

On the phonetics of rhymes in classical and pre-classical French a sociolinguistic perspective

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The failure of traditional scholarship?

In his monumental study on Romance languages, Diez (1836:495ff [1873:458ff]) clearly established the sources of most of the vocalic length distinctions that were still alive in many Gallo-Romance dialects spoken in Northern France, including many varieties of French, the official standard language of the élite, which was not yet on the verge of replacing the other Gallo-Romance dialects spoken in Francophone Europe. Isolated grammarians and scholars, however, have periodically challenged the truth of the tradition set by this or earlier works, among them Matthieu (1559), Lartigaut (1669), Dupuis (1839) and Ricard (1887), who claimed that there were no length distinctions in French. Beyer (1888:75) examined their testimonies and concluded that their descriptions were wrong. A century wiser, we know that grammarians often described a subjective norm, based on their personal regional habits (cf. Morin 2000a), or had metalinguistic conceptions that were different from ours. There is little doubt that Lartigaut described a regional variety of French spoken in Picardy (cf. Biedermann-Pasques 1992:157–158), in which length distinctions never developed or were lost very early (cf. Morin & Dagenais 1988). Matthieu, on the other hand, did not recognize in his own usage the length distinctions he learned in school for Latin verses (cf. Morin 2004).

Some recent works, undisturbed by Beyer's demonstration, have revived the claim that French never had length distinctions or lost them very early: Bichakjian (1986), Bullock (1997) or Baddeley (2001). The most radical attack against 'traditional scholarship' is probably that of Randall Gess (2001):¹

1. Gess' (2001: 146–147) appeal to the authority of Monferran (1999b: 71) in support of his claim is quite misleading. It is not the case that Monferran ever meant to say that "remarks by 16th and 17th-grammarians, as well as prosodists, were due not to a true long/short distinction, but *solely* to a desire to force the French language into the 'superior' Latin mold" (Gess 2001:146 — the emphasis is mine). On the contrary, this author is on record (Monferran 1999a: 89) as recognizing vocalic length to be distinctive in the 16th and 17th centuries in some varieties of French (e.g. that of Malherbe, a native of Normandy) but not in others (e.g., that of Deimier, a native of Provence). This stand is reaffirmed in Monferran (1999b: 71): "sans nier en aucune façon la pertinence de l'opposition de longueur dans les parlers du Nord de la France à cette époque". In the same article, he voiced some concerns — without any supporting evidence, however — that Peletier, one specific grammarian, might have artificially increased the number of forms with long vowels in the texts in which he applied his reformed orthography. As shown by Morin (2004), there is no ground for suspicion; Peletier's distinctions are etymologically regular and corroborated by their modern reflexes in Northwestern varieties of French.

I provide the results from a detailed analysis of textual data which reveals that the deletion of syllable-final /S/ was indeed accompanied by C[ompensatory]L[engthening]. The findings also suggest that the length distinction introduced by CL was lost in the 16th century. (Gess 2001:145)

Morin (2000[b]) claims to have found evidence for a phonological vowel length distinction in the 16th-century ‘vers mesuré’ of Jean-Antoine de Baïf. Bullock (1997) reaches the opposite conclusion on the basis of the same work² (a conclusion supported by the results of this study)... (Gess 2001:155n3)

[My] findings thus shed important new light on the controversial question of whether there was contrastive length in the 16th and 17th centuries (Bullock 1997, Morin 2000[b]). I can only interpret the data presented here as suggesting, contra Morin (2000[b]), an answer in the negative. (Gess 2001:152)

This author’s analysis is limited to stressed vowels in rhymes where “the length distinctions [have been] introduced by C[ompensatory]L[engthening]” resulting from the loss of preconsonantal [s] and [z]. Thus, his demonstration, even if it were right, would not prove that there did not exist any distinctive length in the 16th century, as there were many other sources for length distinctions that could possibly still be observed at that time (as we shall see later). Baïf’s vers mesurés, for instance, clearly distinguished the long [u:] in *douceur* from the short [u] in *douleur*, a distinction which owes nothing to the loss of preconsonantal [s] or [z]. It is nonetheless possible that Gess meant to say that his conclusion applied equally to all length distinctions that developed at the same time as, or prior to, CL.

Gess’ views on the development and later loss of distinctive length in French, however, appear to be relatively different from that of earlier historical analyses. As a result of which, his ‘findings’ may bear on issues that never were considered in earlier studies on the development of vocalic length in French and may not be particularly relevant to assess their validity.

This author appeals to a conception of ‘distinctive length’ which is considerably more restrictive than the ‘length distinctions’ examined earlier. As emphasized by Labov (1981: 299), in historical analyses, and often also in synchronic ones, “long/short [...] does not refer to any physical dimension — certainly not to duration alone — but to a set of features that may include length, height, fronting, the directions and contours of glides, and the temporal distribution of the over-all energy”. Gess took a different stand and dismissed from his analysis the evolution of non-high vowels [e, ø, ə, a] vs. [e:, ø:,

2. It should be noted, however, that Bullock does not present any evidence of the sort, nor reaches the opposite conclusion; on the contrary, she assumes there to be length distinctions. As far as I can determine, this is the only relevant passage in her work on this subject: “From a review of the literature, it is impossible to state with any certainty that phonetic length was salient in Middle French. It is even less likely that we can attribute any real degree of salience to phonological length distinctions” (Bullock 1997:32). This author does not specify her use of the term “salience”. In the sociolinguistic tradition, it means “level of awareness associated with particular variants” (cf. Lodge 2004:118). As shown by Morin & Dagenais (1988), one certainly cannot say that vocalic length, qua sociolinguistic variable, was not salient in the 17th century.

ɔ:, a:], under the assumption that [e:, ɔ:, a:] “underwent an important change in quality” (Gess 2001:148) and became [ɛ:, ɔ:, a:], after which length would have ceased to be ‘distinctive’. He apparently adopts a phonological analysis in which aperture is THE specific feature that distinguishes [e, ɔ, a] from [ɛ:, ɔ:, a:].³ The fact that one may choose aperture rather than length in the phonological system does not mean that length distinctions are necessarily blurred in the overall prosodic system of a language in which vowels may be either phonetically long or short in similar environments (cf. Gimson 2001:98–99 for a discussion of this problem for the description of English).

The most problematic aspect of Gess’ demonstration, however, concerns his choice of texts as representative of 16th-century uses. His impression that there was “an obvious, cataclysmic loss of distinctive vowel length in the following [*i.e.* 16th] century” (Gess 2001:151) is based on the analysis of three texts written at that period: one by Pierre de Brach, from Bordeaux, one by

Jacques Béreau, from Poitou, and one by Clovis Hestean de Nuysement, from Blois. One thing that traditional scholarship made abundantly clear, however, is that — unlike most other Gallo-Romance dialects and regional varieties of French — the varieties spoken in Picardy and Southern France in the 16th century and later did not have vowel-length distinctions (cf. Morin & Dagenais 1988). It is not surprising, therefore, that length distinctions could not be found in the rimes of Southern poets such as Pierre de Brach and possibly Jacques Béreau (Poitou being divided in half by the linguistic boundary between Northern and Southern Gallo-Romance). Obviously, such observations cannot invalidate claims that length distinctions existed in the varieties of 16th-century French exemplified by Baïf (Morin 2000b), Lanoue (Morin & Desaulniers 1991) or Peletier (Morin 2004), who originated from other regions.

On the other hand, there can be little doubt that the medieval length distinctions were still present in the French spoken by Clovis Hestean de Nuysement, a native of Blois, where these distinctions have been retained until recently.⁴ One might surmise that Gess did not observe these distinctions in Nuysement’s rhymes simply because he based his conclusions on aggregated heterogeneous data. As we shall see, however, the results would not necessarily have been different if his corpus had been truly representative and only included works written by 16th-century Northern poets speaking varieties of French that had preserved the medieval length distinctions. The fundamental flaw of Gess’ endeavor is the unquestioned assumption that the literary conventions shared by 16th-century poets required the complete phonetic identity of rhymes (cf. Section 3). Another problematic aspect of his analysis is the quite restricted set of rhymes on which it appears to be based: this set is primarily made up of verb

3. This author actually writes “/a/ → /a/; /e/ → /ɛ/; /ɔ/ → /o/” and makes no mention of the reflexes of [ø, ø:]. His formulation is false for [e] (< Lat. [a:, a] in open stressed syllables) and [ɛ] (< Lat. [e, e, i] in closed stressed syllables), as will be discussed later.

