NOTICE ON THE BEHAVIOUR OF THE CONSONANTAL ARCHIPHONEMES IN FRENCH AND ENGLISH

Abstract: This paper seeks to typify the consonantal archiphonemes /N/ in French and /R/ in English and to achieve a summary comparative study of their behaviour, trying to show that they present analogous nature and distribution. Both French and English archiphonemes result from the neutralisation between a consonant (/n/ in the case of French; /r/ in the case of English) and a “zero” phoneme (represented by ∅) before consonants or in absolute final position. Both archiphonemes present strikingly similar behaviour, they affect the distribution of the preceding vowels in a quite analogous way and their usage follows analogous patterns in terms of the geographic distribution of these languages (i.e., European vs. non-European varieties of French/English).

Keywords: Neutralisation; archiphoneme; French; English.

Preliminaries

According to several authors in structural phonology, including Pais (1981, p. 127) and Akamatsu (1988, p. 111), neutralisation is the phenomenon of annulment of the opposition between two phonemes in a given phonemic context. The phonemic unit that subsumes both neutralised phonemes is called archiphoneme, and it is graphically represented by a capital letter between slashes. As a result of these definitions, in order to have neutralisation, it is necessary that both phonemes occur in the same phonemic context. Thus, Brazilian Portuguese presents the neutralisation of phonemes /ɾ/ (uvular vibrant) and /ʁ/ (alveolar tap) at the end of syllable (for example, carta, ‘letter’, which is indifferently pronounced as /karta/ or as /kaɾta/) (see Bizzocchi 1993, p. 492). From this neutralisation results archiphoneme /R/ (/ kaɾta/). Yet, such phonemes do not neutralise after a consonant, for example. Thus, the Portuguese word guelra, ‘gill’, only admits the pronunciation /ɡelɾa/ and not */ɡelɾa/, whereas prata, ‘silver’, only admits the pronunciation /prata/ and not */prata/. In these cases, evidently, one cannot speak of neutralisation or archiphoneme.

In certain languages, the commutation of a phoneme with a void (that is, the absence of a phoneme) in given contexts does not alter the meaning of the word. In this case, for a reason of formal simplicity, we can posit the neutralisation of the “full” phoneme and the “empty” phoneme, or zero phoneme (represented by ∅). Thus, for example, in British English every /ɛ/ followed by a consonant or in absolute final position may be pronounced or not. Since the possibility of commutation between /ɾ/ and ∅ is systematic in these contexts (for there is no exception), we can perfectly speak of the neutralisation of /ɾ/ and ∅ and, consequently, consider the existence of an archiphoneme subsuming both neutralised phonemes.

However, on the basis of the definitions given above, it is necessary to distinguish between neutralisation and allomorphy. If we take the French expressions vous êtes, ‘you are’ (transcribed /vuz ’ɛt/) and vous faites, ‘you do’ (transcribed /vuz ’fɛt/), we could, at first sight, think of the neutralisation of /z/ with zero phoneme, whose result would be an archiphoneme /Z/, whence vous would be phonemically transcribed as /vuzZ/. Nevertheless, it is necessary to remember that the form /vuz/ only occurs before vowels, whereas /vuz/ takes place before consonants only. Thus, /z/ and ∅ do not commute in the same context, which is why there is no neutralisation in this case. What we have there in truth are two mutually exclusive allomorphs, /vuz/ and /vuz/.

We should therefore bear in mind that neutralisation is due to exclusively phonological (phonetic and phonemic) factors and, in this way, it happens every time such factors are present and only in this condition. Thus, for instance, the neutralisation of /ɾ/ and /ʁ/ in Brazilian Portuguese or the neutralisation of /ɛ/ and ∅ in British English take place without exception every time such phonemes occur at the end of syllable. On the other hand, in the case of the English word usage (pronounceable as /ˈjuːzɪdʒ/ or /ˈjuːzɪdʒ/), we cannot speak of neutralisation between /s/ and /z/, since such phonemes do not necessarily neutralise every time they find themselves between vowels (cf. plural noun excuses /iksˈkjuːzɪz/ and verbal form excuses /iksˈkjuːzɪz/). In this case, /ˈjuːzɪdʒ/ and /ˈjuːzɪdʒ/ are allomorphs.

