

Requiem for a Theme

Itamar Kastner¹ and Fabienne Martin²

Theme vowels in V(P) Structure and beyond, April 2021

University of Graz

¹University of Edinburgh and ²Humboldt-Universität zu Berlin

Introduction

Introduction

French grammars distinguish two main conjugation classes:

1. GROUP 1 (*long-er* 'go along')
 - Infinitive in *-er* /e/
 - 90% of existing lexemes (around 6000)
 - Main attractor for new creations
2. GROUP 2 (*maigr-ir* 'get thin(ner)')
 - Infinitive in *-ir* /iʁ/
 - /i/ in all forms, sometimes followed by /s/ (*maigrissant*)
 - Around 350 lexemes
 - Few recent *dictionarized* creations after 1800
 - Productive? Unproductive?
 - Regular? Irregular?
3. GROUP 3
 - Several subpatterns gathering few verb types each, 450 lexemes
 - Irregular, unproductive (but some verb types with highly frequent verb tokens)
 - includes ≈ 30 *-ir* verbs, a subset of which also have /i/ in PP and SP (*ment-ir* 'lie')

Groups 1 vs. 2: some morphological differences

	LONGER	MAIGRIR
imperfect 1-3sg, 3pl	lǝʒ-ε	meɣɤ- is -ε
pres 1pl	lǝʒ-ǝ̃	meɣɤ- is -ǝ̃
pres 3sg	lǝʒ-ə	meɣɤ- i
simple past 3sg	lǝʒ- a	meɣɤ- i
simple past 1pl	lǝʒ- a -m	meɣɤ- i -m
future 2/3sg	lǝʒ-(ə)ɤa	meɣɤ- i -ɤa
pres. subj. 1-2sg, 3 pl	lǝʒ-ə	meɣɤ- is -ə
past subj. 1pl	lǝʒ- a -sǝ̃	meɣɤ- i -sǝ̃
pres. part.	lǝʒ-ǝ̃	meɣɤ- is -ǝ̃
imperative 2sg	lǝʒ-ə	meɣɤ- i
imperative 2pl	lǝʒ- e	meɣɤ- is - e
infinitive	lǝʒ- e	meɣɤ- i - ɤ
past participle	lǝʒ- e	meɣɤ- i

Table 1: Partial paradigm for LONGER (group 1) and MAIGRIR (group 2)

Spoken vs. written French

If only spoken French is taken into account (and disregarding the blue “mute” ə), in all cases except two, the morphological differences are reduced to the presence vs. absence of /i(s)/:

	LONGER	MAIGRIR
imperfect 1-3sg, 3pl	lɔ̃ʒ-ɛ	mɛgʁ-i-s-ɛ
pres 1pl	lɔ̃ʒ-ɔ̃	mɛgʁ-i-s-ɔ̃
pres 3sg	lɔ̃ʒ-ə	mɛgʁ-i
future 2/3sg	lɔ̃ʒ-(ə)ʁa	mɛgʁ-i-ʁa
pres. subj. 1-2sg, 3 pl	lɔ̃ʒ-ə	mɛgʁ-i-s-ə
pres. part.	lɔ̃ʒ-ā	mɛgʁ-i-s-ā
imperative 2sg	lɔ̃ʒ-ə	mɛgʁ-i
imperative 2pl	lɔ̃ʒ-e	mɛgʁ-i-s-e
infinitive	lɔ̃ʒ-e	mɛgʁ-i-ʁ
past participle	lɔ̃ʒ-e	mɛgʁ-i

Table 2: Partial paradigm for LONGER (group 1) and MAIGRIR (group 2)

Today

Research questions:

- What distinguishes Group 1 from Group 2?
- What is the element /i(s)/ in Group 2 verbs?
- Does French have theme vowels?

Traditional answers (Plénat 1987, El Fenne 1994, 2020 Bonami and Boyé 2003, Aronoff 2012...):

- Group 1 and group 2 are different conjugation classes (different types of stems, theme vowels, inflectional paradigm).
- /i/ is either a theme vowel, or the final part of Group 2 verbal stems (together with /s/).

Common assumption: the link between verbs and their group is **idiosyncratic**, purely morphological, and cannot be explained by semantics, syntax or phonology. (see Oltra-Massuet 2020)

Claims

1. The suffix /i(s)/ **comes with a semantics** which speakers are able to generalize from. (see also Hewson 1997: section 10.3, Garet 2021)
2. Its semantics is **determined by the type of stem** (root or word) it is concatenated with.
 - **Change of state** (v_{cause}) in **word-derived** (deadjectival or denominal) verbs.
 - The identity function in **root-derived** verbs.
3. French has **no conjugation classes** as such.
 - Regular verbs (-er, “Group 1”).
 - Verbs with the /i(s)/ suffix (“Group 2”).
 - Small set of irregulars (“Gr. 3”).
4. The affix /i(s)/:
 - Morphology: triggers contextual allomorphy in specific contexts.
 - Semantics: contextual alloosemy of /i(s)/ (Schäfer, 2008; Marantz, 2013; Wood, 2015).
5. French is moving toward an athematic system in consistent ways.

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Group 2 is regular

Group 2 is **regular** and **productive**.

