# Loss of inflection in the diachrony of French nouns 

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## Overview

- Case study on loss of inflection for 2 morphosyntactic features in the history of French

CASE: reduction in number of feature-values, eventual loss of feature from paradigm
NUMBER: retention of 2 feature-values, progressive loss of formal contrast

- Types of change implicated in loss of inflection
- Pathways to uninflectedness/uninflectability


## Preliminaries

## Uninflectability and other non-canonical properties

## in an abstractive, paradigmatic approach

Baerman, M., D. Brown \& G. G. Corbett. (2005). The syntax-morphology interface: A study of syncretism. Cambridge: CUP. Blevins, J. (2016). Word and paradigm morphology. Cambridge: CUP.
Spencer, A. (2020). Uninflectedness: Uninflecting, uninflectable and uninflected words, or the complexity of the simplex. In L. Körtvélyessy \& P. Štekauer (eds.), Complex words: Advances in morphology. Cambridge: Cambridge University Press, 142-158.
Stump, G. (2016). Inflectional paradigms. Cambridge: CUP.

## Theoretical perspective

- Word-and-Paradigm approach: lexeme as the array (paradigm) of its inflected wordforms
- Abstractive approach (Blevins 2016): speakers are exposed to full wordforms, any segmentation takes the form of abstractive generalisations across full wordforms
- Paradigm linkage approach based on Stump (2016): there are 3 different overlaid paradigms content paradigm: inventory of feature combinations required by syntax realised paradigm: inventory of inflected forms expressing feature combinations form paradigm: mapping between content and realised paradigms


## Uninflectability

Spencer (2020) introduces initial distinction between:

- Uninflectable: 'occur in all the morphosyntactic contexts available to inflecting lexemes' 'their form is invariable' (for whole paradigm or e.g. for a particular feature)
- Uninflecting: given lexeme is not expected to have multiple forms/cells
e.g. Eng. almost
" Defective: paradigm is "missing" certain forms/cells
e.g. Eng. forego (no past, *forwent)


## A subtype of syncretism (Baerman et al. 2005: 2, 27-33)

- Syncretism 'failure to make a morphosyntactically relevant distinction' morphosyntactic feature contrasts exist and are reflected in e.g. agreement phenomena some distinct feature combinations map to identical morphological forms

| - Uninflectedness | morphological inertness |
| :--- | :--- | :--- |
|  | 'lack of response by morphology to distinctions which are syntactically relevant' |

- Neutralisation no formal contrast where a featural distinction is not syntactically relevant


## A subtype of syncretism (Baerman et al. 2005)

## Canonical syncretism (2005:34)

- 'There is, in certain contexts, a loss of distinctions between some but not all values of a particular feature $F$.
- This loss may depend on the presence of a particular combination of values of one or more other features (the context).
- Other syntactic objects distinguish those values of feature F, and they are therefore syntactically relevant.'


## Uninflectedness [=Uninflectability] (2005:33)

- 'There is, in certain lexemes only, a loss of all values of a particular feature $F$ found elsewhere in the language.
- This loss may depend on the presence of a particular combination of values of one or more other features (the context).
- Other syntactic objects distinguish values of feature $F$, either generally or in the given context, and feature $F$ is therefore syntactically relevant.'


## Becoming uninflectable: borrowing

Uninflectable nouns in Russian are typically borrowings with 'a phonological shape which is difficult to accommodate to the Russian morphological system' (Spencer 2020)

Recalls arrested development in defectiveness (Baerman \& Corbett 2010, Bach \& Esher 2015):

- lexeme enters language with an incomplete array of (realised) forms
- often for reasons of phonological shape
- lexeme does not go on to develop additional distinct inflected forms

Baerman, M. \& G. G. Corbett (2010). Defectiveness: Typology and diachrony. In M. Baerman et al (eds.), Defective paradigms: Missing forms and what they tell us. Oxford: OUP, 1-18.
Bach, X. \& L. Esher (2015) Morphological evidence for the paradigmatic status of infinitives in French and Occitan. In D. Haug (ed.), Historical Linguistics 2013. Amsterdam: John Benjamins, 135-154.

## Becoming uninflectable: decay?

## A second pathway to defectiveness: decay (Baerman \& Corbett 2010, Bach \& Esher 2015)

- lexeme enters language with a complete array of (content, form, realised) cells
- some forms/cells fall out of usage due to lexical/syntactic changes
- replaced by alternative construction, not innovative forms for same lexeme

Baerman, M. \& G. G. