

# Irina Sklema-Litwin

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## Non-Nativized Pronunciation Features of French Loanwords : The Case of Nasal Vowels

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*IRINA SKLEMA-LITWIN\**

Uniwersytet Szczeciński

## **NON-NATIVIZED PRONUNCIATION FEATURES OF FRENCH LOANWORDS: THE CASE OF NASAL VOWELS**

### **1. Introduction**

The periods of cultural contact between the speakers of English and other languages have left their permanent record in the English lexicon. Loanwords constitute an essential part of its vocabulary and often present a challenge to analytical description and classification.

Loanwords or borrowings enter the recipient language (L1) for a number of reasons, and at their own pace. Core borrowings usually make their way to the main lexicon as a reflection of L1 speakers' desire to identify with certain prestigious aspects of another community's culture. The process of their adoption is a long one, and numerous foreign items fall out of use on the way never reaching the loanword status. On the contrary, the introduction of cultural borrowings meant to signify new concepts is facilitated by the need to fill lexical voids and takes place in almost no time (Myers-Scotton 1992, 29).

Extensive sociolinguistic research has provided sufficient evidence for a claim that the introduction and adaptation of loanwords into a language is due in the first place to their use by bilinguals. Monolingual speakers further contribute to the dissemination of nativized or well-adapted items. In our discussion, however, we will make no principal distinction between the initial active phases

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\* Mgr Irina Sklema-Litwin jest pracownikiem Katedry Filologii Angielskiej od 1997 roku. Prowadzi badania w zakresie fonologii zapożyczeń. Szersze zainteresowania naukowe obejmują językoznawstwo kontrastywne oraz socjolingwistykę.

of the borrowing process marked by the use of nonces (one-time borrowings), idiosyncrasies (non-established borrowings used by individual bilingual speakers), and the stage of established loanwords used by both bilinguals and monolinguals of a given speech community (Poplack, Sankoff, Miller 1988, 98).

It would be an overgeneralization to state that all loanwords undergo an equally thorough process of phonological adaptation. The pronunciation of nativized borrowings may be viewed as the result of a repair process which ensures their agreement with most constraints of L1, as maintained by the Theory of Constraints and Repair Strategies (TCRS). Alongside those, however, there exist less conventionalized non-nativized loanwords, whose foreign phonetic features, known as non-adaptations or imports, are tolerated by the recipient language. Non-nativized borrowings are believed to comply with fewer constraints and are found in the periphery domains of L1 phonology.

The treatment received by nasal vowels which have no close equivalents in the English language provides an example of such phonological tolerance. The present paper examines segmental and suprasegmental properties of French borrowings containing nasal vocalic segments. The author argues that apart from vowel nasality, such lexical items have retained other non-native characteristics which have remained unassimilated over a longer period of their circulation in the English language. It is argued that such non-native features are gradually entering the peripheral layers of L1 phonology and the pronunciation repertoire of English native speakers.

## **2. Foreign features and repair strategies**

The phonological system of any language is hardly homogeneous. Fries and Pike (1949) were among the first proponents of the simultaneous existence of phonological subsystems or cophonologies, which are believed to “operate partly in harmony and partly in conflict”. This approach has evolved into the more recent Core-Periphery hypothesis, which distinguishes between the native and non-native strata in the lexicon and is adequate enough to describe the degrees of nativization in the lexicon.

Universal phonological constraints are re-ordered every time they are employed to represent the grammar of a particular language since the constraint ranking is language-specific. Borrowings whose phonological structure clash-

es with highly ranked and virtually inviolable constraints will be ruled out unless they undergo a significant change to approximate the target phonetic output of L1. Thus, the adaptation process of a foreign segment or feature can be regarded as a derivation from an underlying source language form to the most native-like surface form in L1. Such processes are believed to be feature-specific and proceed at different rates (Holden 1976). However, low-ranked constraints will tolerate certain unassimilated features in non-native layers of the lexicon.

Phonological loanword adaptation is a systematic process. Upon entering the recipient language, a foreign borrowing is interpreted as a phonological representation of L1, which is verified by the set of native core constraints (Paradis and LaCharité 1997, 380). Ill-formed structures are deemed illegal and invite an adequate amount of repair. The Theory of Constraints and Repair Strategies suggests that the application of individual repair strategies happens along a set of specific guidelines, such as the Preservation, Minimality and Threshold Principles, which makes the outcome quite predictable. As a result, it is possible to arrive at a more tangible description of phonetically close counterpart in the borrowing language.

The violation of universal or language-specific constraints usually triggers the application of insertions or deletions to ensure that a phonological structure conforms to a particular constraint. The Minimality Principle requires such alterations to be economical and apply at the lowest phonological level at which the violated constraint operates (Paradis and Lebel 1994, 77–78). Insertion is employed in cases of insufficient content, while deletion helps to remove excessive content or structure which violates the respective rules of L1. Simultaneously, the input from the source language must be faithfully preserved, which makes insertion a favoured strategy to ensure maximum preservation. The amount of repair involved in the adaptation process is not indefinite and is regulated by the Threshold Principle, which is rather universal and allows two repairs within a given constraint domain. If the repair of a segment requires more than two alterations, the process of its adaptation appears too costly, and the item is most likely to be deleted (Paradis and LaCharité 1997, 385).