- A class is **regular** if speakers conjugate a new or nonce verb from this class according to its paradigm (Dressler 1997, Bonami and Boyé 2003, Boyé and Cabredo Hofherr 2005).
- Group 2 is by now standardly taken to be regular (Meunier and Marslen-Wilson 2004, Boyé and Cabredo Hofherr 2005, Bonami and Boyé 2007, Boyé 2011).
- See experimental work by El Fenne (1994) and Bonami et al. (2008).

Group 2 is regular

El Fenne (1994):

- All -er wug verbs were conjugated according to the Group 1 paradigm by all participants
- Among the other groups, only Group 2 nonce verbs are conjugated as expected by 90% of the subjects.
- Subjects are ready to assign Group 2 class to verbs with an unknown meaning \leadsto Group 2 is regular (see also Boyé 2000).

Infinitif	« vanitre »	« calidre »	« jotir »	« brédire »	« commouvoir »
Attente	« paraître »	« coudre »	« sortir »	« finir »	« pleuvoir »
« finir »	30%			90%	
« ??? »	25%	35%	65%	10%	60%
« coudre »		45%			
« paraître »	40%				
« pleuvoir »					30%
« battre »			25%		
« lire »		20%			
« conclure »					10%
« sortir »			10%		
« laver »	5%				

Group 2 is productive

- Standard claim: Group 2 is unproductive (Kilani-Schoch and Dressler 2005)
 - Last dictionarized 2 Gr. verb around 1900.
- But several authors note that new **word-derived** Group 2 verbs can easily be formed: *siennir*, *orangir*, *blanchouillir*.

(Hewson 1997, Boyé 2000, Bonami and Boyé 2003: 120)
- Around 1000 entries for Group 2 in the Wiktionary, many of which are not dictionarized but nevertheless used by native speakers.

Group 2 is productive

- (1) J'avoue que c'est un moment qui **m'agourmandit**.
'I've to admit that this moment is appetizing to me.'
(Mediapart, 2014, borrowed from Provençal French)
- (2) Que nous reste-t-il du temps qui passe quand le monde **s'assauvagit** comme pas possible.
'what is left from time passing when the world gets wild like crazy.'
(Wordpress, 2009, back from Middle French)
- (3) Est-ce que l'ours '**ensauvagit**' davantage le paysage que le loup?
'Do bears make the landscape wilder than wolves?'
(**forum.velo-club.net**, 2015, neologism)
- (4) Je trouve que le service **s'amenuit**.
'I find that the service gets worse.'
(Tripadvisor, 2018, back from Middle French)

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Semantic trend in Group 2 verbs

Impressions from an inspection of lists of Group 2 verbs

- Most ($\approx 65\%$) of Group 2 verbs are **word-derived** (Arad 2003):
 - many adjective-derived (*maigr-ir* 'become thin(ner)' < *maigre* 'thin')
 - also noun-derived (*at-terr-ir* 'land' < *terre* 'earth'; *fleurir* 'bloom, decorate with flowers' < *florere*, reshaped on *fleur*)
- Most of the **word-derived** Group 2 verbs have a **CoS semantics**
- Group 2 word-derived **activity** verbs are exceptional (*bonnir* 'tell good stories') and seem on the road to perdition
- **Root-derived -ir verbs** are less frequent and
 - are mostly **CoS** (like word-derived ones), e.g., *épanouir* 'blossom'
 - are the main source of (the minority of) **activity** Group 2 verbs, e.g. *agir* 'act'.

In summary: (i) Group 2 verbs are more likely to be **CoS** than **activity** verbs, and (ii) The few activity Group 2 verbs are mostly root-derived, not word-derived.

Semantic trend in Group 2 verbs

- 152/180 first verbs of Group 2 list in Boyé (2000) have a CoS semantics (84, 4%) .
- Annotation by Anscombe (2008):
 - 84% of his 234 Group 2 verbs are (in our terminology) word-derived
 - 15% root-derived (from Latin or Germanic a.o.)
 - Most [no quantitative assessment] have an inchoative (CoS) semantics
- Verhulsdonck (2019): mistakes in the conjugation of /i(s)/-verbs significantly reduced among Dutch FFL learners of French once taught that “Group 2” is mainly inchoative.
 - ‘les étudiants avaient vraiment l’impression d’avoir appris quelque chose.’ (p. 35)
- Comprehensive manual annotations are planned to get a good estimate of CoS semantics.

Doublets

The existence of **doublets differing by their semantics** is unexpected if the link between verbs and their group marking is purely morphological [%=technical/dated/rare] (see also Hewson 1997: 156)

Stem	Group 2 verb	Group 1 verb	
<i>égal</i> 'equal'	% <i>égal-ir</i> COS	<i>égal-er</i> STATE/COS	<i>égal-is-er</i> COS
<i>bête</i> 'stupid'	<i>a-bêt-ir</i> COS	<i>bêt-ifi-er</i> COS/ACT	
<i>fainéant</i> 'lazy'	% <i>af-fainéant-ir</i> COS	<i>fainéant-er</i> ACT	
<i>marron</i> 'brown, chesnut, curl'	<i>marronn-ir</i> COS	% <i>marronn-er</i> COS/ACT	
<i>louche</i> 'squinty/fishy'	% <i>louch-ir</i> COS	<i>louch-er</i> STATE/ACT	
<i>feuille</i> 'leaf'	% <i>feuell-ir</i> COS	% <i>feuell-er</i> COS/ACT	

COS: change-of-state, ACT: activity.

Summing up: research questions and hypotheses

Research questions:

- Do conjugation classes carry meaning?
- Are Group 2 verbs semantically transparent, i.e., is their meaning synchronically compositional (Marslen-Wilson et al. 1996)?

Hypotheses

- The morpheme /i(s)/ is not semantically inert. It is associated with a CoS meaning which is activated in word-derived verbs.
- The meaning of Group 2 word-derived verbs is accessed via their component morphemes (/i(s)/ and verbalizer v and categorizing head (adjectivizer a or nominalizer n; Halle and Marantz 1993; Arad 2003).

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Method

Wug study (cf. Dumay and Martin 2010, see also Ramscar 2001) :

- We examined language users' intuitions using a **two-alternative forced choice** test between verbal forms competing for their fit with a given context.
- Used wug-adjectives serving as a basis for the derivation of nonce Group 1 and 2 verbs (using the suffix /i(s)/).
- For each alternative, we varied the context on the CoS vs. activity dimension.

Participants

Native speakers of French, recruited from our social networks.

1. Experiment 1 (prefixed): N = 28
2. Experiment 2 (unprefixed): N = 16

Procedure

- Choose between *-er* (“Group 1”) form and *-ir* (“Group 2”) form on an unlabelled 7-point Likert scale (online, PennController/Ibex).
- 2 practice items first, and then experimental items:
 - 8 items per condition (total 16 experimental items).



barre de progression

Je n'aime pas trop mon personnage dans la nouvelle pièce. Elle a des manières mignardes, précieuses, **flasses**. Alors chaque fois que j'interviens, je dois faire la précieuse, _____, faire la fillette.

Quelle forme passe le mieux?

flassir ○ ○ ○ ○ ○ ○ ○ **flasser**

- 8 Gold standard fillers with one right answer.
- Order of presentation (whether *-ir* is left/right) and order of items were randomized.

Methods

Manipulated two main variables: Context (CoS/Activity) and Prefix (yes/no).

- (5) The world **is changing** at a crazy pace and **is becoming** more and more **baigle**. For the sociologist Michel Pernu, it is **because of** globalization – which disrupts everything and builds new frameworks for organizing human societies – that **the world** *en-baigl-e/en-baigl-it* at full speed.
- (6) Everyone has already noticed that **the new colleague** is very **blatoche**: **super nice, attentive, professional**, etc. The other day, as **he** *a-blatoch-ait/a-blatoch-issait* **as usual with a customer**, I saw the manager start yelling at him.

Nonce words created with the help of Wuggy (Keuleers and Brysbaert, 2010).

Experimental items available at <https://tinyurl.com/french-ir>

Variable Context: CoS/Act

Cues for CoS:

- inanimate subjects
- *devenir* 'become'
- *rendre* 'make'
- *sous l'effet de* 'under the effect of'
- *rester* 'remain'

Cues for Act:

- animate subjects
- modification by agentive adverbials (*volontiers* 'willingly')
- embedding under predicates of desire (*vouloir* 'want')
- Rephrasing of the wug-VP with *faire* 'do'
- Purpose adjuncts (*pour VP* 'in order to')

Predictions

- In the **activity** context, we expected a preference for *-er*.
- In the **CoS** context, we expected a preference for *-ir* via the Stronger Meaning Hypothesis (Dalrymple et al. 1998):
 - Word-derived Group 2 verbs: **CoS** only.
 - Word-derived Group 1 verbs: **CoS** or **activity**.

Methods

Main effects tested:

1. Context (CoS/Act) – within-subject.
2. Prefix (yes/no) – between-subject.

Additional exploratory predictors / search for confounds:

3. Task (create infinitive/singular verb/plural verb)
 4. Stem vowel
- Each context (carrier phrase) was matched with one set of wugs (adjective and derived form).
 - There was no randomization of contexts with wugs in the pilot.

Methods

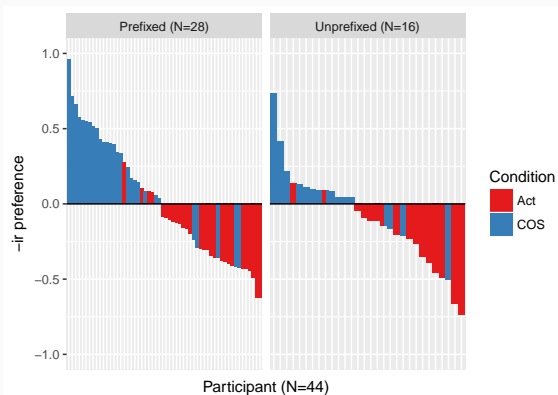
- Scores on the Likert scale were Z-transformed.
 - 1.0: preference for Group 2 *-ir*
 - -1.0: preference for Group 1 *-er*
- Predictions:
 - Positive scores for **CoS** (*-ir*)
 - Negative scores for **Act** (*-er*)
- Mixed effects model with Condition, Prefix and their interaction as predictors.

Results

CoS 0.19 ± 0.89

Act -0.25 ± 0.86

- Condition
 $p = 0.007$
- Prefix n.s.
- Interaction n.s.



