

A fresh look at the history,
geography and social meaning
of the French vigesimal system and
its decimal counterpart (70-80-90)



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1. Intro

■ 1.1. Main topic of this talk

	vigesimal	decimal
70	<i>soixante-dix</i> *	<i>septante</i>
80	<i>quatre-vingts</i>	<i>huitante/octante</i>
90	<i>quatre-vingt-dix</i>	<i>nonante</i>

* *soixante-dix* is a hybrid form; it is not decimal like *septante*, but also not vigesimal like its predecessor *trois-vingt-dix*, on which it is probably based; but we're including it in the vigesimal series.

1. Intro

- 1.2. What we're not going to talk about
 - The origins of the vigesimal system, cf. Price 1991, 469 (“it does not seem possible to come to any firm conclusions regarding the origin or origins of the vigesimal forms”).

1. Intro

- 1.2. What we're not going to talk about
 - The other (numerous!) vigesimal forms in the history of the French language, such as *trois-vingt*, *six-vingt*, etc., all the way up to *dix-neuf-vingt* “380”.
 - The complex situation in the primary Gallo-Romance dialects.

2. Decimal and vigesimal cardinals across time and space – outline

- 2.1. Decimal and vigesimal cardinals in Frantext
- 2.2. Are decimal forms “archaic”?
- 2.3. The decimal system in France: French vs. primary dialects
- 2.4. The decimal system in Belgium and Switzerland
- 2.5. The decimal system in Nova Scotia
- 2.6. The special fate of *octante*

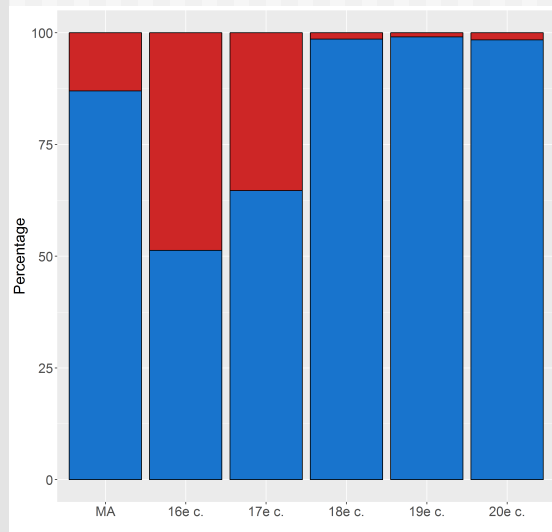
2.1. Decimal and vigesimal in Frantext

- A major flaw of previous studies, as well as dictionary listings, is that textual records of the decimal system were never compared side by side with vigesimal forms, thus making it impossible to actually compare the respective proportions of each variant.
- So we counted each token of them...