4. Cf. Davau (1979:47 *et passim*) for a recent survey in nearby Touraine. In this region, the distinction between long and short high vowels, for instance, has survived longer in the local dialect and in the regional French than in the Paris koinè. Medieval long [u:] for instance is still found in the forms: *il bouche, la mouche, le moule, soûle, il s’écroule, il roule*, etc. and still distinct from the short [u] of *la bouche, il (se) mouche, la boule, la foule*, etc.

endings that underwent radical analogical changes (Section 2). The next section (Section 1) is a summary of the development of vocalic length in Old French and later development of quality distinctions required for this discussion. The conclusion (Section 4) will give a brief overview of the other processes responsible for the development of vocalic length in French, which were not directly relevant to the main topic of this article.

1 The development of vocalic length and quality distinctions in French

1.1 The development of vocalic length in Old French

Several processes were responsible for the development of long vowels during the Old French period, most of which were already inventoried at the beginning of the 19th century (Diez 1836:495ff [1873:458ff]). I will refer collectively to these various processes as ‘medieval lengthening’. They include:

1. weakening of preconsonantal [s] and [z] with concomitant lengthening of the preceding vowel [also called ‘Compensatory Lengthening’ (CL)] as in EOfFr. (*il*) *goste* ['gostə] or ['gustə] > [gu:t],
2. coalescence of a non-stressed vowel with a following vowel, as in EOfFr. (*elle*) *veulle* [və'elə] > [vɛ:l],
3. vocalization of preconsonantal [l] and monophthongization of the resulting diphthong, as in Proto French ['vellə, es'pallə, 'kröllə] > EOfFr. *veule, espaul, croule* ['veulə, es'paulə, 'krɔulə] > [vø:l, e'pɔ:l, kɔu:l],⁵
4. lengthening before geminated [rr] as in EOfFr. *parrin* [pa'r:in] > [pa'ʁɛ̃],
5. lengthening of all stressed vowels before [s] and [z], with the exception of Romance [e] in some regions, as in EOfFr. *cesse* ['sɛsə], *fosse* ['fɔsə] > [sɛ:s], [fɔ:s] vs. *trece* “tresse” ['tretsə], *noce* ['nɔtsə] > [trɛs], [nɔs], however EOfFr. *messe* ['mɛsə] > [mɛs] (Central dialects) or [mɛ:s]/[mɛ:s] (Western dialects),
6. monophthongization of [aj, oɪ] before [z] as in OFr. *plaisir* [plaj'zir] > [ple'zi:r].

These processes were not all equally active in the different medieval dialects of Gallo-Romance. One does not know much about the development of vocalic length in Picard, if there ever was one. Weakening of preconsonantal [s], and sometimes [z], did not occur in Walloon and may be relatively recent in some dialects of Lorraine. It did not occur either in most Occitan dialects, except in a few North-Occitan varieties (cf. Morin 1994b, 2000d, 2003). The coalescence of consecutive vowels was less frequent in some northern and eastern dialects, in which epenthetic glides sometimes allowed the two vowels to remain. Romance [e] sometimes failed to lengthen in contexts where other vowels did; for instance, it did not lengthen before word-final [-sə] in many central dialects⁶ (cf. Morin & Ouellet 1991–1992), although it usually did in Western ones

5. For the evolution of preconsonantal [l] in *veule* and similar forms, cf. Morin 1995.

6. The Tourangeau dialect described by Davau (1979) follows the pattern found in Central dialects.

(Romance Brittany, Anjou, Maine, Poitou, etc.).⁷ There are many other dialectal differences in the development of vocalic length in Gallo-Romance that have not been mentioned here; there is nonetheless a relatively strong unity among the following Oïl dialects, which share at least the developments (1) to (4) listed above: Paris and its vicinity (Île-de-France, Orléanais Champagne), Burgundy, Normandy and most of North-West France (Romance Brittany, Maine, Anjou, Touraine).

EOFr.	End of nineteenth-century French (Passy)	
i	<i>gîte</i> [ʒi:t]	<i>frite</i> [fʁit]
y	(<i>il</i>) <i>brûle</i> [bʁy:l]	<i>nulle</i> [nyl]
o	(<i>il</i>) <i>goûte</i> [gu:t]	<i>goutte</i> [gut]
e	<i>crête</i> [kʁɛ:t]	<i>nette</i> [nɛt]
	<i>pêche</i> [pɛ:ʃ]	<i>sèche</i> [sɛʃ], <i>messe</i> [mɛs]
	<i>serment</i> [sɛʁmɑ̃]	<i>serrement</i> [sɛʁmɑ̃]
ɛ	<i>vèle</i> [vɛ:l]	<i>belle</i> [bɛl]
	<i>cesse</i> [sɛ:s]	
aï	<i>naître</i> [nɛ:tʁ]	<i>faite</i> [fɛt]
	<i>plaisir</i> [plɛ:zi:ʁ]	
eū	<i>veule</i> [vœ:l]	(<i>ils</i>) <i>veulent</i> [vœl]
ə		<i>désir</i> [dezi:ʁ]
ɔ	<i>côte</i> [ko:t]	<i>cotte</i> [kɔt]
a	<i>pâte</i> [pa:t]	<i>patte</i> [pat]
	<i>parrain</i> [paʁɛ̃]	<i>parent</i> [paʁɑ̃]
oï / eï	<i>boîte</i> [bwa:t]	<i>boite</i> [bwat] “boisson”

Table 1: Illustration of the historical sources of vocalic length found in Michaelis & Passy’s dictionary (1897)

Table 1 illustrates some of the medieval length distinctions that could still be observed in a relatively conservative Parisian’s usage at the end of the 19th century, that of Passy (cf. Arickx 1971) — the length distinctions indicated here are those found in Michaelis & Passy’s dictionary (1897), with length represented by [:] in stressed syllables and [·] elsewhere.

Vocalic length was lost in word-final position relatively sooner in the Parisian norm, leaving no trace whatever in Michaelis & Passy’s dictionary, although a century earlier, Catineau-Laroche’s dictionary (1802) still registered a distinctive length at the pause in word-final position. All of the following observations, therefore, concern vowels not found in word-final position.

7. The dialectal distribution has not yet been examined in detail. For the general evolution in Romance Brittany, cf. Chauveau (1984:122); the evolution in Pléchatel (Dottin & Langouët 1901), however, is slightly different.

Medieval length has not been equally preserved for all vowels. The long high-vowels [i:, y:, u:] shortened relatively early in the Parisian norm.⁸ Michaelis & Passy's dictionary only records a handful of the medieval long high vowels [i:, y:, u:] in contexts where length distinctions are still observable.⁹ Catineau-Laroche's dictionary (1802), on the other hand, included a larger array of words in which medieval length was still heard for high-vowels in stressed closed syllables, as in *vite*, *bûche*, *il bouche*, *louche* "cross-eyed", *pouce*, etc., although it already faded away in isolated forms such as *ruche* or *flûte*. Other regions, however, may be quite conservative. In Touraine, for instance, medieval length was still distinctive for high vowels in the second half of the 20th century, both in the local dialect and the regional French of older speakers, as in *biche* [bi:f] vs. *miche* [mi:f] / *triche* [tri:f], *douce* [du:s] vs. *mousse* 'émoussé' [mus], *poutre* [pu:t] / *ça coûte* [ku:t] vs. *il doute* [dut] / *tout(e)* [tut] (Davau 1979; other examples in note 4 above).

1.2 Quality distinctions associated with length

Table 1 also highlights the changes of quality underwent in this variety of French since the Middle Ages by long and short vowels that are not now found in word-final position. The long and short stressed high vowels have probably kept their original qualities. The stressed reflexes of the mid-front monophthongs [e], [ɛ] and of the diphthong [ai] converged to [ɛ] and [ɛ:]¹⁰ without any noticeable difference of quality between the long and short reflexes in the Parisian norm at the beginning of the 20th century, according to the description of Michaelis & Passy. Similarly, the stressed reflexes of the Old French diphthong *oi* have usually preserved length as the sole distinguishing feature: *boîte* [bwa:t] vs. *boite* [bwat] or *croître* [kʁwa:tʁ] vs. *droite* [dʁwat] (the quality [a] or [ɑ] is determined by the preceding consonants, cf. Morin 2000a). The long stressed reflexes of EOfFr. [a], [ɔ] and [eu] frequently became [ɑ:], [o:], [ø:], with a quality relatively distinct from that of their short counterparts [a], [ɔ] and [œ]. The long mid-open reflex [œ:] in *veule* [vœ:l], instead of [ø:] is relatively exceptional in Passy's usage. On the other hand, unstressed long [ɑ'] before *r*, as in *parrain* [pa'ʁɛ̃], has normally retained (or regained) its front quality in the same usage (back unstressed [ɑ'] before *r*, however, is also listed in this dictionary as a standard variant).