Now that these preliminary considerations have been made, we are able to discuss the consonantal archiphonemes in French and English, in which languages this phenomenon is particularly significant, besides the fact that French and English archiphonemes present a great analogy in terms of behaviour.
French archiphoneme /N/

Let us consider the French words once, ‘ounce’, bombe, ‘bomb’, onde, ‘wave’, and ongle, ‘nail’. Note that once only admits the pronunciation ['ɔs], whereas bombe can be pronounced as ['bɔmb] or as ['bɔmb], onde can be pronounced as ['ɔnd], and ongle can be pronounced as ['ɔ̃glə] or as ['ɔ̃glə]. Hence archiphoneme /M/ is deduced, resulting from the neutralisation of /m/ and ∅ before /p/ and /b/, as well as archiphoneme /N/, resulting from the neutralisation of /n/ and ∅ before /t/, /d/, /k/ and /ɡ/. We can, for simplicity, blend both archiphonemes in a sole archiphoneme /N/, which neutralises /m/, /n/, and ∅ freely commutes with the other two phonemes. Thus, we have bombe, onde, and ongle respectively transcribed as /bɔNb/, /ɔNd/, and /ɔ̃Ngł/. It can be observed, in this way, that this archiphoneme is always preceded by a nasal vowel, and in medial position it is always followed by a stop consonant. However, /N/ can also occur in the absolute final position. Let us see how that happens.

Let be the phrases:

(1) mon ami /mɔn aˈmi/  
(2) mon harnais /mɔ əˈne/  
(3) mon tableau /mɔ taˈblo/ or /mɔn taˈblo/  
(4) mon père /mɔ ˈpɛr/ or /mɔm ˈpɛr/  
(5) mon chapeau /mɔ ʃaˈpo/  

On the basis of the examples above, we can posit the phonemic form /mɔN/. Note in examples (1) and (2) that, before words beginning with a vowel sound, /N/ can manifest as /n/ or as ∅, this distribution being disciplined by linguistic norm. Before stops, the occurrence of /m/, /n/, or ∅ is facultative; before other consonants only ∅ occurs.

Nevertheless, not every French word ending with a nasal vowel has an archiphoneme /N/ in final position. If we take, for example, the phrases:

(6) maison azure /mɛˈzɔ aˈzyr/  
(7) maison haute /mɛˈzɔt/  
(8) maison blanche /mɛˈzɔ bˈlæʃ/ or /meˈzɔm bˈlæʃ/  
(9) maison décorée /mɛˈzɔ dəkoˈre/ or /meˈzɔn dəkoˈre/  
(10) maison verte /mɛˈzɔv ˈvert/  

we will see that /m/ and /n/ can only occur before stops; in the other contexts, we always have ∅. In this case, it is more convenient to assume the inexistence of /N/ in the final position. The occurrence of /m/ and /n/ in examples (8) and (9), respectively, can be dealt with in this case as a phenomenon restricted to the phonetic plane, which does not have any repercussion on the phonemic level.

English archiphoneme /R/

Let us consider the English words fast and part. Note that, similarly to French, fast can only be pronounced /faːst/, whereas part can be pronounced as /pa:t/ or as /pa:rt/. We can therefrom deduce archiphoneme /R/, resulting from the neutralisation of /r/ and ∅. Thus, part is phonemically transcribed as /pa:Rt/. This archiphoneme is always preceded by a long vowel or diphthong and it can also occur in the absolute final position. In medial position, it is always followed by a consonant. Then we have:

(11) far away /ˈfaːr əˈwej/  
(12) far from /ˈfaːm frəm/ or /ˈfɑːr frəm/  

We can then posit the phonemic form /faːR/. Observe in example (12) that, before words beginning with a consonant, /R/ can manifest as /r/ or as ∅. Notwithstanding, just as in French, not every word ending with a long vowel has an archiphoneme /R/ in the final position. Let be, for instance, the phrases:
(13) I saw him /aj 'soː him/
(14) I saw it /aj 'soː it/ or /aj 'soʊ it/

We can see in these examples that /r/ does not occur before consonants; before vowels, its occurrence is facultative. In this case, we do not have archiphoneme /R/, being more convenient to deal with the occurrence of /r/ in example (14) as a strictly phonetic phenomenon, which does not reach the phonemic level.

