tend to drop the vowel which corresponds to <e> as well as <eu>, as in the forms *pharmaceutique* [fæmæstik] and *à deux mains* (influenced by *à demain*, where the vowel can delete). A possible explanation for this phenomenon is that speakers who pronounce such forms overgeneralise by integrating a rule such as "/ø/ can be dropped" whatever its counterpart in the spelling: if they were able to distinguish schwa and /ø/, we would expect such overgeneralisations not to occur.

One may still be tempted to appeal to the oft-cited closed syllable adjustment (CSA) (Anderson, 1982; Dell, 1985), which states that a schwa turns to [ɛ] in a closed syllable (or in the head position of a trochee) as witness alternations like *mener* 'to lead' [møne] vs (*je*) *mène* '(I) lead' [mɛn(ə)]. It can be shown, however, that CSA is not a purely phonological phenomenon in SF: the vowel at play sometimes triggers mid-vowel lowering, as is expected by a schwa (e.g. *breveter* 'to patent' [bœvətə] – *brevète* [bœvɛtə]), but sometimes does not (e.g. *resemeler* 'to reheel' [bœsømələ], not *[bœsœmələ] – *semelle* [sømələ] 'tread'). Another argument in support of the stabilisation is given by the fact that reanalyses do occur for some speakers, as in the future *dépècerai* [depœsəβe] (infinitive *dépecer* 'to cut up', [depøse]) instead of the expected [depɛsəβe]; here, the vowel behaves like the stable <eu> of *creuser* 'to dig' (see *creuserai* [kœzøzəβe]). Since there is phonological evidence that alternations with [ɛ] doesn't always involve schwa, but sometimes involves /ø/, and since there is no independent evidence that graphical <e>'s in word-initial position correspond to schwas, we conclude that these vowels have been reanalysed as stable vowels in the development of SF.

Nevertheless, although it is the case that the vowel never alternates with zero word-initially in conservative SF, this is no longer true of SF as a whole: more and more speakers can drop the vowel, not only word-finally, but also in other positions, even the beginning of polysyllabic words (Armstrong and Unsworth, 1999; Durand et al., 1987). The deletion of schwa at the end of a word (or morpheme) and in clitics may be interpreted as the overapplication of the deletion process, which is limited to the prevocalic position in conservative SF (*j'ai* → *j'pense*). However, the phonological status of word-initial graphical <e>'s which do alternate with zero (*f~~e~~rai* '(I) will do') is less clear: are they cases of mere suppletion as is found in pairs like [deʒa] – [dʒa] *déjà*, or is the vowel reanalysed into a schwa?

3 A corpus-based investigation

The data we report on is based on 20 speakers from the *département* Aveyron in formerly Occitan-speaking Southern France¹. The corpus has been established following the methodology of the project *Phonologie du Français Contemporain* (PFC) (see <http://www.projet-pfc.net>, Durand et al. 2002 and Durand et al. 2005). Eight of the speakers live in the suburbs around the capital

¹Hereafter, we will use Southern French to refer to the 20 informants from our corpus. The results can to some extent be generalised to the South West of France.

Rodez and 12 speakers in Salles-Curan, a municipality of 1200 inhabitants located about 40 kilometres from Rodez. The data has been collected in 2002, the Rodez corpus by Elissa Pustka and Jacques Durand, the Salles-Curan corpus by Elissa Pustka (see Sobotta 2006).

Twenty minutes of spontaneous speech per speaker were annotated using the PFC’s coding system and analysed with respect to individual lexemes and constructions. Two contexts of possible deletion are considered in this paper: word-initial position in polysyllables (e.g. *p(e)tit*, *b(e)soin*) and phrase-initial position in monosyllables (e.g. *j(e) suis*, *j(e) pense*). The clitics represent a total of 1328 potential schwas and the polysyllabic words 639.

In the initial syllable of polysyllabic words (e.g. *le besoin*), we can observe an average vowel deletion rate of 11%. However, we should note that the dispersion is very large. In fact, five out of 20 speakers always realize the <e> here: these are speakers from the middle and older generation, among them the two speakers having Occitan as first language, a sawyer born in 1926 and a housemaid born in 1921, who both grew up on isolated farms. The speakers with the highest deletion rates are two young men: a warehouse worker born in 1973 (26%) and a student born in 1985 (33%).