There are strong disagreements about the source of the quality differences now observed between the reflexes of long and short reflexes of EOfFr. [a], [ɔ] and [eu]. As shown in Morin (2000b: 13–15), Martinet (1946, 1959) was certainly right to say that these differences did not develop before the beginning of the 18th century and that, accordingly, the qualities were approximately the same for short and long vowels in the

8. For the development of a *new* length distinction [i:, y:] vs. [i, y] before word-final [s], probably during the 18th century and still recorded in Passy's dictionary, cf. Morin 1989, Ouellet 1993.

9. The medieval distinction between *sure* and *sûre*, for instance, has been neutralized, as a result of the lengthening of all vowels before word-final [ʁ] in Passy's speech.

10. These vowels may have merged before, or after, they were lengthened.

dominant norms of 16th and 17th-century French, not only for the high vowels, but also for the pairs [a, a:], [e, e:], [ɛ, ɛ:], [ɔ, ɔ:] and [ø, ø:].

1.3 Quality, quantity and tenseness

Table 2 presents a summary of the evolution of the phonological system of oral vowels in Paris French. In Martinet's phonological interpretation, vowel length was a major distinctive feature of this system at least until the end of the 17th century and during the transitional period. This feature served first as the only means, or at least the dominant means, to distinguish two series of otherwise identical or very similar vowels. During the transitional period, quality differences between /œ/ and /ø:/, /ɔ/ and /o:/ and /ă/ and /a:/ did not enter into any systematic patterns with other pairs of short and long vowels, and therefore must be regarded as redundant secondary features. Quality differences in the modern varieties of French that have preserved the transitional phonological system appear to be relatively variable depending on the contexts. In Burgundy French, for instance, some speakers use a short close [o] instead of short open [ɔ] in word-final position, and long front [a:] instead of long back [ɑ:] after [w] (Galand 1968:169–170; the variation between [a:] and [ɑ:] in this study is only exemplified in word-final position — but may well be found elsewhere, perhaps in *boîte*, *cloître*, *poêle* or *moite*).

ĩ i:	ỹ y:	ũ u:	ĩ i:	ỹ y:	ũ u:	i	y	u
ě e:	ø ø:		ě e:	ø:	o:	e	ø	o
ě ɛ:		ɔ ɔ:	ě ɛ:	œ	ɔ	ě ɛ:	œ	ɔ
ă a:			ă a:			a		ɑ
End of 17th cent.			Transition			Mid 20th cent.		

Table 2: Evolution of the phonological system of distinctive length (after Martinet 1959)

According to Martinet (1959 [1969: 179]), it is only after the loss of the length distinctions that kept apart the two series of high vowels [i, y, u] vs. [i:, y:, u:] and the two mid-close vowels [e] vs. [e:], that the quality differences between [a] and [a:], [ɔ] and [o:], [œ] and [ø:] were amplified and became truly distinctive, relegating their respective length as a redundant feature — with the notable exception of the pair [ɛ, ɛ:], for which length remained the only distinctive attribute. The demise of length as a constitutive feature of the vocalic system was certainly precipitated by the loss of length in word-final position, after which the distinction between *chat* [ʃa] and *chas* [ʃa:] became totally parallel to that between *chaix* [ʃɛ] and *chat* [ʃa], for instance.

Somehow, a phonological description of French characterizing most vowels only by their qualitative features (height, backness and rounding), as advocated by Martinet, does not appear to fully reflect their specific properties. The fact that the phonemes /œ, ɔ, a/ are regularly realized as short vowels in most stressed closed syllables, unlike /ø, o, ɑ/ that are always long [ø:, o:, ɑ:] in the same contexts, is not a property that can be

correlated to height or backness. There does not appear to be any specific property of the vocal tract that could account for /o, a/ being phonetically long, but intermediate /ɔ/ being short before word-final [t] for instance. This is an idiosyncratic property of these specific vowels, directly inherited from the length of their medieval ancestors, for which the label ‘tense’ has often been proposed (cf. Plénat 1987 for other distributional properties associated with the feature *tense*) — not necessarily co-extensive with the feature ‘tenseness’ specifying “the manner in which the entire articulatory gesture of a given sound is executed by the supraglottal musculature” as defined by Chomsky & Halle (1968:324). The ‘tense’ property of /ø, o, a/ is automatically extended to new forms in the language. Thus the reading of the digraph <eu> as /ø/ in the proper name *Polyeucte* or the reading of the trigraph <eau> as /o/ in *Meaulne*, where both vowels are in closed stressed syllables, produces a long vowel: [pøljø:kt] or [mo:l̥n], even though hereditary long vowels do not appear before word-final [-kt] and [-ln]. The feature ‘tense’ is thus nothing more than a label for the modern contextual length inherited from Old French.^{11,2} Gess’ analysis of rhymes

2 Gess’ analysis of rhymes

2.1 Protocol of identification of long vowels

From his analysis of rhymes in a corpus of seventeen texts ranging from the 12th to the 16th centuries, Gess claims to have been able to find direct evidence for compensatory lengthening, where traditional scholarship failed to do so,¹² and patent proof that “length distinction introduced by CL was lost in the 16th century”. His protocol, however, would count as a ‘mismatch’ — and hence a loss of length distinction — rhymes involving two long vowels when one of them did not result from the loss of preconsonantal [s] or [z], such as *outr̥e: demoustr̥e* [*Roman de la Rose*, ed. Lecoy, 1617–18], in which the length in *outr̥e* resulted from the vocalisation of preconsonantal [l] and not from the loss of preconsonantal [s] or [z] as in *demoustr̥e*.

Even more problematic for his analysis is the exclusive reliance on *orthographic* <s> before a consonant-letter as an indication of length resulting from CL. Thus Gess’ protocol would fail to identify the rhyme *pustes : fustes* [*Roman de la Rose*, ed. Lecoy,

11. The vocalic system of Montreal French is quite similar to that of the mid 20th-century system postulated by Martinet (if one abstracts away recent borrowings from English). Santerre (1971, 1974) proposed an analysis based on contextual length for which he used the equivalent of a “tense” vowel for Martinet’s long /ɛ:/ (which he transcribed as /ɜ/, not a regular IPA usage). This allowed him to construct a formal vocalic system without explicit length. He nonetheless had to make a distinction between two sets of vowels: (1) the set /a, “ɜ”, ø, o/ (typically, the reflexes of 17th-century non-high long vowels) which are phonetically long in all stressed closed syllables (i.e., irrespective of the nature of the following consonant or group of consonants), and frequently diphthongized in some social classes and (2) the set of all other vowels, which may be phonetically long only in some specific contexts and are never diphthongized (but cf. Morin 1987).

12. “Pope [...] states here (falsely, as we will see) that there is no direct evidence for [compensatory lengthening] from Old and Middle French poetry” (Gess 2001:147).

9125–26] as being mixed.¹³ The first orthographic ⟨s⟩ in the plural feminine adjective ⟨pustes⟩ is not etymological; the same adjective (in the singular) may also be written ⟨pute⟩ in the same manuscript (lines 9095, 12540) in conformity with its etymon PŪTĪDĀ(M). The two stressed vowels of *pustes* and *fustes* certainly had different lengths. Why the copyist should have chosen to add a graphic ⟨s⟩ in *pustes* is a matter of conjecture. Some 16th-century treaties enjoin readers to artificially lengthen the short stressed vowel of mixed rimes, and instruct the poet to adjust the spelling accordingly (a practice later called, somewhat misleadingly, a ‘rime pour l’œil’). There is no certainty however that any of these concepts would make any sense at that time and that the spelling *pustes* was meant as an instruction to read the vowel as long [y:].

Gess’ reliance on orthographic ⟨s⟩ in his protocol will have the direst consequences for the identification of long vowels in texts from the 16th century, when new spelling habits developed and etymological silent ⟨s⟩ was frequently omitted after some vowels which could nonetheless be long, as we shall see later.

