

## THE DELETION OF /d/ IN PREPOSITION 'DE' IN SOUTHERN FRENCH SPONTANEOUS SPEECH

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### ABSTRACT

In Southern French from Marseilles, a consonantal reduction phenomenon concerning the deletion of the /d/ of the French preposition "de" in noun phrase is described. An explanation of these segmental simplifications is proposed in the theoretical framework of generative phonology. Involved phonological processes are presented. The deletion of /d/ leads us to take into account the behaviour of its two adjacent vowels. The proposed analysis relies on both theoretical and empirical arguments, in particular on the general nature of the mechanisms of elision in French.

### INTRODUCTION

Spontaneous speech is subject to various reduction phenomena general enough to be taken as such in the grammar of a particular language. The interest of such an option has considerable implications in the fields of speech synthesis and recognition, in particular, in the perspective of adapting systems to the dialect forms of specific communities of users. In the framework of an investigation of spoken Southern French, a morpho-phonological phenomenon concerning the deletion of /d/ in preposition "de" in noun phrases has been observed. An explanation of these segmental simplifications (which suppose the existence of non-reduced abstract forms) is proposed in the theoretical framework of standard generative phonology [4]. The deletion of /d/ leads us to take into account the behaviour of its two adjacent vowels.

### INFORMANTS AND CORPUS

The corpus we have constituted for the general investigation of Southern French consists of tape-recorded conversations with 6 middle-class informants (30 minutes for each speaker). Since our purpose is to bring to

light the linguistic regularities for a sociolect, we have to define at once a level of investigation. We can thus eliminate most sociological variability factors. For methodological reasons, the 6 male informants were chosen the same area in Marseilles. They share a number of common sociological references (sex, school level, socio-cultural category, birth place) but they are divided into three age groups (23-27 years, 58-64 years, more than 75 years). Taking into account these sociological indicators allows a better generalization of the observed phenomena.

A phonetic transcription, corroborated by a segmental acoustic analysis of the occurrences was carried out. This allows us to establish an inventory of the various realizations and to bring to light the different behaviours of the sequence.

### ANALYSIS

At first, we briefly expose how the underlying representations are defined for the representation of final schwas of polysyllabic words which intervene in the subsequent development. In this regional variant final schwas belong to the underlying representation of words. This position is justified for spoken French of Marseilles because of its validity at a very deep level. Brun [2] observed that in this dialect "L'e dit muet, n'est pas muet." (1978 : 31). Today, schwas are still pronounced by native speakers as described in recent studies [1, 3, 6]. Speakers also delete these final schwas; thus the word *abeille* (bee) can also be realized [abɛj]. But by contrast to Northern French in which this deletion is obligatory [5], in Southern French it remains a variable process which is a function of different factors (social, phonetic, stylistic,...).

A last remark concerning the realization of schwa. We consider that

schwa is phonetically present, only if its realization is as long as the other vowels.

We observe that /d/ is not realized when it is preceded by a polysyllabic lexical unit which ends with schwa. This does not depend on the nature, nor the number of consonants which precede the final schwa of the polysyllabic word of the noun phrase, or the one that follows the preposition, eg.: *les élèves de sa classe* (the students of his classroom) [lɛzɛləvəsaklɑsə], *le centre de gravité* (the center of gravity) [ləsɑ̃trəgravitɛ], *la crosse de son fusil* (the butt-end of his rifle) [lakrɔsəsɔ̃fysɪl], *la ville de Sanary*

(the town of Sanary) [laviləsənari], *la place de l'église* (the place of the church) [laplasələglizə] (see Figure 1 below).

This deletion is however optional, eg.: *la porte de l'Orient* (the door of the East) [lapɔrtədəlorjɑ̃], *une mine de charbon* (a mine of coal) [minədəʃɑ̃bɔ̃].

No deletion case has been found, when the preposition is preceded by a word ending with a consonant or a vowel different from schwa, eg.: *le gaz de ville* (the town gas) [gɑzdəvilɛ], *le curé de Saint-Julien* (the priest of Saint-Julien) [kyredəsɛ̃ʒyljɛ̃].

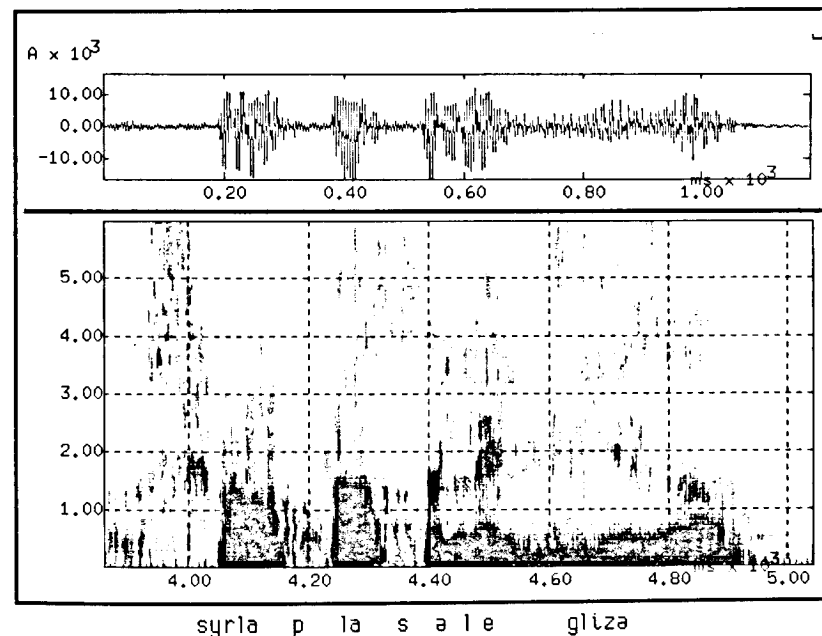


Figure 1. : Spectrogram of the phrase "sur la place de l'église"

When a pause or a hesitation mark is realized after the preposition, /d/ is never deleted, eg.: *une page de ... un cahier d'école* (a page of ... a school notebook).