- Activity/COS distinction was a strong predictor of participants' choice, in line with the hypothesis: (i) preference for *-ir* in CoS; (ii) preference for *-er* in Act.
- Ask us later about prefixation.

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Summary

- The morpheme /i(s)/ is associated with a CoS meaning (in word-derived verbs). It is not semantically inert.
- The morpheme /i(s)/ appears across all forms because it enters the semantic composition of the predicate.
- Depending on their derivational history, Group 2 verbs are inchoative (Nyrop 2004: 52, Brunot 1936: 450, Maiden 2003, Martinet 1969: 111, Aronoff 2012, ...) :
 - Word-derived Group 2 verbs have CoS semantics.
 - Root-derived Group 2 verbs may, but do not have to, instantiate CoS semantics.

Let's see what this means for the formal analysis.

Semantics

(7) $\llbracket i(s) \rrbracket =$

a. $\lambda P \lambda e \exists s. [\text{cause}(e, s) \wedge P(s)] / \{\mathbf{a}, \mathbf{n}\}$ ____

b. $\lambda P \lambda e. P(e) / \text{elsewhere}$

(8) a. $\llbracket \text{rouge} \rrbracket = \lambda s \lambda y. \text{red}(s) \wedge \text{theme}(s, y)$

b. $\llbracket \text{rougir} \rrbracket = \llbracket i(ss) \rrbracket (\text{rouge}) =$
 $[\lambda P \lambda e \exists s. [\text{cause}(e, s) \wedge P(s)]] (\lambda s \lambda y. \text{red}(s) \wedge \text{theme}(s, y)) =$
 $\lambda e \lambda y \exists s. [\text{cause}(e, s) \wedge \text{red}(s) \wedge \text{theme}(s, y)]$

(9) a. $\llbracket \sqrt{\text{AG}} \rrbracket = \lambda e. \text{act}(e)$

b. $\llbracket \text{agir} \rrbracket = \llbracket i(s) \rrbracket (\sqrt{\text{AG}}) =$
 $[\lambda P \lambda e. P(e)] (\lambda e. \text{act}(e)) = \lambda e. \text{act}(e)$

Syntax

We take the semantics to implicate some primitive CAUS in the syntax.

- We will assume that this is a verbalizer, because:
 - We see its effects in conjunction with underlying adjectives or nouns (our examples are denominal or de-adjectival).
 - We'll derive a correct prediction from this later.
- Notation: $v = \text{CAUS} = V_{\text{CAUS}}$

But also:

- The “Group 1” paradigms show us that we do still need a theme vowel of some kind for Group 1!
- We also need some kind of sprouted/dissociated morpheme **TH**.

Morphology

In **most cases**, the differences reduce to the presence vs. absence of /i(s)/. In other cases we find a contrast between e.g. *a~i*:

	LONGER	MAIGRIR
imperfect 1-3sg, 3pl	lõʒ-ε	meɣʁ- i -ε
pres 1pl	lõʒ-õ	meɣʁ- i -õ
pres 3sg	lõʒ-ə	meɣʁ- i
simple past 3sg	lõʒ- a	meɣʁ- i
simple past 1pl	lõʒ- a -m	meɣʁ- i -m
future 2/3sg	lõʒ-(ə)ʁa	meɣʁ- i -ʁa
pres. subj. 1-2sg, 3 pl	lõʒ-ə	meɣʁ- i -ə
past subj. 1pl	lõʒ- a -sjõ	meɣʁ- i -sjõ
pres. part.	lõʒ-ã	meɣʁ- i -ã
imperative 2sg	lõʒ-ə	meɣʁ- i
imperative 2pl	lõʒ-e	meɣʁ- i -e
infinitive	lõʒ-e	meɣʁ- i -ʁ
past participle	lõʒ-e	meɣʁ- i

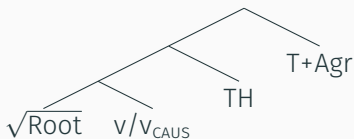
Morphology

Moreover, the simple past form pertains to formal written register and is regularized in non-canonical varieties (standard %rougita):

Left context	KWIC	Right context
'aie des plus rapides qui soient en plein front. </s></s>	Il rougissa	quelques peu aux rires de ses camarades et fixa la
ne matière qu'elle aimait peu ! </s></s>	Le jeune Ichigo rougissa	à cause du rires de ses camarades. </s></s>
fin d'exprimer tout l'amour que je porte pour vous..." elle	rougissa	une fois de plus, mais elle essaya de ne le faire par:
voir si ça aller, et naruto se mit a embrassé hinata, elle	rougissa	comme a son habitude mais... </s></s>
isine de case en prenant ses objets. </s></s>	Raymond rougissa	, et s'excusa plutôt rapidement:[/i] </s></s>
isa, et s'excusa plutôt rapidement:[/i] </s></s>	Robertine rougissa	, et lui dit que ce n'est rien pour elle. </s></s>
r son épaule Lucy s'était endormie sur lui. </s></s>	Grey rougissa	ce qui ne manqua pas a la mage aux cheveux écarl

Morphology

Structure:



Treat the differences between “groups” as contextual allomorphy:

(10) $v \leftrightarrow \emptyset$

(11) $v_{CAUS} \leftrightarrow \begin{cases} \text{a. } is & / \dots \\ \text{b. } i & \end{cases}$

(12) $TH \leftrightarrow \begin{cases} \text{a. } a & / \text{ ____ PAST.Subj, PAST.Smpl} \\ \text{b. } \text{\textcircled{a}} & / \dots \text{ [or } \emptyset \text{ and whatever your analysis of “mute } \text{\textcircled{a}} \text{” is]} \\ \text{c. } \emptyset & / v_{CAUS} \text{ ____} \\ \text{d. } \emptyset & \end{cases}$

- We will see a few examples of “...” next.