2.2 The corpus under scrutiny

The scholar decided to dismiss rhymes with stressed vowels spelt ⟨a⟩, ⟨e⟩ or ⟨o⟩, because he felt he could not determine whether such rhymes were based on the length of the vowels or the specific quality associated with their length, e.g., the reflexes of EOFr. [a] in the words *paste* and *haste* “may rhyme because both long, or because both [a]” (p. 148). One is surprised to read that he applies the same exclusion to the vowels spelt ⟨e⟩. He does not seem to be aware that there were three distinct stressed vowels in Early Old French written with the same letter ⟨e⟩, and erroneously assumed that the distinction between long ‘e’ and short ‘e’ eventually transformed into a quality distinction, opposing mid-close [e] for long ‘e’ to mid-open [ɛ] for short ‘e’ (p. 148). This is all the more regrettable, as traditional scholarship has discussed this problem at length (Malmberg 1942–1943 or Martinet 1959): EOFr. [e], [ɛ] (both written ⟨e⟩) and [ai̯] before consonant not only merged in Paris French, as far as vowel quality is concerned, but retained length as the only distinctive or dominant feature until quite recently, as we have seen earlier: “L’opposition d’un /ɛ̃/ et d’un /ɛ/ long, dernier vestige de la corrélation de longueur vocalique qui caractérisait le français des XVII^e et XVIII^e siècles, restait seule de son espèce et se trouve en voie d’élimination” (Martinet 1959 [1969: 180]).

Gess actually dismissed a much larger set of vowels from his study, and actually limited his observations to the two monophthongs spelt ⟨i⟩ or ⟨u⟩ and the diphthong spelt ⟨ui⟩.¹⁴ As is well known (cf. Martinet 1959 [1969:177]), there are relatively few

13. I use the term “mixed” to describe rhymes that associate reflexes of vowels that would have had different lengths in the central dialects of Old French on which Standard French has been built. A mixed rhyme may or may not have vowels of different lengths in a given region at a given period in history.

14. This scholar actually wrote “the high vowels /i/ and /u/, as well as the high diphthong /ui/” (p. 148). His discussion of the rhymes exemplifying the vowel “/u/” and the diphthong “/ui/” however indicates that he probably meant IPA ‘/y/’ and ‘/yi/’.

long vowels [i:] and [y:] in French that do not have some inflexional function. They are thus prone to morphological analogy and cannot be taken as reliable indicators of phonetic changes. Gess does not provide any detail on the nature of the endings he examined in his corpus. A rapid inventory of the rhymes spelt <is>C, <us>C and <uis>C (where C is any consonant-letter except <s>) selected according to Gess' protocol in Guillaume de Lorris *Roman de la Rose* (ed. Lecoy) gives the followings results: (1) less than 10 % of the total occurrences of rhymes are *not* associated with morphological markers: *triste* (2 occ.), *meïsmes* (1 occ.), *fust* (*noun masc.*, 1 occ.) to which one can add *vites* (*adj. plur.*; for etymological *vistes*; 1 occ.), (2) the remaining rhymes all belong to verbal endings: *aïst*, *blandist*, *crensist*, *dist*, *eïst*, *enhaïst*, *esbaudist*, *feïst*, *gist*, *haïst*, *ist*, *languist*, *meïst*, *morist*, *norist*, *porist*, *preïst*, *replenist*, *requist*, *revenist*, *sist*, *tresist*, *veïst*, *vosist* (32 occ., 3rd person singular forms of either present indicative, preterit, or imperfect subjunctive), *veïstes* (3 occ., 2nd person plural forms of the preterit), and *coneïst*, *deïst*, *eïst*, *fust*, *pleïst*, *seïst* (11 occ., 3rd person singular forms of the imperfect subjunctive).¹⁵

The large number of verb endings in *-ist* in these texts should be enough to make any comparison with 16th-century texts totally irrelevant, as these endings underwent large-scale non-uniform analogical changes. This appears clearly from the two representative Old French verb paradigms for 3sg present indicative, preterit, and imperfect subjunctive given in Table 3.

	pres. ind.	preterit	imp. subj.
Strong verbs			
vëoir	voit	vit	vëïst
dire	dit	dist	desist, deïst
faire	fait	fist	fesist, feïst
mettre	met	mist	mesist, meïst
Inchoative and weak verbs			
fenir	fenist	fenit	fenist
sentir	sent	sentit	sentist
battre	bat	batit	batist

Table 3: Old French 3sg present indicative, preterit and imperfect subjunctive

15. Similar proportions were found in *Le Roman de Tristan* de Bérout (ed. Jean-Charles Payen), *Griseldis* (ed. Roques) — two other texts from Gess' corpus available in our own databases — and, as well, in the Guiot copy of Chrestien de Troyes (ed. Lecoy, Micha, and Roques), the *Roman de la Rose* of Jean de Meun, the *Bible* of Macé, for a total of over 100 000 lines. There were only 12 occurrences of relevant rhymes in *Le livre des Manières* (ed. Lodge), whose stanzas required rhymes to appear in groups of four words: *Bautiste*, *Evang[e]liste*, *Siste*, *triste* and *celistre*, *Epistre*, *istre*, *menistre*, including only one verb form (in the infinitive).

The 3sg forms were distinct in Early Old French for all tenses, except for inchoative verbs (exemplified here as *fenir*), for which present indicative and imperfect subjunctive forms were identical. The imperfect subjunctive ending *-ëist* was generalized to all strong verbs, and later merged with the ending *-ist* of weak verbs after the loss of preconsonantal [s] and the contraction of *ëi* to [i:]. As far as can be determined, this ending kept a long vowel [i:], at least during the 16th and 17th centuries, in all varieties of French that preserved distinctive length for high vowels.

On the other hand, two different patterns were observed for the distribution of length in present indicative and preterit forms. A conservative usage, represented by the work of Lanoue (1596), essentially retained the etymologically regular phonetic length, e.g. VOIR: [vʷæt], [vit], [vi:t], DIRE: [dit], [di:t], [di:t], FINIR: [fɛni:t], [fɛnit], [fɛni:t]. An innovative usage, represented by the work of Meigret (1542–1551) and Peletier (at least in his earlier works, 1550–1555) generalized the short vowel in preterit forms, except when this would entail a homonymy with the present indicative, thus VOIR: [vʷæt], [vit], [vi:t], but DIRE: [dit], [di:t], [di:t], FINIR: [fɛnit], [fɛni:t], [fɛni:t].

The orthographic norm, as exemplified in Lanoue's dictionary, favored the spelling <-ist> for imperfect subjunctive endings and, as a rule, <-it> elsewhere. As a result of this, the spelling <-it> in verb endings offered no cue as to the length of the vowels, as witness the patterns found in Lanoue's dictionary:

VOIR:	<voit>	[vʷæt],	<vit>	[vit],	<vist>	[vi:t]
FAIRE:	<fait>	[fæt],	<fit>	[fi:t],	<fist>	[fi:t]
SUFFIRE:	<suffit>	[-i:t],	<suffit>	[-it],	<suffist>	[-i:t]
LIRE:	<lit>	[li:t],	<lut>	[lyt],	<lust>	[ly:t]
LANGUIR:	<languit>	[-i:t],	<languit>	[-it],	<languist>	[-i:t]
DIRE:	<dit>	[dit],	<dit>	[di:t],	<dist>	[di:t]

Any statistic count based on spelling would completely fail to reveal anything about the distribution of length for poets having the same graphic and phonetic usage as Lanoue.

2.3 A valid protocol

A valid study of the sensitivity of poets to vocalic length in their rhymes does not allow any shortcut. It should examine all sources of lengthening, not only those resulting from the loss of preconsonantal [s] or [z]. It should take into account the etymology of the endings and not simply the spelling habits of the copyist. It should be sensitive to dialectal differences. It should carefully examine the specific evolution of verb endings. Last, but not least, it should not be limited to some high vowels.