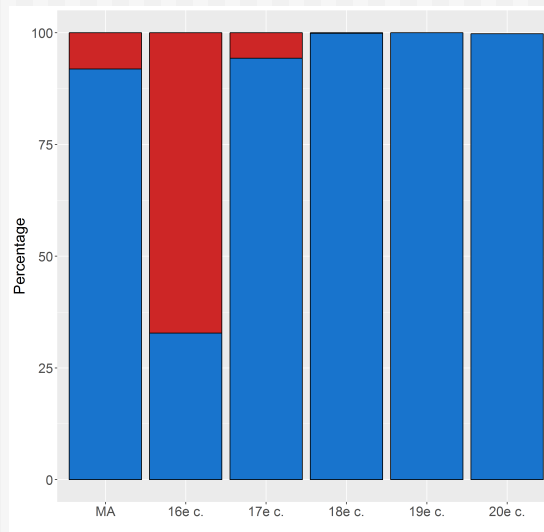
2.1. Decimal and vigesimal in Frantext

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- seisante et (dixldeixldisldizlonzelunzelvoudzeldozeltrezeltreizelquatorzelquatorselquinzelquinselseizezelsaize) = 0
- seisante e (dixldeixldisldizlonzelunzelvoudzeldozeltrezeltreizelquatorzelquatorselquinzelquinselseizezelsaize) = 0
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- seissante et (dixldeixldisldizlonzelunzelvoudzeldozeltrezeltreizelquatorzelquatorselquinzelquinselseizezelsaize) = 0
- seissante e (dixldeixldisldizlonzelunzelvoudzeldozeltrezeltreizelquatorzelquatorselquinzelquinselseizezelsaize) = 2
- sessante(dixldeixldisldizlonzelunzelvoudzeldozeltrezeltreizelquatorzelquatorselquinzelquinselseizezelsaize) = 0
- sessante et (dixldeixldisldizlonzelunzelvoudzeldozeltrezeltreizelquatorzelquatorselquinzelquinselseizezelsaize) = 1
- sessante e (dixldeixldisldizlonzelunzelvoudzeldozeltrezeltreizelquatorzelquatorselquinzelquinselseizezelsaize) = 0
- sexante(dixldeixldisldizlonzelunzelvoudzeldozeltrezeltreizelquatorzelquatorselquinzelquinselseizezelsaize) = 8
- sexante et (dixldeixldisldizlonzelunzelvoudzeldozeltrezeltreizelquatorzelquatorselquinzelquinselseizezelsaize) = 57
- sexante e (dixldeixldisldizlonzelunzelvoudzeldozeltrezeltreizelquatorzelquatorselquinzelquinselseizezelsaize) = 0
- sixante(dixldeixldisldizlonzelunzelvoudzeldozeltrezeltreizelquatorzelquatorselquinzelquinselseizezelsaize) = 1
- sixante et (dixldeixldisldizlonzelunzelvoudzeldozeltrezeltreizelquatorzelquatorselquinzelquinselseizezelsaize) = 11
- sixante e (dixldeixldisldizlonzelunzelvoudzeldozeltrezeltreizelquatorzelquatorselquinzelquinselseizezelsaize) = 0
- soixante(dixldeixldisldizlonzelunzelvoudzeldozeltrezeltreizelquatorzelquatorselquinzelquinselseizezelsaize) = 26
- soixante et (dixldeixldisldizlonzelunzelvoudzeldozeltrezeltreizelquatorzelquatorselquinzelquinselseizezelsaize) = 28
- soixante-(dixldeixldisldizlonzelunzelvoudzeldozeltrezeltreizelquatorzelquatorselquinzelquinselseizezelsaize) = 0
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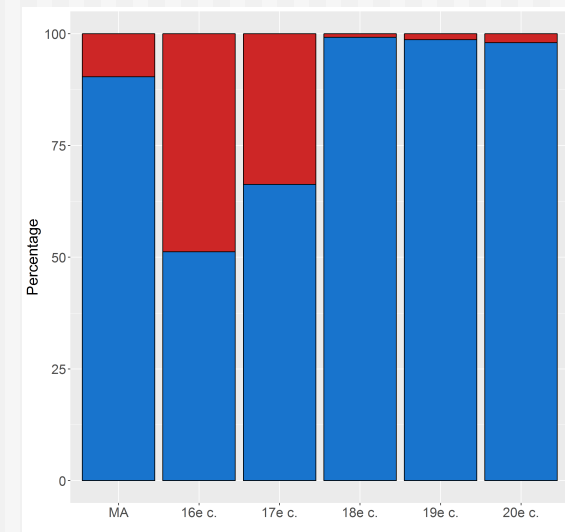
2.1. Decimal and vigesimal in Frantext



70



80



90

2.1. Decimal and vigesimal in Frantext

- 2.1.1. Medieval French (11th-15th c.)
 - Contrary to general belief, decimal forms were actually far less frequent than their vigesimal counterparts in the Middle Ages.
 - Decimal forms did not gradually disappear throughout the centuries: their historical trajectory is irregular.