Morphology: Imperfect indicative

	Gr. 1	Gr. 2	
1SG	-ε	is-ε	(13) $v_{\text{CAUS}} \leftrightarrow \text{is} / ___ \text{T}[\text{Ind.IMPERF}]$
2SG	-ε	is-ε	(14) $\text{TH} \leftrightarrow \emptyset$
3SG	-ε	is-ε	(15) a. $\text{IND.IMPERF.SG} \leftrightarrow \epsilon$
1PL	-jĩ	is-jĩ	b. $\text{IND.IMPERF.1PL} \leftrightarrow \text{jĩ}$
2PL	-je	is-je	c. $\text{IND.IMPERF.2PL} \leftrightarrow \text{je}$
3PL	-ε	is-ε	d. $\text{IND.IMPERF.3PL} \leftrightarrow \epsilon$

- The intuition:
 - The theme vowel is zero in the imperfect indicative.
 - Regardless of v_{CAUS} .
- All TAM suffixes here are vowel/glides initial; we'll see a complication next.
- For convenience, we treat T+Mood+Agr as one node.
 - If you're fond of Spanning, or of non-local contextual allomorphy, you could expand them into separate nodes.
 - The current analysis maintains linear adjacency for allomorphy throughout.

Morphology: Present indicative

	Gr. 1	Gr. 2
1SG	ə-	i-
2SG	ə-	i-
3SG	ə-	i-
1PL	-ĩ	is-ĩ
2PL	-e	is-e
3PL	-ə	is-ə

(16) $v_{\text{CAUS}} \leftrightarrow$

a. is / ____ PL

b. i

(17) TH \leftrightarrow

a. ə / ____ T[Ind.PRES.sg]

b. \emptyset / v_{CAUS} ____ T[Ind.PRES.sg]

c. \emptyset

(18) a. IND.PRES.SG $\leftrightarrow \emptyset$

b. IND.PRES.1PL $\leftrightarrow \tilde{i}$

c. IND.PRES.2PL $\leftrightarrow e$

d. IND.PRES.3PL $\leftrightarrow \text{ə}$

- We see remains of the theme vowel system in the singular.
- Generalization: *is-* before vowel/glide-initial TAM suffixes, *i-* elsewhere.
 - We're ignoring this, encoding it as syntactic contexts (____ PL).
 - One reason is to avoid outwards-sensitive phonologically conditioned allomorphy.
 - The other is because such a claim depends on your analysis of the "mute ə".

Morphology: Present subjunctive

	Gr. 1	Gr. 2
1SG	-ə	is-ə
2SG	-ə	is-ə
3SG	-ə	is-ə
1PL	-ĩ	is-ĩ
2PL	-e	is-e
3PL	-ə	is-ə

(19) $V_{\text{CAUS}} \leftrightarrow$
a. is / ___ T[Subj.PRES]

b. i

(20) TH $\leftrightarrow \emptyset$

(21) a. SUBJ.PRES.SG \leftrightarrow ə

b. SUBJ.PRES.1PL \leftrightarrow ĩ

c. SUBJ.PRES.2PL \leftrightarrow e

d. SUBJ.PRES.3PL \leftrightarrow ə

Morphology: Infinitive and past participle

Gr. 1	Gr. 2
-e	i-r

(22) $v_{\text{CAUS}} \leftrightarrow i$

(23) $\text{TH} \leftrightarrow \emptyset$

(24) $\text{T}[\text{Inf}] \leftrightarrow$

a. $r / v_{\text{CAUS}} \text{ ____}$

b. e

Gr. 1	Gr. 2
-e	-i

(25) $v_{\text{CAUS}} \leftrightarrow i$

(26) $\text{TH} \leftrightarrow \emptyset$

(27) $\text{T}[\text{PP}] \leftrightarrow$

a. $\emptyset / v_{\text{CAUS}} \text{ ____}$

b. e

(Other implementations possible, as usual)

Formal analysis: Summary

1. We've sketched a formal account in which TH is fairly marginal, and /i(s)/ spells out v_{CAUS} .
2. Some parts of this account are inelegant.
 - That's true regardless of the individual choice points, though, just because of the nature of the data.
 - (We've spared you the past subjunctive and simple past: there are complications there, but they are synchronically unstable)
3. Alternative analyses?
 - You could imagine useful comparisons with Element Theoretic analyses or other accounts.
 - You could also imagine an alternative in which /i(s)/ spells out TH in the context of v_{CAUS} .
 - We think these would only end up shifting some of the implementation around, not the essence of the analysis.
4. For the last part of the talk we'll discuss the place of theme vowels in the French system as a whole.