The TCRS maintains that the constraints governing the non-native strata of the lexicon are not dissimilar to those applying in the core. Generally, the core phonology of a language is claimed to differ from its peripheral subsystems in the relative order of faithfulness constraints which are ranked higher than markedness constraints. Consequently, in the peripheral layers certain constraints of the core are relaxed or even deactivated.

“The less nativized the item, the more it is exempt from lexical constraints, e.g. the more it is located towards the periphery, falling outside of various constraint domains. These constraint domains are centred around an abstract core, governed by the maximum set of lexical constraints” (Itô and Mester 1995, 824).

It should be further noticed that the periphery is far from being a random collection of exceptions. It is, in fact, an organized area and makes distinctions between illegal segments, which are either immediately adapted or removed after being introduced into L1, and tolerated segments, whose adaptation is rather inconsistent. Such structures or features are known as *phonological imports* or non-adaptations. It is generally believed that the number of bilinguals and their fluency in the source language account for the overall tolerance of L2 features or imports by the whole community of speakers (Paradis and LaCharité 1997, 390).

Since a number of non-phonological factors, such as orthography, analogy, time distortion or indirect adaptation, may influence the process of loanword adaptation, there is a feeling among researchers that the study of this phenomenon should involve the analysis of large corpora to ensure a reliable description of the significant patterns and tendencies (Paradis and Lebel 1994).

### 3. Assimilation of French nasal vowels

In more than three centuries of French political and linguistic presence in the British Isles Middle English, which was reduced to the humble position of the low variety, borrowed about 10,000 words from the language of the dominant community of French speakers (Paradis and Prunet 2000). The process of borrowing has continued well into the modern era due to the historic and cultural contacts between Britain and France. As a result, French influence upon the English language remains quite significant, and a number of unassimilated grammatical and phonological features survive in L1.

The vowel system of French includes 16 vowels, of which / A~ /, / E~ /, / O~ / and / 9~ / are untypical of English nasal vocalic segments. In the process of their assimilation, it is not only nasality that is perceived as a foreign phonetic feature requiring change, but also their qualitative and quantitative characteristics. The treatment received by French nasal vowels, which have no close equivalents in the English language, may serve as an example of phonological tolerance and will be analysed in the present paper.

To avoid a prohibited combination of features [+vocalic] [+nasal], the standard procedure of adaptation usually involves unpacking, i.e. substitution of an illegal segment by a vowel + nasal consonant sequence. This adaptation scheme is rather universal and would be deployed by most languages where the nasal segments in question are absent. While the very process of unpacking is said to be conditioned by the biphonemic nature of contrastive nasal vowels, it is usually the acoustic impression that accounts for the choice of the English vowel to replace the illegal French counterpart (Paradis and LaCharité 1997, 413–415; Paradis and Prunet 2000, 324).

### 3.1. Phonetic proximity in quality adaptation

The adaptation of a foreign phoneme into L1 is preceded by its identification with the native phonic material and results in the selection of the “closest phonetic approximation in the receiving language” (Fisiak 2004, 39; Čubrović 2002, 2). The analysis of French borrowings containing nasal vowels proves that their quality identification is seldom a simple phoneme-to-phoneme match.

In her study of the most recent French loans adopted after 1800, Čubrović (2002) examines the three most frequently occurring nasal vowels / E~ /, / O~ / and / A~ / which appear in 190 loanwords. Notwithstanding the limited number of loans, which is the result of the overall decline in the borrowing tendency, the list is exhaustive enough to exemplify assimilation trends regarding the quality of nasal vowels. Since the vowel / 9~ / is known to be increasingly replaced with / E~ /, it has been excluded from the discussion.

To begin with, the vowel / E~ / appears in 32 recent borrowings. The spelling pronunciation is claimed to account for the choice of the nasal consonant and sometimes the corresponding English vowel, as in (1a). In (1b) and several other cases, the acoustic aspect predominates favouring the English / { / as the first adaptation choice due to its feature proximity to the French / E~ /, both vowels being quite low, front and unrounded. Less common adaptations involve the English vowels / e / and even / @ /, the latter being of special interest for the present discussion.

- (1) a. intern / “Int3:n /, singleton / sINgl=t@n /  
 b. timbale / t{m”bA:l /, coq au vin / kQk@U”v{n /

The native English variants of /O~/ are a varied selection, which is believed to reflect not only the acoustic tendencies in its adaptation but also the dialectal preferences. In 33 loanwords the back vowels /Q/ and /A:/ are found alternating with the diphthong /oU/, as in (2a). The last two adaptations are characteristic of American English pronunciation. In weak English syllables the nasal vowel is often reduced to the neutral ‘colourless’ /@/, which is sometimes elided leaving a nasal consonant in word-final position (2b).