Systematisation of archiphonemes /N/ and /R/

In Table 1, a systematic board of consonantal archiphonemes of French and English is presented, showing the simple vowels (nasal, in the case of French; long, in the case of English), and the same vowels followed by the respective archiphonemes. Note that some long vowels of English, as well as diphthong /æi/, undergo phonetic modifications as they find themselves in an isolate position or followed by /R/. It is also interesting to emphasise that, in French, not all oral vowels have nasal correspondents (in fact, only /a/, /e/, /ɛ/, /ɔ/, and /ø/ present nasal counterparts; the same does not happen to /i/, /u/, /ø/, and /y/). Similarly, not all short vowels of English present long counterparts: it is the case of /e/.

Another interesting aspect of the behaviour of these archiphonemes is that both modify the sound of the preceding vowel in a similar way. Looking at Table 2, we can observe that, in French, grapheme an followed by a stop always corresponds to phoneme /ã/ + /N/, resulting in phonemic sequence /ãN/; in the same context, graphemes in and un are always pronounced as /ɛN/, grapheme on is always pronounced as /ɔN/, and grapheme en is sometimes pronounced as /ɛN/ and sometimes as /ɔN/.

Analogously, in English, grapheme ar followed by a consonant always corresponds to phonemic sequence /ɑR/; in the same context, graphemes ir and ur are always pronounced as /atoire/, grapheme or is always pronounced as /ɔːR/, and grapheme er is sometimes pronounced as /ɑːR/ and sometimes as /ɔːR/.

Conclusion

One can observe that French and English have consonantal archiphonemes that present a strikingly analogous behaviour under all aspects, for both occur in the syllable exclusively in the immediately postvocalic position, both result from the neutralisation of a consonant with zero phoneme, both require to be preceded by a specific type of vowel (in French, nasal vowels, excluded the oral ones; in English, long vowels, excluded the short ones). Moreover, one can notice that, in the preconsonantal position, these archiphonemes are preferably actualised as ∅ in the European pronunciation of these languages. In this kind of context, the actualisation of /N/ as /n/ and /R/ as /r/ has a dialectal character in France and England, being, on the contrary, the normal actualisation of these archiphonemes in the overseas varieties of these languages (Canadian, African French, etc.; North-American, Canadian, African English, etc.).

References


Notes

1. In fact, the pronunciations [ˈbɔ̃mb], [ˈ5nd] and [ˈ5ɲlɔ] are commoner in some regions of France, as well as of French-speaking Canada, not corresponding to the standard Parisian pronunciation, for example, which is [bɔmb], [3d] and [3ɡlɔ].

2. In truth, /N/ manifests as ∅ before words that formerly used to begin with an aspirate h. This aspirate sound having disappeared in French, such words begin today with a vowel sound.

3. It is convenient to add that, in French, the appearance of a sound [ŋ] at the end of the word, after a nasal vowel, is quite common. Thus, it is not uncommon to hear long pronounced as [ˈlɔɲ]. Also in this case, there is no archiphoneme /N/.

4. The pronunciation /ˈpaːt/ is commoner in northern England, Ireland, as well as the United States and Canada, not corresponding to the standard Londoner pronunciation, which is /ˈpaːt/. 
5. In fact, the only case in which archiphoneme /R/ can be preceded by a short vowel is when it is preceded by unstressed /√/ (compare forward /fo:Rw√Rd/ and foreword /fo:RwA:Rd/).

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