It appears that exceptions are not randomly distributed across the lexicon, but concern a well-defined group of words and constructions (see figure 1). Previous studies sporadically mention: *est-c(e) que*, *qu’est-c(e) qui*, *n’est-c(e) pas ?*, *parc(e) que*, *p(e)tit*, *maint(e)nant*, *ach(e)ter* and verbal phrases introduced by *je*, e.g. *j(e) suis*, *j(e) sais pas*, *j(e) crois*, etc. (see Armstrong and Unsworth 1999; Durand et al. 1987; Séguy 1951), which is consistent with our data. In the corpus, the majority of the exceptions concern the various forms of the word *petit* and the future and conditional forms of *être*². From a total of 70 elided schwas, 40 are found in the masculine form *petit* (and 24 of these 40 in the construction *un petit peu*, where the elision rate is 63%).

word	tokens	deletion rate
<i>petit</i>	40/84	48%
<i>petits</i>	8/20	40%
<i>petite</i>	19/31	6%
<i>petites</i>	1/12	8%
<i>sera</i>	4/6	67%
<i>serait</i>	4/14	29%
<i>serais</i>	1/5	20%
other words	8/467	2%
total	70/639	11%

Figure 1: Deletion rate of the vowel in the first syllable of polysyllabic words

An interesting point to note is that the feminine forms of *petit* have a much lower deletion rate than their masculine counterparts, whereas there is no significant difference between plural and singular (both in masculine and feminine). This is a highly unexpected pattern under the assumption that vowel deletion is purely phonological: the process should only be sensitive to phonological, not to morpho-syntactic information. This difference supports the assumption that the phenomenon is lexical: the deleted vowel is probably the result of the borrowing of the frequent construction *un p(e)tit peu* from NF which contaminated the masculine word form in other contexts (e.g. *un p(e)tit garçon*) before the feminine one. It is indeed not surprising that grammatical morphemes like auxiliaries or quantifiers undergo weakening first, which is typical for the grammaticalisation processes, e.g. *I’m going to* (MOVEMENT) > *I’m gonna* (FUT.) (see Lehmann 1982, Bybee 2001).

²The other eight occurrences of schwa deletion in word-initial syllable concern occurrences of the words *c(e)lui-là* (1/1), *f(e)ront* (1/1), *f(e)ras* (1/2), *v(e)nir* (1/3), *r(e)tard* (1/4), *d(e)vrait* (1/5), *b(e)soin* (1/10) and *d(e)puis* (1/13).

With respect to the second context analysed, the monosyllables in phrase-initial position, the schwa was elided in 24% of the cases. The speaker with the lowest deletion rate (2%) is the old sawyer already mentioned for the polysyllabic context, whereas the speakers with the highest elision rates (51%) are two young persons born in 1980 and 1982. As in the other context, the diffusion takes place at the same time via generations and via the lexicon. In fact, only *je* and *ce* are concerned by deletion (35% respective 34%), whereas the other clitics almost never lose their vowel (*de*: 5%, *que*: 2%, *le*, *ne*, *se*, *te*: 0%). Note however that the dispersion is very large, even for one word: the schwa in the pronoun *ce* is deleted in 57% of the cases in *c(e) que/c(e) qu'* and in 40% of the cases in *c(e) qui*, but only at 10% in all the other context of the pronoun (before future and conditional forms of *être*), the other occurrences corresponding to the determiner (0% of deletions). Regarding *je*, we observe that the behaviour of schwa largely depends on the following verb. The highest deletion rates can be observed before auxiliaries and modal verbs (see figure 2), which also corresponds to the theories of grammaticalisation. We can hypothesise that these forms have been borrowed as entire constructions from NF, where word-initial vowels are optionally deleted. Since research has shown that there is a continuum between words and free syntactic combinations (Construction Grammar; see e.g. Croft and Cruse 2004), it is not surprising that whole constructions can be borrowed and that they can so without the vowel³.

following verb	tokens	deletion rate
<i>pense</i>	37/66	56%
<i>suis</i>	50/93	54%
<i>sais</i>	114/220	52%
<i>peux</i>	6/11	55%
<i>trouve</i>	7/14	50%
<i>crois</i>	16/38	42%
other verbs	67/414	16%
total	297/856	35%

Figure 2: Deletion rate of the vowel in phrase-initial *je* depending of the following verb

A more detailed analysis shows that the non-realisation of the vowel in *je* does not function in the same way in Aveyron and in Paris, even if the global deletion rate is comparable (more than 40%), which is the case of the speakers born between 1977 and 1985. While we observe an effect of frequent constructions between the young Aveyronnais – the deletion rate in *je pense* (73%), *je suis* (67%), *je sais (pas)* (62%) and *je crois* (58%) lies clearly above the average (47%) –, the Parisian control group produces no difference in the mean deletion rate between frequent verbs and others (67%) (see Sobotta 2006: 200ff). We interpret this discrepancy as follows: the instability of the vowel in SF is an effect of suppletion of a traditional and a loan form, whereas in NF it is the result of a productive alternation.