- (2) a. *montage* / mQn”tA:Z / BE; / “mA:ntA:Z /, / moUn”tA:Z / AE  
*conte* / kQnt / BE, / koUnt / AE
- b. *conservatoire* / k@n”s3:v@twA:ʀ / BE, / k@n”s3` :v@twA:r / AE  
*torchon* / “tO:S@n / BE, / “tO:SA:n / AE

Finally, in the most numerous group of recent French borrowings, 113 in number, the nasal vowel /A~/ is nativized through a similar set of English segments /Q/ and /A:/ excluding the diphthong /oU/. The short back vowel /Q/ is favoured by speakers of British English, while the long /A:/ is an unquestionable choice for the American variety (3a). Additionally, there is a group of the 19<sup>th</sup> century borrowings regarded as frequently used “near-native” items, which have been adapted with the help of /{/ in both British and American accents. The choice of this vowel is again explained by the spelling pronunciation (3b). Yet another ‘disguise’ of the French /A~/ in weak English syllables is the schwa, as in (3c), a quarter of all loanwords with this segment.

- (3) a. *danseuse* / %dQn”s3:z / BE; / %dA:n”su:z / AE  
*restaurant* / “rest@rQnt / BE; / “rest@rA:nt / AE
- b. *flamboyant* / fl{m”bOI@nt /; *panda* / “p{nd@ /; *hangar* / “h{Ng@ʀ /
- c. *hollandaise* / %hQl@n”deIz / BE; / %hA:l@n”deIz / AE  
*ambiance* / “{mbi@nts /

Čubrović concludes that however difficult it seems to contrast individual phonemes belonging to different phonological systems, it is not impossible to compare their distinct articulatory and acoustic features (Čubrović 2002, 2-7). The closest phonetic equivalents in the recipient languages are then regarded as native counterparts of the borrowed segment, which thus ends its journey along the adaptation path.

### 3.2. Adaptation alternatives of vowel nasality

Having reviewed the inventory of English vowel qualities which regularly substitute for their French nasal counterparts, we may proceed with the discussion of nasality itself. The previous research has registered three possible scenarios of adaptation: the loss of nasality, the retention of this feature or, less frequently, zero assimilation of French segments (Paradis and LaCharité 1997, Paradis and Prunet 2000, Čubrović 2002). As has been mentioned before, unpacking takes place when nasality is lost leaving a combination of a phonetically close vowel followed by a corresponding nasal consonant. This repair mechanism seems by far the most preferred adaptation alternative. Secondly, whenever nasality is retained, the segment is unclaimed as a recommended pronunciation variant, or so it has been suggested by the earlier analysis of the feature. The third scenario refers to rather infrequent cases of importing a French vowel with a complete set of its distinctive features including qualitative, quantitative and nasal properties. Thus, no adaptation as such occurs, which is explained by either the recent time of borrowing or the low frequency of use.

The nasality retention scenario appears a less studied one leaving more than a few questions unanswered and offering a research opportunity which we have taken advantage of. How legitimate is nasality as a feature in English? What is the environment of a nasal vowel after entering the recipient language? Is nasality the only imported feature of a foreign segment? A closer look at these issues allows a conclusion that in the process of borrowing nasal vowels may follow a path of partial adaptation retaining both their nasality and quantitative characteristics, which will be described in the subsequent parts of this paper.

### 3.3. Nasal vowels in CEPD

We have taken the lead prompted by the earlier research and attempted to identify first (i.e. recommended) pronunciation variants which have retained vowel nasality as an imported feature in the entire corpus of *Cambridge English Pronouncing Dictionary* (Jones 2003). Instead of searching for French loans specifically, the occurrences of nasal vowels have been registered disregarding the languages they may have been imported from and the time of their borrowing. Unsurprisingly, French has appeared the only source of loans containing nasal vocalic segments.



The search brought a list of approximately 380 lexical items, all of French origin, with segments / A~: /, / O~: /, / {~ /, / 3~: / replacing the French nasal vowels / A~ /, / E~ / and / O~ /. Of the items found, 271 constitute the major focus of our examination as they display a nasal vowel (or vowels) in their first recommended pronunciation variant. Only British Standard pronunciation has been considered for the reasons we will discuss later. Inflected forms have been excluded from the statistical description since the realisation of the vowels under discussion is not affected by grammatical endings.

As follows from a simple count, in over 100 loanwords nasality has been deleted as a result of the most typical unpacking procedure. In the choice of the English vowel substitute, both the acoustic and the orthographic principles have been observed. The examples in (4) illustrate the complete inventory of unpacked vowels which surface in the repaired first pronunciations. However, other variants of the same items do not exclude nasality. No occurrences of the vowel / 3~: / are listed below since it only appears in two loanwords and is never completely unpacked.