Predictions

1. Prediction 1: No combination with other morphological exponents of v_{cause} .
 - Martin and Piñón (2020): under one of their readings, /ifi/ and /is/ spell out v_{cause} , too (see, e.g., *égal-is-er* ‘make/become equal’).
 - We predict these suffixes not to combine with /i(s)/, which is supported by the data (*wug-ifi-(i)-r, *wug-is-i-r).
2. Prediction 2: nominalizations:
 - We expect /i(s)/ to be part of the morphological make-up of event nouns derived from Group 2 verbs, which is supported by the data (*blanch-i-(sse)-ment*, *blanch-iss-age*).
 - We expect Group 2 verbs to have a preference for *-ment* nominalizations, given the semantic profile of the suffix *-ment* and its affinity with CoS verbal stems (Martin 2010).
 - This seems to be confirmed, too (Anscombe 2015, Lapraye 2017)

Predictions

3. Prediction 3: Word-derived Group 2 activity verbs will be reanalyzed.

- The compositional meaning of word-derived Group 2 verbs can be occasionally overridden by specific lexemes, see (28)-(29).
- But such verbs seem automatically assigned the expected compositional CoS meaning by naive speakers (see also Boyé 2000: 22).

(28) *chauvir*

- a. **Lexicographed meaning:** prick up one's ears
- b. **Common naive interpretation:** become bald

(29) *bonnir*

- a. **Lexicographed meaning:** tell good stories
- b. **Common naive reinterpretation:** become better

What if we add irregulars?

	GR. 1	GR. 2	GR. 3
infinitive	lɔ̃ʒ-e	μεγβ-i-κ	...-i/wa/∅-κ
past participle	lɔ̃ʒ-e	μεγβ-i	-i/y/...
simple past	lɔ̃ʒ-a-	μεγβ-i-	-i/y/...

- TH is arguably still realized in the simple past as /a/ for Gr. 1.
 - Remains of other TH(s) in Gr. 3? Let's look at the two other cells with potential candidates (disregarding the past subjunctive).
 - No syncretism between the infinitive and the PP in Gr. 3 ((El Fenne 1994))
 - PP of *-ir* Gr. 3 verbs: \rightsquigarrow /i/ (34%), /y/ (45%) or suppletive (17,5%)
 - No syncretism between the PP and simple past in Gr. 3 (Labelle and Morris 2011):
 - Simple past of Gr. 3 verbs with a PP in /y/: \rightsquigarrow /y/ (43%), /i/ (38%) or /N/ (16%)
- ⇒ In sum, French TH is not a very good theme vowel: it doesn't clearly contrast with anything that has the same properties.

Plan

Introduction

The morphology of group 2 verbs

The semantics of group 2 verbs

Experiment

The morphology of French verbs redux

Requiem for /a/ Theme? A look at child French

A look at child French

- What do patterns of acquisition of the ‘conjugation system’ by L1 acquirers of French tell us about
 - ‘Gr. 2’ verbs
 - the (un-)stability of conjugation classes in French?
- Hypothesis:
 - Kroch (2010), Lightfoot (2010): language change happens during the process of language acquisition, via re-analysis of errors
 - Cournane (2019): child language acquisition and overgeneralization are responsible for innovation in language change processes and their implementation
- Since acquisitional studies put regular vs. irregular *-ir* verbs in one conjugation class, we have to speculate on the basis of reported data (and CHILDES searches). (Royle 2007, Royle and Thordardottir 2008, Royle et al. 2012, Royle et al. 2012, Kresh 2008, Labelle and Morris 2011, Savelli et al. 2002)
- We look at the formation of past participle and simple past.

Over-regularization of PPs of Gr. 3 verbs (only?)

- Attested over-regularizations of PPs in child French (Royle 2007, Kresh 2008):

- non-*ir* Gr. 3 verbs \rightsquigarrow Gr. 1 verbs (in /e/)
- -*ir* Gr. 3 verbs \rightsquigarrow Gr. 2 verbs (in /i/)

- (30) a. *batt-u* (-*re*, Gr. 3) \rightsquigarrow °*batt-é* (Gr. 1)
b. *voul-u* (-*oir*, Gr. 3) \rightsquigarrow °*voul-é* (Gr. 1)
c. *ouvert* (-*ir*, Gr. 3) \rightsquigarrow °*ouvr-i* (Gr. 2)
d. *souffert* (-*ir*, Gr. 3) \rightsquigarrow °*souffr-i* (Gr. 2)

- No reported examples of Gr. 2 verbs or -*ir* Gr. 3 ones regularized on the model of Gr. 1.
- We take this to suggest that children are aware of Gr. 2 regularity.

- (31) a. *fin-i* (Gr. 2) \rightsquigarrow **fin-(iss)-é* (Gr. 1)
b. *dorm-i* (-*ir*, Gr. 3) \rightsquigarrow **dorm-é* (Gr. 1)
c. *sort-i* (-*ir*, Gr. 3) \rightsquigarrow **sort-é* (Gr. 1)

Irregularizations of PPs in Gr. 3 verbs (only?)