2.1. Decimal and vigesimal in Frantext

- 2.1.2. Renaissance French (16th c.) and classical French (17th c.)
 - Rather surprisingly, the decimal forms experienced a big rise in the 16th c., becoming approximately as frequent as the vigesimal ones.
 - In the 17th c., most of the records are to be found at the very beginning of the century; in the following decades, the decimal forms gradually disappear.

2.1. Decimal and vigesimal in Frantext

- 2.1.2. Renaissance French (16th c.) and classical French (17th c.)
 - In fact, decimal forms were seen as “learned”, compared to the more common connotation of the vigesimal ones (see quotations n°2 and 3 on the handout).

2.1. Decimal and vigesimal in Frantext

- “Nota [*sic*] also that, all be it **the vouldgar people use never, *septante, octante* and *nonante***, as I shall herafter playnly declare, ye that **the lerned men use them** [...] : *Dix ans ou vingt, trente ou quarante, Cinquante, soixante ou **septante**, Voire **octante, nonante** ou cent.*”;
- “Here foloweth wherin **the vouldgar people**, marchaunte men, and suche as write hystories dyffer from the maner of nombring here afore rehersed : [...] ***Soixante dix. Quatre vingtz. Quatre vingts et dix.***” (Palsgrave 1530, 368-9)

2.1. Decimal and vigesimal in Frantext

- 1550, MEIGRET, *Traité de gramm.*, éd. F. J. Hausmann, p. 42: “nous avons une autre manière de compter **plus reçue et approuvée** : par laquelle, en poursuivant le nombre, nous disons *soixante et dix* pour septante”. (TLF s.v. *septante*)
- The decimal forms typically appear in scientific and philosophical texts (often translations of Latin originals).
- They do not seem to be rooted in everyday usage.

2.1.3. Modern French (18th-21st c.)

- The decline that started in the 17th c. was totally complete by the end of the 18th c.: the decimal forms had lost the battle.
- They did survive, though, but with severe restrictions on their use.
- Some of the most frequent remarks deal with their use in arithmetic (quotation n° 4) or in the scholarly French of foreign speakers (quotation n° 5).

2.1.3. Modern French (18th-21st c.)

- “SEPTANTE. adj. numéral de t. g. Nombre composé de sept dizaines. **Il n’a guere d’usage que dans les supputations d’Arithmetique.**” (Académie 1694, 1718, 1740)
- “**Il n’y a que les étrangers** qui disent *septante*, au lieu de soixante & dix.” (Trévoux 1738-1742)

2.1.3. Modern French (18th-21st c.)

- 2.1.3.1. Regional connotation (quotations n° 7, 8)
 - “Le rapporteur sur les élections, M. Frechet a fait éclater de rire l’Assemblée en disant : – Sur la liste étaient inscrits cent trente mille quatre cent **septante** sept électeurs. On a crié de toutes parts : **Lyonnais ! Lyonnais !**” (Victor Hugo, 1885, *Choses vues* < Frantext)
 - “Septante, quoique bien préférable à soixante-dix, puisqu’il est dans l’analogie de quarante, cinquante, soixante, n’est guère usité que par des **personnes appartenant au midi** de la France.” (Littré)
 - Very frequent amongst regionalist writers

2.1.3. Modern French (18th-21st c.)

- 2.1.3.2. Archaic connotation (quotation n° 6)
 - “Le jeune avocat, resté nonante jours, **pour employer un mot de ce temps**” (1846, Honoré de Balzac, *Sur Catherine de Médicis* < Frantext)
 - Metalinguistic awareness.