In the same structural environments, the sequence /\_ Xa##dæ#l can also be realized in some different ways, in particular it can be pronounced with the

deletion of the final schwa of the word that precedes "de". For example, the phrases *une bouteille de 'badoit'* (a bottle of 'Badoit'), and *l'école de la vie* (the school of life) are respectively realized [ynabutejdəbədɔ̃wə], and [ləkɔldəlavɪ].

The comparison of different realizations seems to suggest that the first way of analysing the reduced forms

consists of deleting the final schwa of the word that precedes the preposition, and then of truncating /d/. This solution presents a major drawback. When a /d/ deletion process takes place, it is likely to treat without distinction the forms derived from the phonological sequences /\_Xə##də#/ whose final schwa could be deleted, and those derived from the sequences /\_X##də#/, in which it must not apply in order not to generate false realizations, eg., *le gaz de ville* /gazə#də#vɪlə/ > \*[gəzəvɪlə]

The second alternative consists in admitting that the truncation process precedes the final schwa deletion process. So, when whatever segment, different from schwa, precedes "de", the consonantal deletion can not operate, and /d/ remains.

After /d/ deletion, the two adjacent schwas are now contiguous. However, only one of them appears in phonetic representations, the other one is deleted during the phonological derivation. Two obligatory phonological processes in French are traditionally considered responsible for schwa deletion in vocalic environment, if one admits that /ə/ can be defined like any vowels by the [+syllabic] feature. These processes are schwa elision in pre-vocalic and post-vocalic environment, that can affect respectively the first and second schwa of the sequence. It seems a priori that there is no difference between one or the other of the processes taking in charge the deletion of one or the other of the schwas. In both cases, the required realization at the output of the phonological component is obtained. The two processes operate at a lexical-morphological level, i.e. their application domain is word bounded, in inter or intra-morphemic sequences, eg.: *une robe bleue* (a blue dress), /bʁə#ə#blø/ > [bʁə#blø], *princesse* (princess) /prɛ̃sə#əsə/ > [prɛ̃səsə]. But pre-vocalic schwa elision operates also, like the /d/ truncation process, at a post-lexical level, i.e. it applies between word boundaries, eg.: *l'ami* (the friend) /lə#ami/ > [ləmi]. The application domain of post-vocalic schwa deletion could be enlarged. But this procedure has to be set aside at once, because it has neither theoretical nor empirical scope. At the difference of pre-

vocalic elision, it has only a weak application domain, limited to this particular phenomenon. In this sense, it does not satisfy the maximal generality condition required by linguistic theory.

As Dell [5] underlines, "*Une grammaire doit exprimer le fait que l'existence de régularités linguistiques n'est pas fortuite, mais découle de certaines propriétés de la langue comme système structuré. Elle doit prendre les faits dans un réseau de généralisations aussi serré que possible.*" (p. 85) On the contrary, this analysis is licit and satisfactory in the case of pre-vocalic schwa elision. Furthermore, this analysis is corroborated by an argument relying on the general nature of the mechanisms of elision in French, as confirmed by various linguistic facts.

1- The definite article or subject pronoun "la" has its vowel deleted before a feminine word beginning with a vocalic initial, eg.: *l(a) armoire, je l(a) ai rangée* > *l'armoire, je l'ai rangée* [larmwərə ʒə#lɛ#ʁɑ̃ʒə] (I have put the wardrobe in order). In the same way, /il/ of the adverb "si" is deleted when it is followed by masculine subject pronouns "il, ils" (he, they (masc.pl.)), eg.: *s(i) il mange* > *s'il mange* [sɪlmɑ̃ʒə] (if he eats). In these two cases, the first vowel elision is represented by the symbol of the apostrophe in the orthography.

2- A frequent vocalic elision process has been observed in our corpora. Its application domain is limited to a few words that belong to non-lexical categories, like pronouns "tu" or "qui", eg.: *t(u) apprend* (you learn) > [təpʁɑ̃], *t(u) as* (you have) > [tə], *qu(i) était* (who was) > [kətɛ]. In this very common use of casual French, the two successive vowels sequence is reduced again by the deletion of the first one.

3- Like the preposition "de", the /d/ of the contracted article "du" can be omitted under the same conditions, eg., *la traverse du Maroc* (the Morocco crossbar) [latrəvɛrsymɑʁɔk], *la place du rapport* (the place of the report) [laplɑzɹapɔʁ]. The processes used are similar ones to those we have seen for "de". After the truncation of /d/, the two vowels are contiguous. The first of them, here a schwa, is deleted to the benefit of the second, /y/.

We illustrate our analysis with two derivation examples.

*la ville de Sanary*  
/vilə#də#sanari/  
d\_Trunc vilə##ə#sanari  
ə\_elision vil ##ə#sanari  
[lavɪləsanari]

*la traverse du Maroc*  
/trəvɛrsə#dy#marɔk/  
d\_Trunc trəvɛrsə##y#marɔk  
ə\_elision trəvɛrs ##y#marɔk  
[latrəvɛrsymɑʁɔk]

### CONCLUSION

This segmental reduction phenomenon which is not described in the literature of Southern French seems to be quite frequent among our informants. It is also generalisable to the whole group of sociolects of spoken French from Marseilles we have observed. However, nothing allows us to affirm here that these forms characterize this regional variant in particular. In other words, it could be simply specific forms of spoken French in general. Only complementary investigations can state precisely and evaluate the geographical, stylistic and sociological variability of these forms.

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