The evolution of the vowels *a*, *o*, *e*, *eu* provides the *necessary control* for any statistical study. If, as Gess admits, the reflexes of long *a*, *o* and *e* did not merge with those of the corresponding short vowels, and if rhymes necessarily required the *complete* phonetic identity of the ending, as Gess (2001) presupposes,^{16, 17} one should not find mixed rhymes for such vowels *ever*. They are, however, not rare in 16th-century poetry. Clément Marot's work, for instance, includes a very large number of mixed rhymes in *a*, *o* and *e*, e.g. for [a:] ~ [a] *basse* : *place* – *casse* : *bécasse* – *passé* : *trace*, *race* – *surpasse* : *audace*, for [ɔ:] ~ [ɔ] : *grosse* : *crosse*, *Écosse* and for [ɛ:] ~ [ɛ] *cesse* : *adresse*, *détresse*, *espèce*, *finesse*, *noblesse*, *rudesse* – *est-ce* : *liesse* – *expresse* : *dresse*, *jeunesse* – *presse(s)* : *adresse*, *liesse*, *paresse*, *tristesse*, *rudesses*.¹⁸ The existence of such rhymes proves that the poetic conventions adopted by 16th-century poets did not require the complete phonetic identity of word-endings in rhymes and that any analysis based on the opposite premise is bound to be flawed. This is not quite unexpected, as the rules of versification, including the nature of the phonetic resemblance required for rhymes, are cultural products, not universal entities; they develop in specific historical contexts that need to be carefully investigated before poetic works can be profitably used to reconstruct past pronunciations.

3 On the conventional nature of rhyme

3.1 On the nature of homophony in the rhyme

It is normally assumed, without much discussion, that from the earliest time, French poets who used rhymes, naturally adopted the following *modus operandi*: “La rime de deux mots est l’homophonie de leurs voyelles accentuées et de tout ce qui les suit” (Tobler 1880 [1885:149]). This early hypothesis is still commonly accepted in some recent studies on French rhymes. Tobler himself did not make precise how similar he felt the homophony had to be, but probably did not think that length was relevant (cf. his lack of specific comment on OFr. rhymes such as *depute* : *juste* after the loss of preconsonantal [s], 1885:191). It has also been argued that poets allowed, albeit only occasionally, further departure from this strict identity, e.g. Shapiro (1974: 506) in his discussion of rhymes such as *time* : *nine* in *A stitch in time saves nine*. Doutrelepon (1987:67, 162–163) shows that there is no reason to believe that rhymes such as

16. Gess appears to hold contradictory views on the pertinence of vocalic length for rhymes. Although Gess (2001:148) crucially assumes that rhymes such as *putes* : *fustes* should only be possible if their vowels were of equal length, he equally crucially argues elsewhere (Gess 1998: 360, 1999:266) that Old French rhymes such as *vet* : *sert*, *sage* : *large* should be interpreted as [vɛt] : [sɛ:t], [sɑdʒə] : [la:dʒə], with rhyming vowels of different lengths, which came into existence once the “deletion of syllable-final [sic] /r/ [sic]”, as in *sert* and *large*, produced distinctive long vowels.

17. Straka (1985) also presupposes the complete phonetic identity of rhymes during the classical period and similarly reaches wrong conclusions about the development of mixed rhymes.

18. These rhymes are written here with their modern spelling.

felenesse : *perversse* (Erec 6363–64) or *quatre* : *conbate* (Yvain 3861–62), indicate that *r* was silent in the endings *-ersse* and *-tre* in Chrestien de Troyes's or Guiot's usage.

The fact of the matter is that rhyme, assonance and other means of versification are mostly conventional in nature, and one cannot presuppose what means are in force in a specific work prior to the analysis of this work, as well as other works belonging to the same cultural tradition. I am not denying the obvious: the rhyming of two words in French always implied a phonic resemblance between their endings. The question is how similar endings had to be to be allowed in a rhyme and, conversely, whether the relative homophony of two endings necessarily allowed them to appear in a rhyme.

3.2 Avoidance of dialectal clashes

There are many phonically arbitrary constraints on French classical versification, which Cornulier (1995) properly described as ‘graphic fiction’, particularly for the poetry written during and after the Romantic period. Victor Hugo, in the 19th century, used rhymes such as *été* : *jeté*, but would not have used the rhyme *été* : *jeter*, although the two forms: *jeté* and *jeter*, were then completely homophonous. These constraints have at least two sources: conservatism of earlier usages and avoidance of dialectal clashes. The absence of rhymes such as *été* : *jeter* in Victor Hugo's work is a form of conservatism. The ban in classical poetry against sequences Vowel+shwa+Consonant, except at the end of lines, was originally motivated by conflicting pronunciations that made it impossible to construct a line metrically acceptable to all readers: a word like *espée* in the phrase *espée sanglante* was trisyllabic in Southern varieties of French and disyllabic in most other varieties; it — and all other words having the same form — had to be avoided, if lines were to be acceptable to speakers of all varieties of French (cf. Morin 2000c).

Similar bans have certainly existed very early in Old French. Suchier (1893 [1906:16]) and Lüdtke (1972) point out the absence of the words corresponding to *pui* ‘mountain’, *nuit*¹⁹ at the end of lines in the *Chanson de Rolland*, although words with similar endings, *lui*, *fui*, *fuit*, *conduit* were quite frequent in this position. The diphthong *ui* [yɪ] in *pui*, *nuit* is the reflex in Central French of an earlier [ɔɪ] that also became [eɪ] or [iɛ] in other dialects of Northern French, whereas the diphthong [yɪ] in *lui*, *fuit* is the reflex of an earlier sequence [yi] found in almost all dialects. The absence of *pui*, *nuit* (as well as *tuit*, *truis* — words that were however less likely to appear in line-final position) in the *Chanson de Rolland* is certainly the result of an early cultural ban that developed in a large cultural area in Western France, where the reflexes of earlier [ɔɪ] were then quite divergent, as argued by Lüdtke.

A regional ban against long vowels at the rhyme could likewise have arisen in cultural centers that gathered speakers from regions where the development of vocalic length distinctions was not uniform. There is no evidence that this ever happened. It is quite possible, on the contrary, that there developed an insensitivity to vocalic length,

19. *Nuit* found in line-internal position is spelt ⟨noit⟩ in the Oxford manuscript.

perhaps after a period of conservatism that concealed, possibly to the poets themselves, the dramatic changes under way in the vocalic systems of the different varieties of Gallo-Romance, including nascent French.

3.3 Conservatism

I know of no specific study that examined the precise development of vocalic length in Picardy. The modern varieties of Picard and French spoken in the French provinces of Picardy, Artois and Hainaut, as a rule, have no distinctive length (some forms of length distinction might be found in Belgian Hainaut, however). This characteristic feature of Picard has been noted as early as the 16th century, but is certainly much older. Thirteenth-century charters from Picardy do not distinguish the reflexes of EOF. [-s] and [-ts] in the spelling (cf. Dees *et al.* 1980, maps 266) and neither do some Picard poets in their rhymes (Dees 1990), a likely sign that the length distinctions that developed before the reflexes of OFr. [-s] and [-ts] had already vanished in Picardy, if they ever existed (cf. Morin & Bonin 1997: 123n3 for the potential use of the letters <s> and <z> to distinguish vocalic length). It is also of matter of conjecture whether the loss of preconsantal [s] ever produced long vowels in Picard dialects.

I do not know either of any specific study that examined the use of mixed rhymes in works written by Picard poets, besides that of Dees (1990) — restricted, though, to the confusion of EOFr. [ts] and [s].²⁰ It is quite possible that the inventory of rhyming pairs of some Picard poets would not be different from that of other poets elsewhere. One should not conclude, however, that length was necessarily distinctive for them — as Gess' protocol would lead to do. Such results could simply indicate that poets were quite familiar with a large corpus of earlier works and/or contemporary works from other regions, to which they (consciously or not) conformed.

3.4 Insensitivity to vocalic length

On the other hand, it is much easier to establish that Renaissance poets had definitely acquired a lack of sensitivity to vocalic length, as one gathers from various remarks made by grammarians. It is difficult to decide, however, how progressive or abrupt the

20. The problem of vocalic length in rhymes has never been a strong concern of traditional scholarship. Chatelain's study (1907:xii) specifically excludes this feature: "la question de la longueur des syllabes [sic] a été laissée de côté". Gess' statistics on orthographic <s> after the letter <i> and <u> did not reveal any difference between Picard and non-Picards texts, but that does not allow one to draw any firm conclusion about the length of vowels, as we have seen. Langlois published one of the first rhyming "dictionary", written between 1411 and 1432, whose anonymous author appears to be more familiar with local Picard productions than those of courtly poets of other regions (Langlois 1902:xxvii). His rhymes in ÈT and IT (listed below with the spelling used in the ms.) freely mixed vowels that would have had different lengths in other dialects: (1) *prest, est, let, aguet, varlet, colet, folet, molet, tet*, (2) *mit, fist, dist, esprist, escript, dit, lit, rit, abit, respit, despit, vit, prist* (Langlois 1902:75); he equally listed together endings that were distinguished elsewhere: *nés* "born (pl.)" : *nés* "nose", (p. 74), *messe* : *abbesse* : *adresse* : *presse*, *effasse* : *lasse*, *espasse* : *entasse* (p. 89; there is some uncertainty, however, about the status of the last two series of rhymes).

transition was.²¹ The number of mixed rhymes that caught the attention of 16th-century grammarians may not have been significantly more frequent than they were half a century before.