2.1.3. Modern French (18th-21st c.)

- 2.1.3.3. Idiomatic phrases
 - *les Septante* “the translators of the Old Testament; the translation itself” (proper noun)
 - *septante fois septante* “numerous times”, taken from the New Testament
 - *quart de nonante* “navigational instrument” (technicism)

2.2. Are decimal forms “archaic”?

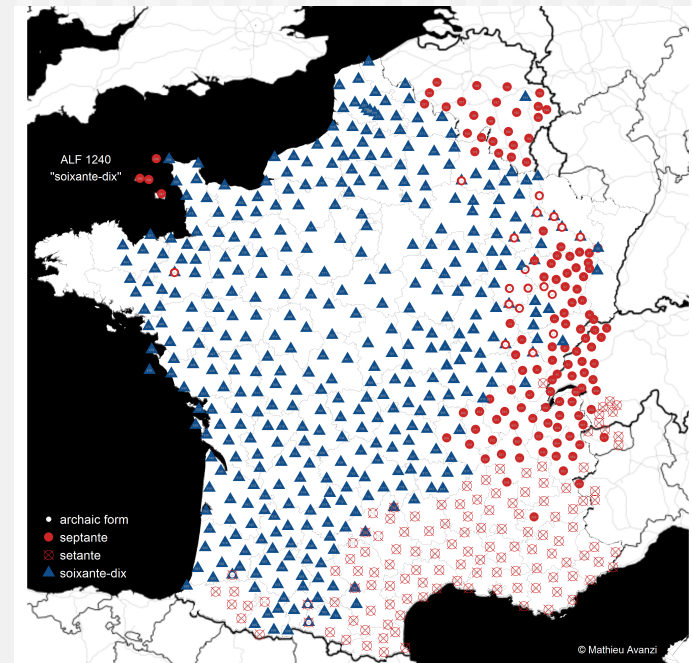
- It is very common in French lexicography to refer to decimal forms as “archaisms”.
- If this means that they were relatively more frequent in the 16th c., at least in formal written language, such a statement is acceptable.
- If, on the other hand, this suggests that they were dominant in medieval French, **it is false**. As Frantext data shows, vigesimal forms for 70-80-90 were far more frequent than their decimal counterparts back then, and the peak they reached in the 16th c. was an artificial phenomenon that didn't last.

2.3. The decimal system in France: French vs. primary dialects

- 2.3.1. Where primary dialects show a preference for decimal forms
- 2.3.2. Where primary dialects show a preference for vigesimal forms

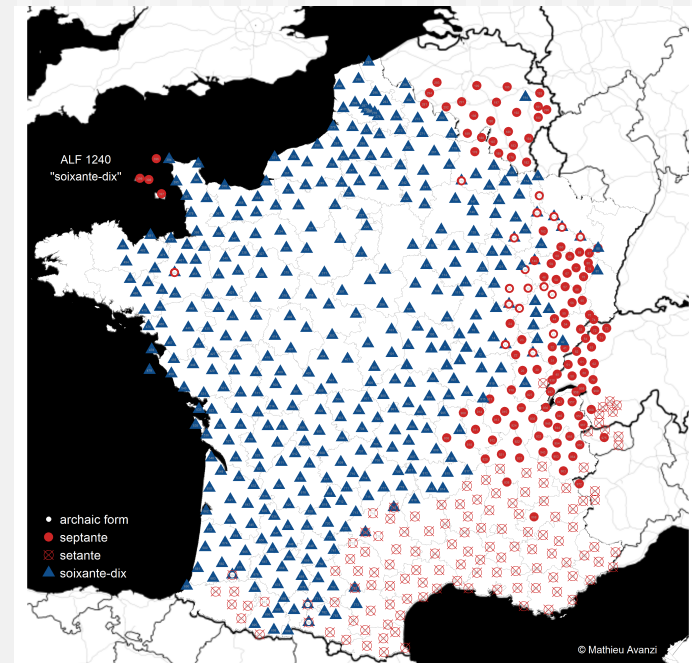
2.3.1. Where primary dialects show a preference for decimal forms

- In the southeast of France (Provence, etc.), the *setanta* type (latin cluster -PT- > -t-) is inherited and dominates the area.
- It must have triggered or at least supported the use of *septante* in regional French.