- Also observed: Irregularizations in /y/ in non-*ir* Gr. 3 verbs (sometimes with stem regularization) (Royle 2007, Kresh 2008)

- (32) a. *pris* (-dre, Gr. 3) \rightsquigarrow °*prend-u* (Gr. 3)
b. *éteint* (-dre, Gr. 3) \rightsquigarrow °*éteind-u* (Gr. 3)

- Pattern not reported for Gr. 2 or Gr. 3 *-ir* verbs:

- (33) a. *fîn-i* (Gr. 2) \rightsquigarrow **fîn-(iss)-u* (Gr. 3)
b. *adouc-i* (Gr. 2) \rightsquigarrow **adouc-(iss)-u* (Gr. 3)
c. *dorm-i* (Gr. 3) \rightsquigarrow **dorm-u* (Gr. 3)

- This suggests again that children are aware of Gr. 2 regularity, but also of the irregularity of Gr. 3 verbs, and tend to ‘regularise’ /y/ as ‘the’ vowel used for those irregulars.

Over-regularization of the simple past across Gr. 2 and Gr. 3 verbs

- Over-regularization of the simple past formation of Gr. 3 and Gr. 2 verbs (Pazery 1986, Savelli et al. 2002, Labelle and Morris 2011)

(34)	a.	<i>je pris</i> (Gr. 3)	↷	° <i>je pren(d)-a</i> (Gr. 1)
	b.	<i>il dit</i> (Gr. 3)	↷	° <i>il dis-a</i> (Gr. 1)
	c.	<i>j'ouvr-i-s</i> (Gr. 3)	↷	° <i>j'ouvr-a</i> (Gr. 1)
	d.	<i>il ralent-i-t</i> (Gr. 2)	↷	° <i>il ralent-iss-a</i> (Gr. 1)
	e.	<i>il réfléch-i-t</i> (Gr. 2)	↷	° <i>il réfléch-iss-a</i> (Gr. 1)

- Sign that children perceive Gr. 2 verbs are irregular after all?
- No. We think this variant results from the reanalysis of /a/ as a TAM-marker (and the desire to overtly mark the use of the *passé simple*)
- In Labelle and Morris's (2011) data, the suffix /i(s)/ seems often present in children's regularized form of Gr. 2 verbs (only).
- Suggests that they are aware of the affixal properties of /i(s)/.

Occasional gr. 1 to gr. 2 shift for verbs with CoS semantics

- That children might be sensitive to the affixal (and semantic) properties of /i(s)/ is also suggested by the occasional use of Gr. 2 morphology for Gr. 1 verbs with CoS semantics. (Blanche-Benveniste and Pallaud 2001, Kilani-Schoch and Dressler 2005)

- (35) a. *Il rapetissa* (Gr. 1) \rightsquigarrow $^{\circ}$ *il rapetiss-it* (Gr. 2)
b. *il s'éveilla* (Gr. 1) \rightsquigarrow $^{\circ}$ *il s'éveill-it* (Gr. 2)

Irregularizations of the simple past of Gr. 3 verbs (only?)

- Also observed among older children (perhaps realizing that /a/ is not a TAM marker after all): Irregularizations of the simple past in /y/ for Gr. 3 verbs (Savelli et al. 2002, Labelle and Morris 2011)

(36) Attested (in Labelle and Morris 2011 a.o.):

- a. *il vit* (-oir, Gr. 3) ∼ °*il vut* (Gr. 3)
- b. *il répond-it* (-dre, Gr. 3) ∼ °*il répondut* (Gr. 1)
- c. *il obtint* (-ir, Gr. 3) ∼ °*il obtenu* (Gr. 3, 44/129)

- Pattern again not reported for Gr. 2 -ir verbs
- Confirms again that children are aware of Gr. 2 regularity, but also of the irregularity of Gr. 3 verbs, and analyses /y/ as ‘the weird vowel for weird verbs.’

(37) Not attested in Labelle and Morris (2011):

- a. *ils ralentirent* (Gr. 2) ∼ **ils ralent(iss)urent* (Gr. 3, 0/222)
- b. *ils réfléchirent* (Gr. 2) ∼ °*ils réfléch(iss)urent* (Gr. 3, 0/282)

Summary

Children's productions

- confirm the regularity of Gr. 2 verbs
- suggest that they are aware of the affixal properties of /i(s)/
- lean towards an impoverishment of the system of conjugation classes, via a reduction of the morphological differences between Gr. 1 and Gr. 2 verbs.
- In particular, /a/ in simple past seems on its way to be reanalysed as a TAM marker for regulars.

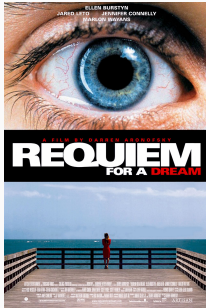
Next directions

1. Refined experiment:
 - Control more closely for Task (e.g. avoid infinitive).
 - Compare word-derived vs. root-derived nonce verbs.
 - Production task on a given artificial stem and a context that varies again on the CoS/activity dimension.
2. Formal analysis:
 - Investigate the role of affixation on CoS semantics of word-derived vs. root-derived *-er/-ir* verbs.
 - Syntactic analysis of /i(s)/ to go with the semantic analysis.
3. Investigate the productivity of /i(s)/:
 - Lexicographic study.
 - Production and meaning assignment tasks.
4. Compare with the distribution in the lexicon.