Thus, in the introduction of his rhyming dictionary, Lanoue (1596) warns the reader that he drew a distinction between rhymes according to the length of their stressed vowels, in such a way that “ce qui fera fait felon icelle fera plus parfait: Non que fi on fait autrement ce foit faire mal, (autrement il faudroit condamner tous ceux qui ont escrit iufques icy)” [rhymes that conforms to this distinction will definitely sound better, though there is nothing reprehensible in doing otherwise — lest one should condemn every single person who has ever written [poetry] until now].

Lanoue regularly reminds his reader that in public reading care should be taken to ‘adjust’ the pronunciation of mixed rhymes in order to achieve homophony. He meticulously lists which words with an inherently long vowel may be pronounced with a short one or — and that is by far the most frequent case — which words for which the opposite is true. It is quite clear from his comments that Lanoue’s decisions are based on the current variability of uses among the aristocracy.

The acceptability of mixed rhymes may also have profited from the specific prosody in use at that period for the reading aloud of poetry. There are indications that vowels were lengthened at the end of phrasal stressed groups, and, thus, at the end of lines in poetry. In 1574, Baïf made specific use of this prosodic lengthening in his *poésie mesurée*, whereby syllables at the end of phrasal stressed group always counted as heavy (cf. Morin 1999). More than a century later, Hindret (1687: f° ẽ ij r°–v°) blames the confusion between long and short vowels in pairs such as *sage : âge*, *troisième : emblème*, *boule : moule* made by some speakers that would use a long vowel in all cases. The lengthening of short vowels, he says, is permissible in poetry, but not in ordinary speech: “Si ce n’est pas une grande faute dans la poésie, ç’en est une infuportable dans la prononciation où la syllabe longue prononcée pour une brève, choque extremement l’oreille. Ces prononciations défectueufes [...] ôtent tout l’agrément d’un discours quelque regulier & poli qu’il foit.”

In the current state of research, one can only speculate on the reasons why there would have been a marked increase of mixed rhymes during the 16th century — if that actually were the case. There are, however, many reasons that would lead us to expect radical changes to have occurred at that period. One possible factor is of course the complex series of analogical changes in verb endings discussed earlier, which resulted in a complete inversion of the length distinction for inchoative verbs in present indicative and preterit forms. The ensuing social variability could only foster the acceptability of mixed rhymes. More important, however, is the cultural ambiance set up by the French Renaissance, and the appropriation of French as their cultural language by the élite in Southern France.

21. Gess reports a dramatic orthographic change after 1500, the importance of which is however difficult to evaluate. It would be of little significance if it were mostly limited to verb endings, as we have seen.

The first expression of a profound change appears in the poetry of the Grands Rhétoriqueurs (1470–1520), who, through irony and parody, took apart the medieval poetic tradition (cf. Zumthor 1978) and enjoyed playing with rhymes. The Court of Burgundy in Valenciennes (Picardy) was one of the most active centers of that school, with famous Picard poets such as Georges Chastellain, Jean Molinet and Jean Lemaire de Belges, who certainly would not have objected on phonetic grounds to using mixed rhymes, as they were homophonous in their own usage. Among the Rhétoriqueurs were also Southerners, equally notorious for their lack of sensitivity to vocalic length, such as Octavien de Saint-Gelais.

The same period witnessed an increase of writers, poets and scholars from Southern France who definitely and massively joined in the cultural development of French as a recognized language for the arts. Their contributions were numerous and had a strong impact on the new developing sensitivity and esthetics in poetry, in particular the works of Marot²² and Du Bartas. Critics from Southern France did not hesitate to intervene on questions of French versification, among whom we may mention Gratien du Pont (1539), from Toulouse, who relied on his own regional southern pronunciation of French as a basis for his argumentation. Almost a century later, Deimier (1610), born and raised in Avignon, explicitly condemned as ‘superstitions’ some of the distinctions based on vocalic length that were defended by other contemporary critics (cf. Monferran 1999b: 89).

4 Conclusion

Old French versification took shape during the early stages of this language, before the development of the medieval length distinctions. At that time, rhymes excluded endings, such as those of *dete* [ˈdɛtə] : *creste* [ˈkrestə], which would eventually differ only by the length of the stressed vowel in most dialects (as in [ˈdɛtə] vs. [ˈkre:tə]), but became homophonous in others. The strong conservatism in matters of rhymes makes it difficult to determine whether the relative absence of mixed rhymes, i.e. rhymes that had stressed vowels of different lengths in the dialects that preserved the medieval length distinctions, would be a simple manifestation of conservatism or a deliberate desire to discriminate between long and short vowels — in Picardy, at least, only conservatism could explain a segregation of this kind. Pope was certainly correct to say that “No direct evidence of differentiation of quantity in vowels is afforded by the rhymes in Old and Middle French” (Pope 1934 [1952: § 558]).

Comments made by grammarians and literary critics in the 16th and 17th centuries show without ambiguity that vocalic length was definitely not relevant for rhymes at that period. Frequent rhymes such as *douce* : *courrouce*, *cesse* : *adresse*, *maistre* : *mettre*, *grosse* : *croisse* or *basse* : *place*, do not allow one to draw the conclusion that

22. Although his father came from Normandy, the young Clément was born and raised in Southern France.

their vowels were identical, as indeed they still were different in pairs such as *maître* : *mettre*, *grosse* : *croisse* or *basse* : *place* for many speakers of French at the end of the 20th century (cf. Martinet & Walter 1973).

Traditional scholarship obviously did not rely on rhymes to establish that some historical processes produced long vowels. All it could count on were early descriptions of French, in which past grammarians classified French vowels according to their perceived length and direct observations on modern varieties of French. Not all early descriptions are equally reliable or precise and must be carefully scrutinized. Modern observations are less subject to debate, but do not necessarily correspond to early phonetic distinctions. The fact that the modern reflexes of EOfR. *coste* and *cotte*, for which one can reconstruct with relative confidence the pronunciations [kōstə] and [kōtə], are now pronounced [ko:t] and [kɔt] makes it likely that the loss of preconsonantal [s] was responsible for the lengthening of the preceding vowel, or for its being raised, or for both at the same time. The evolution of other vowels in similar contexts, e.g. EOfR. *teste* [tɛstə] > [tɛ:t] vs. OFr. *tete* [tetə] > [tɛt], and regularities observed in many languages for similar phonetic changes suggest that lengthening was a regular outcome of the loss of preconsonantal [s] (but one cannot exclude that the vowel of *coste* was raised as soon as it was lengthened, as claimed by some Romanists, e.g. Straka 1964).

Traditional scholarship was fortunate enough to have a large corpus of Gallo-Romance dialects (cf. Wartburg, Keller & Geuljans 1969) and various regional varieties of French in Europe (e.g. Passy 1899, Michaelis & Passy 1897, Martinon 1913, Barbeau & Rodhe 1930, Martinet 1945, Galand 1968, Taverdet 1974, 1989, Métral 1977, Peretz 1977, Walter 1982, Pohl 1983, Krier 1983, Montreuil 2003) and North America (cf. references in Morin 1996) to reconstruct the sources and the evolution of vocalic length in French. There appears to have been several periods during which vocalic length developed in Gallo-Romance, as a result of which the new emerging long vowels could either be integrated into the prior vocalic system or displace the earlier length distinctions. Exceptionally, a triple length distinction may even appear (cf. Morin 1994b).

The first layer of long vowels has its sources in a general Romance allophonic process of vowel lengthening in open stressed syllables, ultimately responsible for length distinctions such as *ᵛALLĒM* > [val] vs. *SĀLĒM* > [sa:l] in modern Frioulan, traces of which are still observed in Walloon, Francoprovençal and, more frequently, Alpine Provençal (cf. Morin 2003: 120-138). This early lengthening is the source of the diphthongization that developed in many Oïl, Romanche and Gallo-Italian dialects, e.g. *DĒBĒT* > Proto French [de:vet] > OFr. *deit* [deɪt] / *doit* [dɔɪt] “(he) owes”.