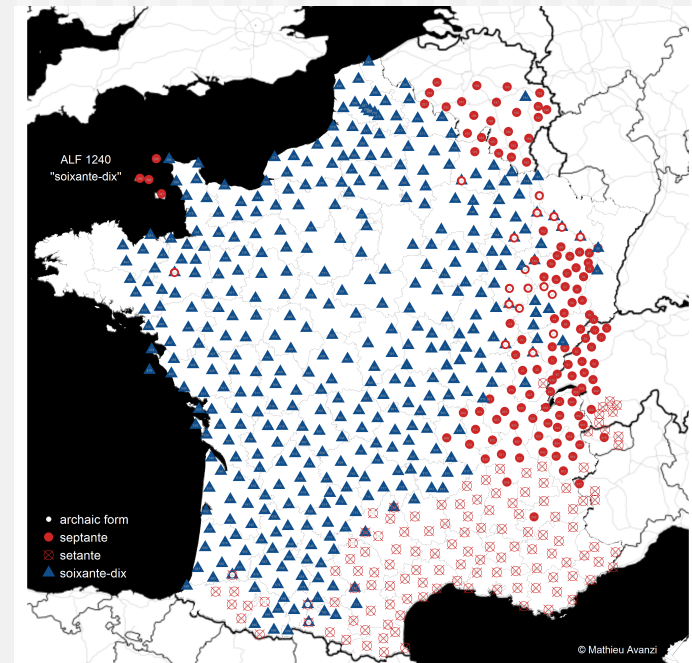
2.3.2. Where primary dialects show a preference for vigesimal forms

- In most of Gallo-Romania, though, the vigesimal forms are dominant in the 'patois';
- in the east, the dialectal decimal forms exhibit a *-pt-* cluster (totally learned), that can only have come from the influence of standard written French.



2.3.2. Where primary dialects show a preference for vigesimal forms

- But what could possibly have supported the survival of this learned form in French?



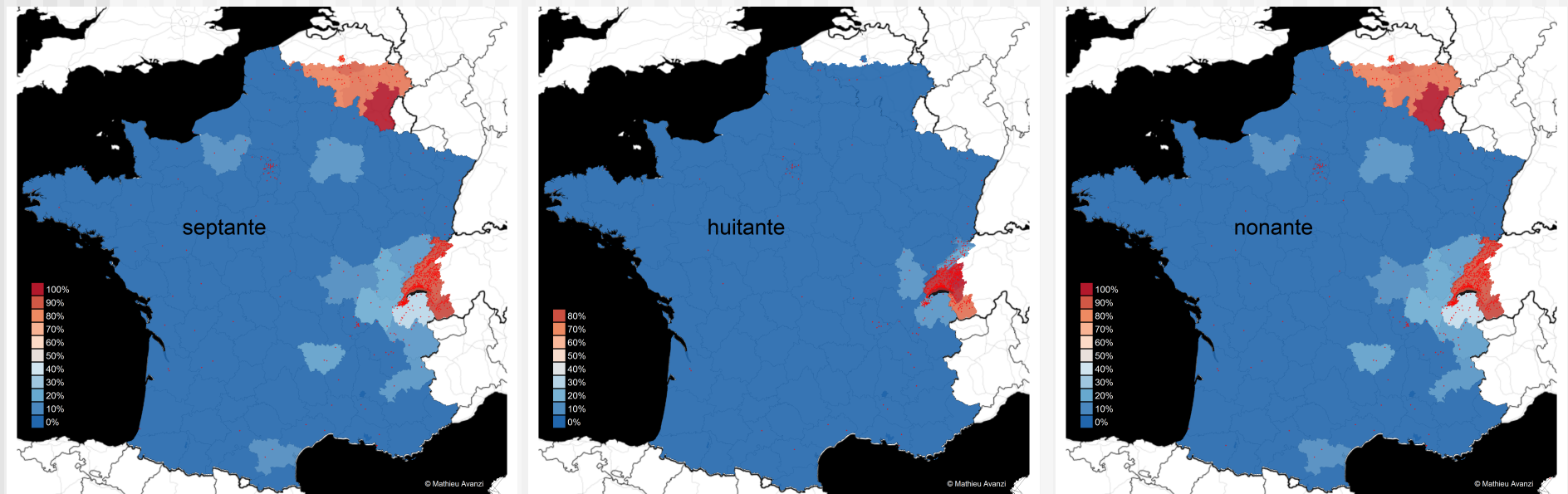
2.3.2. Where primary dialects show a preference for vigesimal forms