- (4) a. / A~: / cantatrice / “k<sub>1</sub>nt@tri:s /  
 blanquette / %blQn”ket /  
 debridement / dl”bri:dm@nt /  
 nuance / “nju:A:nts /
- b. / O~: / concierge / %kQnsi”e@Z /  
 chiffonier / %SIf@”nI@r /  
 liaison / li”eIz@n /
- c. / {~ / bandeau / “b<sub>1</sub>nd@U /  
 chatelain / “S{t@leIn /  
 dauphin / “dO:fIn /  
 pointillism / “pOIntIII.z@m /  
 Senghor / “seNgO:” /  
 Dupuytren / dU”pwi:tr@n /

### 3.4. Degrees of nasalisation

Nasal colouring as an allophonic feature is not unusual in the production of English vowels, which may prompt the suggestion that vowel nasality is less “marginal” in the English language in general than it is commonly believed. We would like to argue that it is gradually entering the peripheral layers of L1 phonology and the grammar of English native speakers.

The selected 271 borrowings containing 283 nasal vowels might be taken as evidence for the claim that nasality can be accommodated within the phonological system of English. While the vowel qualities have been replaced by the closest native counterparts, as suggested in the previous studies, their nasality has been transferred into English along two different paths.

The set of 12 lexical items we will consider first (5) are the cases of retained nasal vowels, insignificant in number yet an additional proof that the distinction between foreign words and borrowings in the language is difficult to draw on purely phonological grounds. Note the 6 items in italics for which the variant with a nasal vowel is the only pronunciation given. Should we imagine a continuum of the nasality feature of a vowel segment, these phonemes would be placed at its utmost end. Speakers of English are then required to produce a non-native combination [+vocalic] [+nasal] constrained by the grammar of the language.

- (5) a. / A~: / aide(s)-de-camp / %eIdd@”kA~: /  
 arrondissement / % {rQn”di:s@mA~: /  
 Caen / kA~: /  
 agent(s) provocateur(s) / % {ZA~:pr@%vQk@t3:” /
- b. / O~: / champignon / “S {mpi:njO~: /  
 à **bon** marché / { %bO~:mA:”SeI /
- c. / {~ / absinth(e) / “ {bs {~T /  
 Aix-les-Bains / %eIk sleI”b {~ /  
 Alain / {I” {~ /  
 Alain-Fournier / {I% {~”fO:nieI /  
 Amiens *French city*: / “ {mj {~ /  
 Jospin / “ZQsp {~ /

This adaptation alternative, however, is different from the third scenario, the so-called zero assimilation, which involves importation of a foreign phoneme

with all its properties. It must be borne in mind that the process of (minimal) repair has ensured the respective qualitative change.

The major portion of our body of evidence contains 271 vowels which appear to have retained a lesser degree of nasality. We will suggest that their pronunciations occupy an intermediate position between the unpacking scenario and the retention of the nasal characteristic. All the cases, like in (6), would seem to match the fully nativized (unpacked) pattern but for the unfailing presence of nasalisation and the fact that the following nasal consonant (italicised) can be optionally omitted disregarding its place of articulation.

- (6) a. / A~: / chanterelle / %SA~:nt@”rel /  
 embouchure / %A~:mbu:”SU@<sup>r</sup> /  
 pétanque / peI”tA~:Nk /
- b. / O~: / demimonde / %demi”mO~:nd /  
 Mont Blanc / %mO~:m”blA~:N /  
 bouillon / “bu:jO~:N /
- c. / {~ / pince-nez / %p{~ns”neI /  
 timbre / “t{~mbr@ /  
 au gratin / %@U”gr{t{~N /
- d. / 3~: / vingt-et-un / %v{~nteI”3~:N /  
 Lebrun / l@”br3~:N /

The resulting sequence, a nasalized vowel followed by an optional nasal consonant, may imply that a certain degree of nasality will be retained regardless of the speaker’s choice. In the case of a more nativized pronunciation, allophonic nasalisation will be justified by the presence of the following nasal stop, resulting in a higher degree of assimilation. Otherwise, the acoustic effect of nasality will have to be attached to the vowel itself when the background consonant is deleted, promoting the importation of a foreign feature. Phonetically, both processes are not dissimilar, especially when the velar segments are engaged. We then conclude that such ‘inconsistent’ pronunciations are best described as *partial adaptation of nasality* and rather belong to the second scenario where the feature is invariably retained.

On the whole, “educated speakers of British English” are believed to be familiar with nasality as a peculiarity of French pronunciation, while nasal vowels

are regarded as “marginal members of the RP vowel system” (Wells 2000, xxi). It has been reported that the number of non-core French borrowings in English may amount to around 1,200 items (Čubrović 2002), which invites a comment that about 23% of the items (271) have been adapted as their less nativized versions containing imported vowel nasality. Thus, the overall presence of this feature in the vocabulary stock of English appears to hold the answer to the question of its legitimacy.

#### **4. Vowel quantity and prosodic constraints**

As has been mentioned before, the transfer of a foreign phoneme from L2 to L1 in its entirety is seldom, if ever, successful. It seems more viable to assimilate as many of its segmental properties as possible to minimize the number of constraint violations. We have just considered the transformations endured by French nasal vowels in the process of borrowing, namely the adaptation of their qualitative parameters and nasality. There remains, however, a quantitative aspect which we will examine next.