The second layer of vowel lengthening is the one I referred to here as ‘medieval lengthening’. At that time, diphthongization could not longer be interpreted as a modality of length, because (1) there existed new long vowels that did not diphthongize, e.g. *GENĪSTŪM* > Proto French [dʒe'nest] > OFr. *genest* [(d)ʒə'ne:t], but not **geneist*/*genoist* and (2) length became contrastive for diphthongs, cf. *CRĒSCĒT* > Proto

French ['kressʲet] > OFr. *creist* [krejst] / *croist* [krʲɛ:t] “(he) grows” vs. OFr. *creit* [krejt] / *croit* [krʲɛt] “(he) believes”.

A third layer resulted from the coalescence of a tonic vowel with a following shwa, e.g. *ami* [a'mi] “friend” (masc.) vs. *amie* [a'miə] > [a'mi:] “friend” (fem.). This development first affected the verb ending *-eient* / *-oient* (3pl of the imperfect and conditional) probably during the Middle French period. Its generalization elsewhere may have begun relatively soon in Northern and Eastern Oïl dialects and only later elsewhere.

A fourth layer was added after the 17th century (cf. Morin 1989, Ouellet 1993) when learned words with the graphic endings *-is*, *-us*, *-ès*, *-as* and *-os* were borrowed with a long stressed vowel, as in *virus* [vi'ɥy:s].

One must probably postulate a fifth layer responsible for half length differences associated with the loss of post-tonic shwa, e.g. *brutale* [bryta'l], *vile* [vi'l] vs. *brutal* [brytal], *vil* [vil], only mentioned by Mauvillon (1754: 22, cf. Thurot 1883: 642ff) among earlier grammarians. According to Mauvillon, the loss of shwa added a ‘demi-longueur’ to the original (short or long) vowel. This new length distinction probably did not develop in the central varieties of French around Paris (but cf. Martinet 1933: 196 and 1990:16). Its effect may perhaps still be observed in some varieties of French with a francoprovençal substrate. Some Vaudois varieties of French in Switzerland thus have a triple distinction: *mal* [mal] vs. *malle* [mal] vs. *mâle* [ma:l] (Métral 1977, Andreasen & Lyche 2003). On the French side of the border, and almost a century earlier, however, long *a* had not been backed and the distinction was limited to two terms: *mal* [mal] vs. *malle* [ma:l] / *mâle* [ma:l] (Boillot 1929).

The length distinctions of the second, third and fourth layers have been relatively stable in many Oïl dialects, except when they were associated with grammatical functions (gender and number for nouns and adjective, person and tense for verbs) and hence subject to analogical leveling or extension. They have also been relatively stable, at least until the beginning of the 20th century, in the regional varieties of French that were implanted on dialectal substrates that had length distinctions, whether or not these distinctions had the same sources as in the standard language. The regional varieties of French spoken in Wallony, for instance, have adopted the long vowels resulting from the loss of preconsonantal [s], although this change did not occur in the Walloon substrate. The specific quality of long vowels is also often that of the dialectal substrate, e.g. non-back long [a:] is often heard in the varieties of French spoken in Belgium (Pohl 1983, Warnant 1997). In Liège, where Walloon long [a:] was eventually backed and raised to [ɔ:] (or [ɔ:]), the same vowel [ɔ:] appears to have been originally used in the regional French, as evidenced by early borrowings in Liège Walloon, such as (*il*) *gâte* [gɔ:t], but now appears to have been replaced by the front vowel [a:], probably under the influence of the other varieties of Belgian French. Conversely, in harmony with the dialectal substrate, the regional varieties of French implanted in Picardy and most of Southern France do not have length distinctions.

In Paris, on the other hand, variability has always been more important. At the beginning of the 19th century, the conservative norm began to be seriously challenged

by the norm then championed by Dupuis (1836), a norm that was going to prevail by the end of the 20th century. It eventually spread from Paris to other regional varieties of French that had hitherto better preserved the hereditary length distinctions. There is no sociolinguistic survey, however, that may help quantify the importance of that belated influence and Dominicy (2000: 20) rightly challenges the ‘story’ told in most treatises on French pronunciation about the imminent doom of length distinctions in all varieties of French.

Changes in the Parisian norms are certainly related to the large influx of speakers from various parts of France and the ensuing koinèisation of the varieties of French thus brought into contact, as argued by Lodge (2004:217–218).²³ Spelling may in some cases have contributed to the temporary maintenance of vowel length in the Parisian norm;²⁴ e.g., long medieval [ɛ:] in the ending [-'ɛ:sə] was preserved longer in words where it is spelt *ai*, as in *graisse*, than in words where it is spelt *e*, as in *presse*. The effects of spelling appear to have been negligible before the 19th century, however (cf. Morin & Ouellet 1991–1992).²⁵

Beyer's (1888) concern about an ‘accurate’ description of length distinctions in French reflects the expectations of his period. He could not conceive of the existence of systemic variability within the upper-class Parisian society and was convinced that there existed a uniform ‘orthoepic’ description of the language that Ricard (1887) or Dupuis (1836) failed to discover. He put great hopes, however, in Passy's new system of description to extract from the mass of contradictory data the true representative prosodic invariants.

Bichakjian's (1986) endeavor, although different, shared with that of Beyer's the quest for a unique linguistic system assumed to characterize the linguistic habits of members of a heterogeneous speech community, including not only the upper-class Parisian society, but apparently a much larger group spread over all areas where French is now an official language. This author defended a ‘paedomorphic’ theory of language evolution according to which vocalic length is a feature of early languages, which

23. One does not understand, however, why this author excludes *a* from the set of vowels for which length “was maintained concomitantly with a qualitative distinction [in stressed closed syllables]”. His account of the “upper-class Parisian usage at the end of the [19th] century” is based on Michaelis & Passy's (1897) dictionary, which does not make that distinction and regularly notes long back [ɑ:] in stressed closed syllables (with the exception of a few words, for which the absence of length is historically motivated).

24. One can certainly discount the influence of spelling on the evolution of the unwritten rural dialects, however.

25. Straka (1985:96–103) concludes from his observations of 17th-century rhyme patterns that stressed [a] has been uniformly lengthened (and backed) before the nasal consonants [n] or [m], as in *dame* or *femme*, before [s], as in *face*, and before [ʒ], as in *courage*. According to this author, the modern short front [a] before [m, n, s] and long front [a:] before [ʒ] would result from a later phonetic change that spared vowels orthographically marked with a circumflex, as in *âme*, *âge*, or followed by the digraph <ss>, as in *basse*. This analysis is untenable (cf. Morin 1994a: 56–63). Similarly the difference of length between *-esse* [-ɛ:s] < -ĕssă and *-esse* [-ɛs] < -ĭtĭă, in *presse* [pre:s] and *parese* [pa:re] for instance, cannot be based on orthography, as the endings of these two words have been spelt *-esse* as early as 1549 (cf. Catach *et al.* 1995). One can only conclude that 17th-century poetic conventions allowed the rhyme of long *a* with short *a* and long open *e* with short open *e*.

cannot be (re)introduced in a ‘language’ unless it replaces another more complex articulation, as “this would mean going against the mainstream of language evolution” (Bichakjian 1986: 31). The reintroduction of vocalic length in a Romance language after it has been lost in the later stages of the evolution of Latin would seriously jeopardize his theory. Bichakjian’s survey of the development of vocalic length in general and in French in particular presents serious shortcomings,²⁶ but his theoretical interpretation of the development of vocalic length is what surprises most. He recognized that the various lengthening processes created length distinctions among vowels that could appear in similar environment. He admitted that the length differences in pairs such as *bette* [bet] “chard”: *bête* [bɛ:t] “animal”, *mi* [mi] “half” : *mie* [mi:] “crumb (soft part of the loaf)” / *mis* [mi:] “put (past. part.)” were transmitted from one generation to another for long periods of time, often ranging over several centuries — probably seven centuries for the length differences between the stressed vowel of *bette* and *bête*, *faite* and *fête*, *tette* and *tête*, *mettre* and *maître* etc. (Bichakjian 1986:20). The long vowels in such pairs, however, were not really ‘long’, but only ‘lengthened’ (a term which he also used for allophonic length, as that of [a:] in *grave* [gra:v], where it is conditioned by a following word-final [v]), and thus do not count against his theory, he claimed. The basis for the distinction between ‘length’ and ‘lengthening’ appears to largely depend on their long-range fate in history:

In spite of the numerous cases of vowel lengthening and the concerted efforts of grammarians and prosodists, quantity did not really survive. It disappeared where it was redundant; it was converted into quality whenever possible; and in a few isolated pairs it led a marginal existence for a while and is now dying out. The balance is clear: French rejected quantity. (Bichakjian 1986:20)

He further argues that length, in pairs such as *bette* / *bête* or *mi* / *mis*, could not possibly have been ‘distinctive’ in the internalized grammar of individual speakers. Here is how the argument goes:

since prosodists [...] admonished poets not to couple in rhyme words with ‘short’ and ‘long’ vowels, it could safely be concluded that even the learned natives had not developed such a fine feeling for vowel length.