4 Grammar or lexicon: who's responsible?

The kind of exceptional behaviour illustrated by the data has always been problematic for generative approaches. Even though they have considerably advanced our understanding of phonological phenomena, they have not provided any satisfactory treatment for exceptions. There are, of course, formal means to handle these exceptions. The standard practice in SPE was to use rule features: a lexical entry E is marked as [-rule R], in which case the rule R never applies to E even if it matches its structural description. Dell, who has developed one of the most explicit generative (sub)grammars of French, was well aware of the problem raised by exceptions. In his discussion of final Obstruent+Liquid cluster simplification, he admits that frequency is the factor driving the

³If the construction was borrowed with a schwa, it would be indistinguishable from native forms!

possibility of deletion of the liquid (Dell, 1985: 238) (cf. *pègre parisienne* ‘Parisian underworld’ *[pɛɡpaʁizjɛn] vs *arbre pourri* ‘rotten tree’ [aʁbpuʁi] or [aʁbʁəpuʁi]). He (unwillingly) stipulated that exceptions such as *pègre* are stored with a [-LIQUEF] specification, LIQUEF being the rule which deletes a liquid between two consonants⁴. Such a device (or any notational variant thereof) could be used to model the ongoing change in word-initial position in SF: exceptions, where deletion *can* happen, would be tagged as having a deletable vowel. The problem is that such a diacritic approach has very little explanatory power, for while it states which words have an exceptional behaviour, it does not *explain* precisely why these words, and not others, fail to obey the regular grammar.

In contrast to generative models, the exemplar models proposed by Joan Bybee contain complex representations with multiple word forms, which change by language use (see Bybee 2001; Hooper 1976). This framework allows us to model the lexical differences observed in our corpus: the borrowed and the traditional representation form a suppletion (e.g. /pøti/ ~ /pti/ for *petit*), the lexical strength of each exemplar depending on usage frequency. But the richness of the representation does not imply that there are no generalizations at all in exemplar phonology. The main difference from generative phonology is that representations are primary and generalizations (called *schemata*) secondary: “Generalizations over forms are not separate from the stored representation of forms but emerge directly from them.” (Bybee, 2001: 7)

Such a model, which allows redundancy, is cognitively more plausible than traditional models for it does not assume that information is trimmed off representations once generalisations are discovered. It is also argued to be less speculative because it does not presuppose any innate knowledge (this issue, of course, remains an empirical question). In addition, it corresponds better to the observed facts: it can more easily take into account variation and change, especially lexical variation developed from contact, initiated by loan and spread by usage. According to this view, it is possible to model the alternation in SF as the competition of pairs of traditional (i.e. native) and borrowed forms (e.g. *ferai* [føʁe] ~ [fʁe]) which gives rise to the emergence of a schema.

Nevertheless, while it properly addresses issues faced by traditional approaches, exemplar phonology also has several problems. First, it is not very explicit concerning the details of the emergence and concerning the existence (or not) of covert symbolic structure at the representational level (words, syllables, feet, etc.). Since most researchers agree that there is no linguistic structure in the phonetic signal, one can wonder from what kind of ‘substance’ emergence is to take place, and whether there is any kind of linguistic analysis of this substance prior to emergence. For instance, abstract categories such as syllables and feet (or any symbolic alternative, like empty positions) are indispensable to account for phenomena like the position law we discussed in section (2), but it is not clear whether these categories exist (and are somehow available before acquisition) or whether they are an epiphenomenon of emergence. In the latter case, exemplar phonology must be able to explain phonological generalisations (e.g. the disjunctive context of the position law) without any appeal to these symbolic primitives, and it remains to be seen how this can be achieved.

5 Conclusion

In this paper, we have drawn attention to the behaviour of schwa in initial position (phrase-initial clitics and first syllable of polysyllabic words) in SF. Word-initially, the otherwise stable vowel tends to delete in frequent verbs and/or in specific constructions. This phenomenon is sociolinguistically controlled (young educated speakers are most likely do delete the vowel). We have shown that an exemplar-based approach can offer a deeper account than a traditional approach.

⁴A similar device has been used for word-initial schwas: in his declarative analysis of schwa, Angoujard (2006: 88-9) suggests that the first vowel in a word like *belon* (a variety of oyster), where the vowel cannot be deleted, is a stable schwa (in this framework, a schwa that must be inserted) and not, as is assumed by many scholars, a historical schwa which has been reanalysed as a full /œ/ or /ø/ (Morin, 1978; Walker, 1993).

It remains to be seen how SF will evolve, but if the deletion pattern keeps spreading through the lexicon, it may eventually become a productive alternation, as in NF. In this case, it is quite possible that learners will reinterpret these alternations as involving real phonological schwas, for they will no longer be able to distinguish alternating [ø] which come from a schwa (as in *je*) from other alternating [ø] (e.g. *petit*).

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