- Religious schools seem to be the pathway leading to its introduction (quotation n° 9):
 - “D’après la façon dont s’exprimaient les paroissiens, on savait instantanément ceux qui naguère avaient été à l’école publique et ceux qui avaient fréquenté l’école chrétienne. Ceux de ‘la laïque’ comptaient : soixante-dix, quatre-vingts, quatre-vingt-dix ; ceux de ‘l’école libre’ comptaient : **septante, octante, nonante**” (*La Croix*, 17-18 nov. 1979, p. 6 < TLF s.v. *octante*).

2.4. The decimal system in Belgium and Switzerland

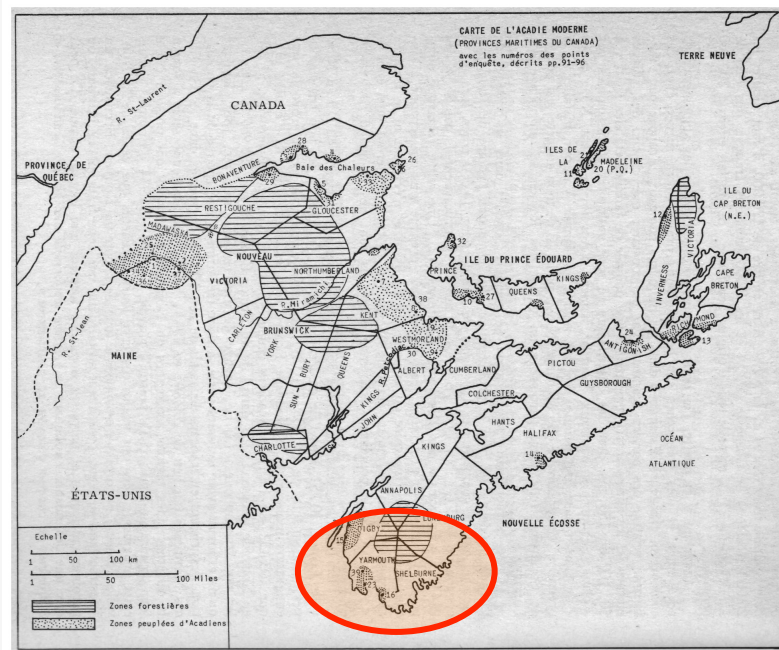
- In Belgium and Switzerland, *septante* and *nonante* belong to the national standards.
- It was, obviously, the existence of an independent school system that allowed the decimal forms to take root.