It has been experimentally confirmed that nasal vocalic segments in French are “systematically longer in all contexts” than their oral counterparts. Final free syllables appear to provide the most favourable environment for the longest realisations of nasal vowels. Although slightly shorter in non-final syllables, they are still reported to exceed the duration of phonologically close oral vowels /A/, /o/ and /ʌ/ by 25% (Sampson 1999, 110).

It could not escape our attention that an overwhelming majority (238, i.e. 88%) of the analysed nasal vowels are long. A possible explanation would naturally involve the phonetic proximity of the long English substitutes /O:/ and /A:/ to their French counterparts. However, in almost every case of unpacking associated with nasality deletion (and this scenario is by far the most widespread of all), it is the short /ʌ/ that is unquestionably favoured by the British speakers. This observation has led to an assumption that apart from nasality, the length of the vowel segments under analysis may also have been imported from L2. Two arguments may be raised in favour of the non-nativized quantity: the stress patterns of loanwords containing long nasal (or nasalized) vowels, and the behaviour of such segments in unstressed English syllables.

#### 4.1. Stress patterns of French borrowings

Initially, Old English allowed little variation in assigning stress to borrowings imposing the prevailing Germanic pattern upon foreign items. Greek, Latin and Scandinavian loans were generally made to carry primary stress on the first syllable. There is diachronic evidence, however, that Middle English, which is known to have adopted a remarkable number of French words, showed more tolerance towards non-Germanic stress placement (Fisiak 2004, 69-70). Two different accentuation patterns of the same French item, one nativized (Germanic) and the other non-adapted, could have circulated in Late Middle English (7a). In the process of conventionalization, some of the alternative foreign stresses were eventually assimilated, yet some were reassigned to syllables other than initial and so have remained in use until modern times (7b).

- (7) a. OF *bachelér* – ME *bachelér*, *bácheler*  
 OF *honouráble* – ME *honouráble*, *hónouráble*, *hónourable*
- b. OF *adversité* – ME *advérsite*, ‘adversity’  
 OF *astronomíe* – ME *astrónomīe*, ‘astronomy’

Consequently, lexical stress as a non-adapted or partially modified suprasegmental feature could have pertained in a number of French borrowings since Middle English.

The outcome of our search has revealed that the stress patterns of the French loans with recommended nasal pronunciations are hardly homogeneous. Consider first the placement of the primary stress in polysyllabic words where nasal vowels occur in 101 syllables, as summarized in Table 1.

Table 1. Primary stress in polysyllabic words

Nasal vowel	/A~:/	/O~:/	/ɨ~/	/ɜ~:/	Total
<b>Initial</b>	28	2	6	–	36
<b>Non-final</b>	16	1	–	–	17
<b>Final</b>	33	8	5	2	48

The initial stresses may be viewed as the native Germanic pattern (8a), while the non-final accentuation, as illustrated in (8b), is believed to have resulted from various morphological and phonological processes which will not be discussed here. Provided that in French there is no lexical stress as such

and the major prosodic prominence is simply aligned with the word-final or phrase-final syllable, we may regard the predominant final accentuation as an imported stress pattern (8c).

- (8) a. manqué / “m<sup>A</sup>~:N.keI /  
 convenance / “kO~:n.v@.nA~:ns /  
 ingénue / “{~n.ZeI.nju: /
- b. diamanté / %di:.@”m<sup>A</sup>:~N.teI /  
 hors de combat / %hO:.d@”kO~:m.bA: /
- c. faïence / faI”A~:ns /  
 boeuf bourguignon / %b3:f%bU@.gi:”njO~:N /  
 enceinte / %A~:n”s{~nt /  
 vingt-et-un / %v{~n.teI”3~:N /

As evidenced by the distribution of primary stress, a loanword may be borrowed by L1 with both segmental and suprasegmental features that remain unasimilated even over the longer period of its circulation.

#### 4.2. Inhibited vowel reductions

A rhythmical identity of English as a stress-timed language is based on the strong tendency to reduce the peaks of unstressed syllables. If a borrowed vocalic segment were to be fully assimilated, it would be expected to comply with the principles of prominence reduction obliging in English. An unstressed vowel is known to undergo qualitative and quantitative changes and mainly surface as a “targetless” non-sonorous / @ / with a few possible alternatives (Crosswhite 2004, 191–92). Otherwise, it is described as an exceptional case of failed or inhibited vowel reduction.

The most recent account of such cases is unrelated to the distribution of stress but offers a number of alternative explanations. For instance, the reduction of unstressed vowels in closed syllables (9a) is assumed to be inhibited by following non-coronal (velar or labial) obstruents, since the energy level of the vowel provides critical perceptual clues to their marked places of articulation (Burzio 2002, 2).