Claims

1. The suffix /i(s)/ **comes with a semantics** which speakers are able to generalize from.
2. Its semantics is **determined by the type of stem** (root or word) it is concatenated with.
 - **Change of state** (v_{cause}) in **word-derived** (deadjectival or denominal) verbs.
 - The identity function in **root-derived** verbs.
3. French has **no conjugation classes** as such.
 - Regular verbs (-er, “Group 1”).
 - Verbs with the /i(s)/ suffix (“Group 2”).
 - Small set of irregulars (“Gr. 3”).
4. The affix /i(s)/:
 - Morphology: triggers contextual allomorphy in specific contexts.
 - Semantics: contextual alloosemy of /i(s)/.
5. French is moving toward an athematic system in consistent ways.

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itamar@itamarkast.net
fabienne.martin@hu-berlin.de

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Task: adj-inf, adj-sg, adj-pl

We experimented with three tasks.

Adjective wug to infinitive (2):

(38) frache < affracher/ affrachir

Adjective wug to simple present present singular verb (3):

(39) louffe < alouffe/alouffit

Adjective wug to simple present plural verb (3):

(40) raune < araunent/ araunissent

Vowels

Controlling for effects of vowel harmony or some kind of sound symbolism:

frache a

flasse a

baigle ε

faiches ε

raunes o

ploques o

louffe u

crouche u

maloches a o

blatoche a o

caruches a y

maruches a y

rilonces i ã

picrons i ã

locerge o ε

torrenne o ε

Prefixes i

- French prefixes *a-*, *en-*, *é-* and *dé-* often act as transitivizers (Junker 1987, Boons 1991, Labelle 1992, Aurnague and Plénat 2007).
- The reflexive *se* is often needed to obtain the anticausative use of a prefixed verb (Labelle 1992), for the external argument projected by the prefixed verb needs to be absorbed by *se* (Reinhart and Siloni 2005, Schäfer 2008)

Prefixes ii

- (41) a. **Mon chapeau a amoché.*
my hat has a-ugly-é

Intended: 'My hat got damaged.'

- b. *Mon chapeau s'est amoché.*
my hat REFL=is a-ugly-é

'My hat got damaged.'

- But prefixed Group 2 verbs seem to more easily keep/get an anticausative use even without a reflexive (Thorn 1907):

Prefixes iii

(42) *Nolwenn Leroy a amochi avec les années.*

Nolwenn Leroy has a-ugly-i with the years

'Nolwenn Leroy got uglier over the years.'

(Internet)

- If reflexively unmarked Group 2 verbs may be used in unaccusative (anticausative) frames more easily than *-er* verbs, the preference for *-er* verbs should be stronger for prefixed verbs than for unprefixed ones.
- But the task may not be appropriate to track this effect.
- Prefixation with *a-*, *dé-*, *en-* blocks activity semantics (Martin and Piñón 2020).
- May be a confound in the prefix condition.

Prefixes iv

- (43) a. Ils en-marouch-ent. (#ACT)
- b. Il a-blatoch-e. (#ACT)

The ‘inchoative conjugation’ in Romance

- /i(s)/ < Latin inchoative suffix /-sk-/ which gave rise to the ‘Romance inchoative conjugation’
- French (like Italian) narrowed down the choice of vowels to *i* (Allen 1995; see discussion in Kobayashi 1988), the theme vowel of Latin 4th conj. *-īre*, a systematic morphology of the inchoative.

(44) *ruber* ‘red’, *rubeo* ‘be red’, *rubescō* ‘grow red’

- The inchoative meaning of Latin /-sk/- eroded and got lost (Allen 1995, Schwarze 2009, Da Tos 2012)
- **Hypothesis:**
 - /sk/ re-emerged in French /-i(s)-/ through a process of historical re-analysis (Hewson 1997, Caudal 2014, see also Schwarze 2009: 43).
 - /i(s)/ = **inchoative suffix** (see Fouché 1967, Kobayashi 1988, Hewson 1997: 153 see also Schwarze 2009), i.e. a **spell-out of v_{cause}**

Syncretism between the past participle and the simple past

Table 3 - PS endings compared to participle and infinitive endings (irregular verbs only). Syncretisms indicated in grey.

	PS endings				
	i	i (≠) ¹	u	N	Totals
Participle endings					
-i	342 ²	33	-	-	376
-u	65	-	68	26	159
other	41	-	2	-	43
none	1 ³	-	-	-	1
<i>Totals</i>	449	33	70	26	578
Infinitive endings⁴					
-ir	327 ²	33	14	26	400
-Vr	9	-	36	-	45
-Cr	113	-	20	-	133
<i>Totals</i>	449	33	70	26	578

Syncretism between past participle and infinitive

(63) *Suffixes du participe passé* ²⁴

Suff. Inf / p.p.	Rd+e	Rd+y	Rd+i	Rd+t	Rd+Ø	
-eʳ	parl-e					<i>parler</i>
-r		rɔ̃p-y	sɥiv-i	di-t	fini ^S *	<i>rompre, suivre, dire, finir</i>
-ir		tən-y	part-i			<i>tenir, partir</i>
-war		vul-y				<i>vouloir</i>
-tr		bat-y			ne ^S *	<i>naître, battre</i>
-dr		kuz-y		pɛ̃-t		<i>coudre, peindre</i>