2.4. The decimal system in Belgium and Switzerland



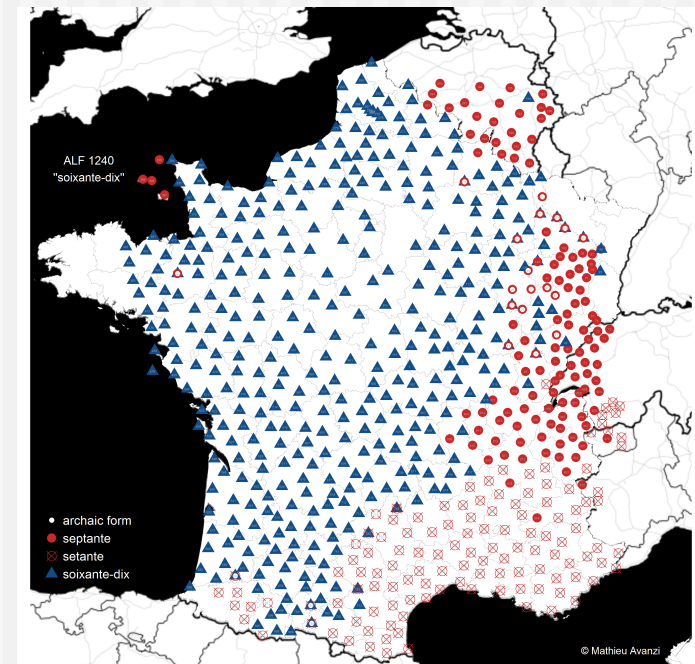
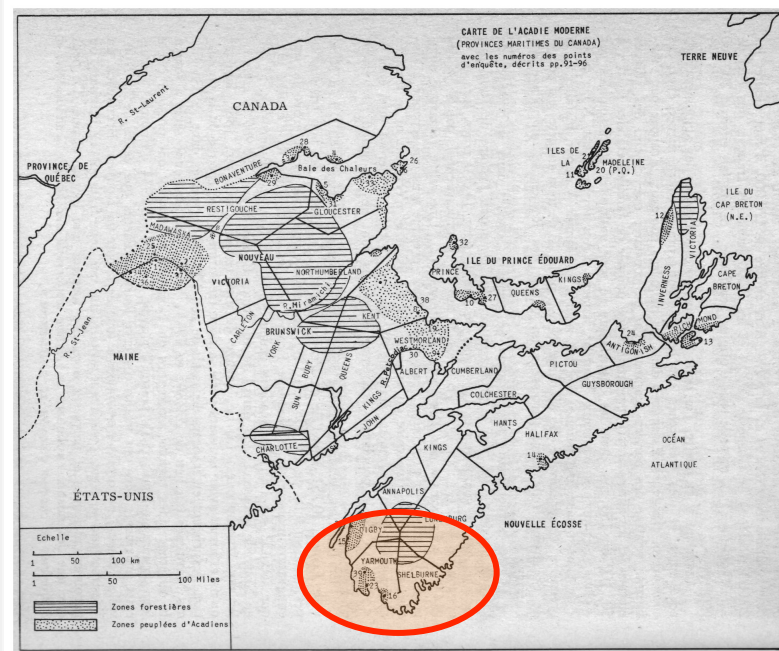
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2.5. The decimal system in Nova Scotia (Acadie, Canada)



- Decimal forms have been recorded in a few isolated French-speaking villages in the south of Nova Scotia (Massignon 1962, 577).
- Where could that come from?

2.5. The decimal system in Nova Scotia (Acadie, Canada)



2.5. The decimal system in Nova Scotia (Acadie, Canada)

- Immigrants from the Anglo-Norman Islands did settle in the Canadian Maritime Provinces in colonial times; they seem to be the only possible cause for this use (the first Acadian settlers didn't come at all from the east or the south of France).
- The only other possibility would be that it came from 16th-17th c. formal written French. That is somewhat unlikely, considering the poverty and isolation in which the Acadian people found themselves at that time.

2.6. The special fate of *octante*

- The inherited form *huitante* has always been very poorly represented in the written language (it only survives nowadays in a few Swiss cantons).
- By contrast, its learned counterpart *octante* was relatively well represented in the 16th c., but it totally vanished from the modern language. The competition with *quatre-vingts* was fatal.

2.6. The special fate of *octante*

- Nevertheless, many authoritative dictionaries maintain that *octante* is still alive and well: « *Vx, p. plaisant. ou région.* (notamment **Suisse romande, midi de la France, Canada français**). » (TLF).
- This is **totally wrong**.
- Some Swiss speakers will say *huitante*, but never *octante*; the isolated Acadian villages in Nova Scotia actually say *huiptante*; and no evidence has ever been produced that *octante* once existed in southern France (the dialects had inherited forms, belonging to the *huitante* type).

3. Concluding remarks

- 3.1. The triumph of a popular variant over learned tendencies
 - Interesting counterintuitive case study
 - diatopic vs. diaphasic variation
- 3.2. Wish list for future research
 - other vigesimal forms in medieval French
 - other vigesimal forms in Gallo-Romance dialects
 - the imbalance between *septante-nonante* on the one hand, and *huitante* (much rarer) on the other hand

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