A cross-linguistic analysis of failed vowel reductions, offered by Crosswhite, distinguishes phonotactic blocking in word-initial positions (9b), and cases of hiatus (9c). Morphological blocking occurs in related words (9d), and unstressed grammatical endings (9e) to avoid homophony (Crosswhite 2001, 141–67). Finally, vowels may remain unreduced or follow an uncharacteristic reduction pattern in loanwords, as in (9f).

- (9) a. parsnip /I/, almanac /{/ , expectation /e/, autopsy /Q/  
 b. [am'ir'ik"ansk@j] “American”, [agn'iv"oj] “fiery” (Russian)  
 c. [te"atr@ ] “theatre,[line"al] “linear” (Catalan)  
 d. [bl"ago] “benefit” - [bl"aga] “benefits” (Bulgarian)  
 e. [dask"a] “board” - [k"oSka] “cat” (Russian)  
 f. [sopr"ano] “soprano” (Catalan), [Zal'uz"i] “jealousie” (Russian)

The absence of vowel reduction in borrowings should be further accounted for with the reference to the relevant co-phonology dealing with non-nativized lexical items, according to some scholars, or the relevant constraint ranking in the peripheral domain of the entire phonological system of English, as argued by others. To some extent, the occurrence of unreduced nasal vowels in unstressed syllables may provide a clue to the degree of their assimilation.

### 4.3. Unreduced nasal vowels and stress levels

In order to either confirm or disprove our assumptions regarding the extent of nativization of long nasal vowels, we will examine their behaviour in both prominent and non-prominent syllables. Having excluded 13 monosyllabic words from the analysis, we may distinguish three degrees of stress in the syllables with the remaining 225 nasal segments, as seen in Table 2.

Table 2. Degrees of stress

Nasal vowel	/A~:/	/O~:/	/ {~ /	/ 3~:/	Total
Primary	77	11	11	2	101
Secondary	34	11	12	–	57
Unstressed	58	39	21	–	118

While the distribution of the primary stress has been discussed and illustrated earlier (8a-c), it must be further admitted that its frequent assignment to the syllables with /A~:/ follows from the relatively high sonority of the English vowel which has been chosen to substitute for the French segment. On the whole, provided that secondary stress occurring mainly in phrases is included (10), the majority of syllables (57%) harbouring nasal vowels are prosodically prominent.

- (10) langoustine / %lA~:~N.gU”sti:n /  
 nom(s) de plume / %nO~:~n.d@”plu:m /  
 vin(s) de pays / %v{~n.d@.peI”i: /

Nevertheless, there is ample evidence (43% of all syllables) that unreduced nasal vowels are commonly found as unstressed regardless of the syllable position in a word (11a). Moreover, as if to support the claim that distribution of long nasal /A~:/ and /O~:/ is unrelated to stress, there are loanwords consisting of syllables, both stressed and unstressed, whose peaks are solely formed by such segments, as seen in (11b).

- (11) a. arrondissement / % {r.Qn”di:.s@m.A~:/; planchette /  
 plA~:~n”Set /  
 salon / “s{l.O~:~N/; longueur / lO~:~N”g3:”t /  
 absinth(e) / “{b.s{~T /; ancien(s)-régime(s) / %A~:~nt.si. {~n.reI”Zi:m /
- b. chanson / “SA~:~n.sO~:~N /  
 pension / “pA~:~n.sjO~:~N /  
 entente / A~:~n”tA~:~nt /  
 embonpoint / %A~:~m.bO~:~m”pwA~:~N /



## 5. Discussion and additional remarks

As has been mentioned before, British and American pronunciations of loanwords with nasal vowels show considerable segmental variation (12a). While assimilating the French vowels / A~: / and / O~: /, the choice of native segments is explained by the dialectal differences in the phonemic inventories, with a general tendency for American English speakers to prolong the borrowed vowels or even replace them with diphthongs. British speakers appear to employ unpacking involving short vowels more willingly (12b). We would assume that in a short vowel + nasal consonant sequence, the consonant represents not only the deleted vowel nasality, but may also function as a sonorous prolongation of a shorter adapted version of the intrinsically long nasal vowel.

- (12) a. pointillism / "pOIntIlIz@m / BE; / "pw{nt@Ilz@m / AE  
 demimonde / %demi"mO~:nd / BE; / "demimA:nd / AE  
 Blondin / "blQndIn / BE; / blA:n"d{n /
- b. blanquette / %blQN"ket / BE; / %blA:N"ket / AE  
 garcon / "gA:sQN / BE; / gA:r"soUn / AE  
 pompadour / "pQmp@dU@ / BE; / "pA:mp@dO:r / AE

Parallel with imported long nasal vowels in focus of our discussion, in British English there exist pronunciation forms in which French segments surface as short nasal vowels. Their appearance in French borrowings seems less justifiable in certain positions since they additionally break a phonotactic constraint which bans English short vowels from open syllables (excluding weak forms). Nevertheless, they are found among the recommended variants, as illustrated in (13). In practice, however, even though there is no length mark, such vowels are predetermined to surface as long due to the syllable type and retained nasality.

