

### French theme vowels

In Latin, verbs are classed into four or five conjugations distinguished by theme vowels (ThVs), which appear in certain verb forms between the root and the inflectional ending: (I) /a:/-conjugation (e.g. *portāre*: *port-ā-mus* vs. athematic *port-o*), (II) /e:/-conjugation (e.g. *dēlēre*: *dēl-ē-mus* and *del-ē-o*), (III) /i/- or consonantal conjugation (e.g. *legēre*: *leg-i-mus* vs. athematic *leg-o*), (IV) /i:/-conjugation (e.g. *audīre*: *aud-ī-mus* and *aud-ī-o*), and the mixed conjugation (e.g. *capire*: *cap-i-mus* and *cap-i-o*; consonantal conjugation with *i*-extension classed as /ɪ/ by Halle 2018 and /i/ by Van der Spuy 2020). Most Romance languages, as e.g. Catalan, Spanish and Italian, have reduced the Latin system, maintaining only the three ThVs *-a-*, *-e-* and *-i-*. As a result, finite verbal forms can be segmented at least into four parts which are quite transparently realized in these Romance languages: [[root + Th]<sub>stem</sub> + T + φ] (e.g. Sp. *cant-á-ba-mos* 1pl impf.). In French, ThVs, in contrast, have developed very differently – as general rule, Latin *-ā-* developed to *-e-* (*amāre* > *aimer* [ɛmeʳ], but *aimais* [ɛmɛ] 1sg impf.), *-i-* remained (*sentīre* > *sentir* [sɑ̃tir], but *sentais* [sɑ̃tɛ] 1sg impf.), *ē* diphthongizes to *oi* [wa] (*valēre* > *valoir* [valwar], but *valais* [vale] 1sg impf.) and *ě* (or rather /i/) is lost (*scribĕre* > *écrire* [ekrir], *écrivais* [ekrive] 1sg impf.) (cf. Foley 1979: 135) – leading to less transparent verbal forms and to a conjugation class system that is not describable, at first glance, in terms of ThVs. In our talk, we will pursue a complex of central questions concerning the segmentability of French verbs and the assumption of ThVs: Are French verbs segmentable in more than two constituents (i.e. stem and inflectional ending)? Does French have ThVs? And if so, which form does the French theme “vowel” – or maybe better, theme extension – have?

The traditional approach for French distinguishes three conjugation classes (CC) (cf. e.g. Grevisse 1969): The most productive and regular class is CC I with the infinitive ending in *-er* [-eʳ] (e.g. *aimer*) (90% of all French verbs). As a general rule, the verbs of this class have one single stem for all tense forms. Only a small group of verbs show some alternation (e.g. *lever* [lə.veʳ] and *levons* [lə.vɔ̃z] vs. *lève* [lev]) in the pres. ind., which count as phonologically predictable changes (cf. Meunier & Marslen-Wilson 2004). The infinitive of CC II is formed with *-ir* [-ir] and these verbs have a “short” (e.g. *fini-*) and a long or extended stem (e.g. *finiss-* [finiː]). These verbs are fully regular (according to Gertner 1973:19 even more regular than those of CC I), but they are generally considered to be no longer productive. Finally, CC III is a ragbag of (highly) irregular verbs, e.g. *dormir* ‘to sleep’ (without *-iss*-extension), *rompre* ‘to break’, *peindre* ‘to paint’ and *boire* ‘to drink’. In CC III, two subgroups of irregular verbs can be detected: (i) only the verbal stem is irregular, whereas the inflectional endings are identical to the ones of regular verbs (e.g. *mourir* ‘to die’) and (ii) also the inflectional ending is affected from the irregularity (e.g. *être* ‘to be’ vs. *somme* [sɔ̃m(z)]) (cf. Meunier & Marslen-Wilson 2004). This often suppletive CC is considered to be unproductive.

With respect to ThVs, there are various assumptions in the literature, cf. (1): The I CC has either /ə/ or /e/ (if not considered part of the inf.) as ThV preventing deletion of the root final consonant (e.g. in *aime* [ɛm]/\*[ɛ]) and the II CC has the Th /i/ which co-occurs with the stem extension *-ss-* (e.g. *finissons* [finisonː]). CC III, cf. (1)c-f, is completely mixed containing verbs with Th /i/, athematic verbs, verbs with theme consonants (ThCs) and verbs with theme diphthongs (Th-diphthongs).

El Fenne (1994, 2020) as well as Paradis & El Fenne (1995) criticize the proposals in (1), since for this classification they have to stipulate a considerable amount of sometimes unmotivated readjustment rules. El Fenne (1994, 2020) proposes the twofold classification (or rather threefold if one considers stems ending in vowel, e.g. *frier* [fri-eʳ]) in (2) based on whether or not the verb stem ends in a permanent C (PC) (e.g. *aime* [ɛm]) or in a floating C (FC) which shows up only if it can fill the onset position of a following V (e.g. *partons* [partɔ̃] vs. *part* [par]/\*[part]). The simplification with respect to the verb stems goes hand in hand with a complication of the inf. endings and, from the analysis in El Fenne (1994), it is not clear how the stems are combined with the corresponding ending. What is more, there are important differences with respect to the segmentation of the respective forms. In (1), even though many assumptions are disputable, the stem is further segmented into root and ThV (or Th-diphthong or ThC), whereas it is considered to be one single unit in the proposal of El

Fenne in (2). What we might analyze as ThV, is either part of the stem (cf. *fini-r*) or part of the ending (cf. *dorm-ir*) in her proposal.