[...]

Since the natural awareness of an opposition between long and short vowels was lacking, quantity could not have been distinctive, but sixteenth-century Humanists were not interested in the competence of the native speakers. Bichakjian (1986:18)

In other words, because Malherbe (a native of Normandy where length distinctions are still alive nowadays) and some other literary critics were in favor of specific esthetic

26. He does not even mention two key articles written by Martinet: *Note sur la phonologie du français vers 1700* (1946; reprinted in *Le français sans fard* in 1969, from which he quotes another article, though) and *La prononciation du français contemporain* (1945), which are quite detrimental to his thesis. Although Martinet’s 1945 survey is based on a written questionnaire, it shows without ambiguity that upper-class Frenchmen from different parts of France made widely divergent uses of vocalic length, and, at the same time, that length distinctions between short [i, y, u, e, ε] and long [i:, y:, u:, e:, ε:] were then strong and alive in many varieties of Northern French, but not — as expected — in Picardy.

canons in poetry and did not like the works of poets that did not conform to these canons, one has to conclude, Bichakjian claimed, that French native speakers necessarily lacked the linguistic competence to distinguish *bette* from *bête*, *mi* from *mis*, *bout* from *boue*, etc.²⁷ Yet, he also admitted that 16th-century distinctions of that sort were transmitted to subsequent generations for many centuries to come. One finds it hard not to conclude that such length differences must have been quite perceptible if generations of speakers were so prone to acquire and transmit them.

Somehow, Bichakjian decided that only educated speakers acquainted with the ‘length’ distinctions of Latin could have become aware of the ‘lengthening’ distinctions that developed in their own language and that these grammarians lured themselves and their readers into thinking that ‘lengthening’ distinctions were in fact ‘length’ distinctions:

[...] The desire to imitate Latin was [quite] strong — not to say obsessive — [...] In such a mood of adulation, grammarians could not forgo, of course, the opportunity, afforded to them by the various lengthening processes, to introduce or restore quantitative oppositions in French. Bichakjian (1986:18)

It is true that early grammarians, and in particular Sylvius (1531), who wrote, in Latin, one of the first French grammars published in France, found in that language a ready model for their attempts at describing French. Very soon, however, Humanists severed their intellectual dependence on Latin: if French were to have the same high status as Latin, it could not possibly be considered to be a — necessarily corrupt — derivative of that language. Many of them proposed instead that French was the modern form of Gaulish, whose history, they claim, was no less brilliant than that of Latin, and wrote their grammars accordingly. Meigret’s grammar in 1550 was written without reference to that of Latin. Rambaud, an obscure school teacher from Marseille proposed in 1578 a new writing system to remedy the problems caused by the current Latin alphabet, which he applied to French, Provençal and... Latin. A Jesuit priest, Vaudelin (1713), also proposed a reformed spelling to be applied equally to French and... Latin. The charitable priest carefully transcribed in his reformed spelling common prayers to be recited in Latin “pour faciliter au peuple la lecture de la science [sic] du salut”. He carefully indicates which Latin vowels were long, which were nasalized, etc., not as they were in Classical Latin, but *as they were then pronounced* in French churches; e.g., Latin *omnīpōtens* is rendered as *omnīpotis* — which reads as [õmni:põ'tēs] — with a long [i:] for Classical Latin short *ī*.

Bichakjian noticeably quoted Sylvius’s extravagant latinizations to exemplify “the mood of adulation” that induced grammarians to “introduce or restore quantitative oppositions in French”, but did not warn his readers that that very Sylvius did not report

27. Gess (2001: 146) endorsed Bichakjian’s view on the non-distinctiveness of length in the history of French and held forth that “the lengthened vowels were purely phonetic, and not phonemic”. He suggested that the length of lengthened vowels it triggered by “purely phonetic rules (P2 postlexical rules according to Kaisse’s 1990 typology)” in the internalized grammar of individual speakers. I fail to understand how a ‘purely phonetic rule’ would apply to *bête*, but not to *bette*, for instance, if the mental representation of these two words were not distinct.

there to be any differences in length for French vowels, none whatever, although he had many occasions to do so, e.g. when he observed that the *s* of *maistre* was not pronounced: “vt *magister mâ}frè* : quod *mâtrè* propemodum solum pronuntiamus” (page 7).²⁸ The fact of the matter is that Sylvius was Picard. As a rule Picard and Southern grammarians did not mention length distinctions in French, or — in the case of Lartigaud — insisted to say that there were none, or — in the case of Ramus — did not really observe them in their work (cf. Morin & Dagenais 1988). The geographical distribution of the 16th and 17th-century grammarians whose ‘adulation’ for Latin quantitative oppositions did or did not extend to French surprisingly matches well-known modern dialectal differences. This means that grammarians simply tried to describe, the best they could, the length distinctions found in their own varieties of French.

One simply cannot understand the evolution of the pronunciation of French without a serious understanding of the regional and social differences as well as the social and cultural contexts in which past documents have been produced.

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28. In Sylvius reformed spelling, the circumflex in *â* indicates that the digraph <ai> is to be pronounced as a monophthong; the sign ` before *f* indicates that the following letter is mute.

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Acknowledgments:

Some of the databases used in this study have been constructed from electronic documents provided by the following persons or organisms, to whom I express my hearty thanks:

- Le Roman de Tristan of Béroul* (ed. Jean-Charles Payen): Bibliothèque Nationale de France.
- Guiot’s copies of Chrestien de Troyes* (eds. Lecoy, Micha & Roques): Marie-Louise Ollier, Serge Lusignan, Charles Doutrelepon & Bernard Derval, Université de Montréal.
- Roman de la Rose* (ed. Lecoy): Bernard Derval, Université de Montréal.
- Griseldis* (ed. Roques): Monique Lemieux, UQAM.
- L’adolescence clémentine, La suite de l’adolescence clémentine and Œuvres poétiques of Clément Marot* (ed. Gérard Defaux): Bibliothèque Nationale de France.

The other databases used here were built directly as part of a long-term research on the history of French, subsidized in part by the Social Sciences and Humanities Research Council of Canada and the Government of Québec-FCAR: *Livre des Manières* of Étienne de Fougère (ed. Lodge), *Bible of Macé de la Charité* (ed. Smeets), *Chanson de Rolland* (ed. Bédier), the complete works of Meigret using his reformed spelling (1542–1551), the complete works of Peletier using his reformed spelling (1550–1581), *Dictionnaire des rimes* of Lanoue (1596), *Les progrès de la véritable orthographe* of Lartigaut (1669), *Nouvelle manière d’écrire comme on parle en France* of Vaudelin (1713), *Nouveau dictionnaire de poche de la langue française* of Catineau-Laroche (1802), *Dictionnaire phonétique de la langue française* of Michaelis & Passy (1897), *Dictionnaire phonétique de la langue française* of Barbeau & Rodhe (1930), with the help of Michèle Bonin, Jocelyne Cyr, Yves Favreau, Stéphane Goyette, Jocelyn

Guilbault, Marie-Claude Langlois, H el ene Morissette, Martine Ouellet, Sandra Thibault, and Marie- eve Varin.

Abstract

Various medieval dialects of French, including the ancestor of the standard language, underwent a series of changes responsible for the development of a new system of vowel length distinctions. This system probably stabilized during the 13th century and eventually collapsed, in the Standard language, by the middle of the 20th century. These length distinctions developed *long after* the medieval poetic tradition was fixed and never became relevant to the phonetic identity of rhymes. The heterogeneity of the 16th-century literate speech community doomed all learned or regional attempts to make rhymes in Renaissance and Classical French sensitive to vocalic length. As a consequence, “[n]o direct evidence of differentiation of quantity in vowels is afforded by the rhymes in Old and Middle French” — as Pope (1934 [1952: §558]) aptly observed — nor, for that matter, in Classical French.