- (13) champignon / "S{mpi:njO~: / (Jones 2003)  
 / "S{mpi:njQ~ / (Wells 2000)  
 arrondissement / %rQn"di:s@mA~: / (Jones 2003)  
 / %rQn"di:s@mQ~ / (Wells 2000)

Besides segmental dissimilarities, the phonological literature has registered rather consistent suprasegmental variation of British and American stress patterns, which has found little explanation so far. There is, however, a relevant hypothesis offered by Berg (1999), which predicts the pronunciation of French

names in British and American English. The accentuation pattern is believed to be geographically determined, with initial stresses mostly occurring in loanwords transferred to L1 from the neighbouring countries. The larger the distance, however, the more likely the final stress in borrowings is. Indeed, American English applies final stress to geographically distant French names in most cases, while British English employs initial stress more often, as evidenced by Berg's analysis of 932 stress-divergent items. It is also suggested that this assumption may be extended to account for the stress difference in French common nouns (Berg 1999, 137).

A closer look at our lexical items containing nasal vowels (including the recommended unpacked forms) has provided sufficient empirical proof in line with the above hypothesis, as illustrated in (14).

- (14) Avignon / “{vinjO~:N / BE; / %vi:”njo~Un / AE  
 François / “frA~:nswA: / BE; / frA~:nɾ”swA: / AE  
 chambré / “SA~:mbreI / BE; / SA:m”breI / AE  
 bandeau / “b{nd@U / BE; / b{n”doU / AE  
 salon “s{IO~:N / BE; / s@”IA:n / AE

The change of stress pattern, however, does not affect the ability of nasal vowels to avoid reduction even in non-prominent positions.

The acoustic and articulatory parameters of unreduced vowels seem to differ from those found in stressed syllables. While maintaining relative immunity to the mechanisms of prominence reduction, unreduced vowels are still subject to qualitative and quantitative changes. The output pronunciation may not exclude a minor degree of undershoot, the realization of a segment which does not reach the so-called canonical target (Crosswhite 2004, 233–234). As has been demonstrated by vowel reduction theorists, the overall vowel quality is affected by the segment's duration: a surface realization may approach the target only in the contexts where the vowel stays long (Moon and Lindbloom 1994).

Provided that borrowed nasal vowels are usually replaced with corresponding English segments carefully chosen among other candidates in the process of adaptation, it may seem a waste of effort to reduce them afterwards. They are made to retain not only their nasality but also their intrinsic length in order to maintain the qualitative parameters. To further support the claim, we will recall that the adaptation path of French nasal vowels involving the centralized / @ / has been proven far less common than other alternatives (Čubrović 2002, 4–5).

In general, it seems unreasonable to obscure the phonetic shape of loanwords, whose average frequency of use is normally lower than that of the core vocabulary stock, and the sound of which is less familiar to the members of L1 speech community.

## **6. Conclusion**

This paper has made an attempt to show that adaptation of French loanwords displaying vowel nasality does not necessarily result in the deletion of the foreign feature. Providing that borrowings containing a nasal or nasalised vocalic segment are hardly scarce in the English language, we may conclude that the constraint on vowel nasality has been weakened and ranked below the requirement of faithfulness, at least in the periphery. It is not impossible that unassimilated vowel nasality tolerated in the non-native strata of the lexicon will influence the native perception of the feature as more agreeable with the core phonology demands.

In addition, the Preservation Principle of the TCRS is believed to ensure the retention of other non-native characteristics of French loans. Thus, vowel quantity appears to be imported from the source language in many cases, as proven by the analysis of stress patterns of loanwords containing long nasal vowels, and the resistance of such segments to reduction in unstressed English syllables. Not to exceed the threshold of two repairs in the process of adaptation, it seems reasonable to preserve the intrinsic length of nasal segments even in the case of unpacking. The analysis of the CEPD corpus indicates that American English appears to produce a more faithful output in terms of vowel length and stress placement.

In general, the realization of foreign segments in a language is subject to various stylistic and idiolectal factors making the degree of nativization less reliable. The study of loanwords requires a researcher to cope with all types of variability, which can be reduced, in the end, to several predictable adaptation patterns.