(1) Classification based on the infinitive ending (Martinet 1969, Van den Eynde & Blanche-Benveniste 1970, Pinchon & Coute 1981, Plénat 1981) (IS = inflectional suffix)				(2) Twofold classification based on the verb stem (El Fenne 1994, 2020)				
	stem		IS		stem	IS		
a.	[ɛm-	(-ə-)	-e <sup>r</sup>	<i>aimer</i> (with ThV)	a.	[ɛm-	-e <sup>r</sup>	<i>aimer</i> (PC)
b.	[fin-	-i <sup>s</sup> -	-r]	<i>finir</i> (with Th-extension)	b.	[fini <sup>s</sup> -	-r]	<i>finir</i> (FC)
c.	[par <sup>t</sup> -	-i-	-r]	<i>partir</i> (with ThV)	c.	[par <sup>t</sup> -	-ir]	<i>partir</i> (FC)
d.	[di <sup>z</sup> -	∅	-r]	<i>dire</i> (athematic)	d.	[di <sup>z</sup> -	-r]	<i>dire</i> (FC)
e.	[ku <sup>z</sup> -	-d-	-r]	<i>coudre</i> (ThC)	e.	[ku <sup>z</sup> -	-Tr]	<i>coudre</i> (FC)
f.	[vu <sup>l</sup> -	-wa-	-r]	<i>vouloir</i> (Th-diphthong)	f.	[vu <sup>l</sup> -	-war]	<i>vouloir</i> (FC)

We will argue against El Fenne's proposal, but integrate her idea of root final FCs into our classification. One central argument against El Fenne (1994, 2020) comes from experimental studies on how stems and conjugation classes are mentally represented and processed in French. Meunier & Marslen-Wilson (2004) show that regular verbs, verbs with morphophonologically predictable allomorphy and even idiosyncratic verbs are decomposed for lexical access, i. e. word recognition seems to be morpheme based. Furthermore, Estivalet & Meunier (2015, 2016) show that stems which contained a ThV are fully decomposed into root and ThV.

Leaving aside irregular verbs for the moment, we argue in line with the traditional classification that French has three CCs, cf. (3). We will propose that two are thematic (with the Th [-ə-] for the first and [-is-] for the second class), while the third one is athematic. Additionally, we assume, in contrast to El Fenne (1994, 2020), that root final Cs are always FCs. Their (non)appearance depends, in essence, on whether or not there is a ThV position available. If so, the C will be bound (also in those cases where the V itself may be deleted, cf. (*tu aimes*); if not, it is deleted. Something similar holds for the so-called short and long stems of *finir*: the Th of this CC come with an unbound FC, i.e. [-i<sup>s</sup>-]. If the following element is vocalic, [s] will occupy the respective onset. Otherwise, it is deleted. There is no need to assume a short and a long stem. The root final C of athematic verbs (cf. 3c) cannot be bound by the onset position of a ThV, since they are athematic per definition. However, whenever the inflectional ending is vocalic, the C will occupy the respective onset.

(3) Two thematic and one athematic CC

	Root	theme		IS	IS		root/stem	IS	IS		
		[C	V							]	
a.	/ɛ <sup>m</sup> /	→	(ə)		e <sup>r</sup> /	[ɛ.me <sup>r</sup> ] <i>aimer</i>	c.	/par/	→	ir/	[partir] <i>partir</i>
	/ɛ <sup>m</sup> /	→	(ə)		z/	[ɛm <sup>z</sup> ] <i>ailles</i>		/par <sup>t</sup> /	→	z/	[par <sup>z</sup> ] <i>pars</i>
	/ɛ <sup>m</sup> /	→	(ə)		ʒ <sup>z</sup> /	[ɛ.mʒ <sup>z</sup> ] <i>aimons</i>		/par <sup>t</sup> /	→	ʒ <sup>z</sup> /	[par.tʒ <sup>z</sup> ] <i>partons</i>
	/ɛ <sup>m</sup> /	→	(ə)		ε z/	[ɛ.me <sup>z</sup> ] <i>aimais</i>		/par <sup>t</sup> /	→	ε z/	[par.te <sup>z</sup> ] <i>partais</i>
	/ɛ <sup>m</sup> /	→	(ə)		j ʒ <sup>z</sup> /	[ɛ.mjʒ <sup>z</sup> ] <i>aimions</i>		/par <sup>t</sup> /	→	j ʒ <sup>z</sup> /	[par.tjʒ <sup>z</sup> ] <i>partions</i>
b.	/fi <sup>n</sup> /	→	i	s	r/	[fi.nir] <i>finir</i>					
	/fi <sup>n</sup> /	→	i	s	z/	[fi.ni <sup>z</sup> ] <i>finis</i>					
	/fi <sup>n</sup> /	→	i	s	ʒ <sup>z</sup> /	[fi.ni.sʒ <sup>z</sup> ] <i>finissons</i>					
	/fi <sup>n</sup> /	→	i	s	ε z/	[fi.ni.se <sup>z</sup> ] <i>finissais</i>					
	/fi <sup>n</sup> /	→	i	s	j ʒ <sup>z</sup> /	[fi.ni.sjʒ <sup>z</sup> ] <i>finissions</i>					

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