**Bibliography**

- Berg Th., 1999, *Stress Variation in British and American English*, "World Englishes" 18, no. 2, pp. 123–43.
- Burzio L., 2002, *Phonology and Phonetics of English Stress and Vowel Reduction*, paper presented at the Meeting of the Texas Linguistic Society, March 1–3, in Austin, University of Texas, USA.
- Crosswhite K., 2001, *Vowel Reduction in Optimality Theory*, L. Horn (ed.), New York: Routledge.
- Crosswhite K., 2004, *Vowel Reduction*, [in:] *Phonetically Based Phonology*, B. Hayes, R. Kirchner, D. Steriade (eds.), Cambridge: Cambridge University Press, pp. 191–231.
- Čubrowić B. 2002, *Assimilation of recent French loanwords in English*, paper presented at the 10<sup>th</sup> ELSNET Summer School, July 14–27, University of Southern Denmark.
- Fisiak J., 2004, *A Short Grammar of Middle English*, Poznań: Wydawnictwo Poznańskie.
- Fries Ch.C., Kenneth L.P., 1949, *Coexistent Phonemic Systems*, "Language" 25, no. 1, pp. 29–50.
- Holden K., 1976, *Assimilation Rates of Borrowings and Phonological Productivity*, "Language" 52, no.1, pp. 131–147.
- Itô J., Mester A., 1995, *Japanese phonology*, [in:] *The Handbook of Phonological Theory*, J. Goldsmith (ed.), Cambridge, MA: Basil Blackwell, pp. 817–838.
- Jones D. 2003, *Cambridge English Pronouncing Dictionary*, P. Roach, J. Hartman, J. Setter (ed.), Cambridge: Cambridge University Press.
- Moon S.-J., Lindbloom B., 1994, *Interaction between Duration, Context, and Speaking Style in English Stressed Vowels*, "JASA" 96, pp. 40–55.
- Myers-Scotton C., 1992, *Comparing code-switching and borrowing*, "Journal of Multilingual and Multicultural Development" 13, pp. 19–39.
- Paradis C., Lebel C., 1994, *Contrasts from segmental parameter settings in loanwords: core and periphery in Quebec French*, [in:] *Toronto Working Papers in Linguistics*, C. Dyck (ed.), pp. 75–95.
- Paradis C., LaCharité D., 1993, *Constraint-based theories in multilinear phonology*, "Canadian Journal of Linguistics" 38, pp. 127–303.
- Paradis C., LaCharité D., 1997, *Preservation and minimality in loanword adaptation*, "Journal of Linguistics" 33, pp. 379–430.
- Paradis C., Prunet J.-F., 2000, *Nasal Vowels as Two Segments: Evidence from Borrowings*, "Language" 76, no. 2, pp. 324–357.
- Poplack S., Sankoff D., Miller C., 1988, *The social correlates and linguistic processes of lexical borrowing and assimilation*, "Linguistics" 26, pp. 47–104.
- Sampson R., 1999, *Nasal Vowel Evolution in Romance*, Oxford: Oxford University Press.
- Wells J., 2000, *Longman Pronunciation Dictionary*, Second Edition, Harlow: Longman.

## NON-NATIVIZED PRONUNCIATION FEATURES OF FRENCH LOANWORDS: THE CASE OF NASAL VOWELS

### Abstract

The article examines segmental and suprasegmental properties of French borrowings containing nasal vocalic segments. The occurrences of nasal vowels in the corpus of *Cambridge English Pronouncing Dictionary* (Jones 2003) have been registered resulting in a stock of 380 lexical items, 271 of which display nasal (or nasalized) vowels in their first recommended pronunciation variant. The paper reviews three possible scenarios of vowel nasality adaptation: the loss of the feature resulting in unpacking, the retention of nasality involving nasalization of English vowels which substitute for their French nasal counterparts, and less frequent cases of zero assimilation of French segments.

The author also argues that apart from vowel nasality French borrowings have retained other non-native characteristics, such as quantity – it is assumed that the length of the vowel segments under analysis may have been imported from French. Two arguments are raised in favour of non-nativized quantity: the stress patterns of loanwords containing long nasal (or nasalized) vowels, and the behaviour of such segments in unstressed English syllables.

**Keywords:** French loanwords, nasalization, phonological adaptation, vowel length

## NIEZASYMILOWANE CECHY FRANCUSKICH ZAPOŻYCZEŃ: SAMOGŁOSKI NOSOWE

### Streszczenie

W artykule rozpatrywane są segmentalne i supra-segmentalne cechy francuskich zapożyczeń zawierających samogłoski nosowe. W korpusie *Cambridge English Pronouncing Dictionary* (Jones 2003) występowanie samogłosek nosowych stwierdzono w 380 jednostkach leksykalnych, z których 271 zawiera nosową lub unosowioną samogłoskę w pierwszym, rekomendowanym wariantcie wymowy. Autorka artykułu dokonuje przeglądu trzech możliwych scenariuszy adaptacji samogłosek nosowych: (1) utraty cechy skutkującej ‘rozpakowaniem’, (2) zachowanie nosowości powodującej unosowienie samogłosek angielskich, które zastępują francuskie odpowiedniki oraz (3) rzadsze przypadki zerowej asymilacji francuskich głosek.

Autorka również dowodzi, że francuskie zapożyczenia zachowały inne fonologiczne obce cechy, takie jak iloczasy – zakłada się, że długość segmentów wokalicznych pod-

danych analizie mogła być zapożyczona z języka francuskiego. Przedstawiono dwa argumenty popierające tezę o niezasymilowanej długości: (1) rozkład akcentu wyrazowego w zapożyczeniach zawierających długie samogłoski nosowe (lub unosowione) oraz (2) zachowanie segmentów tego rodzaju w angielskich sylabach nieakcentowanych.

**Słowa kluczowe:** francuskie zapożyczenia, unosowienie, adaptacja fonologiczna, iloczas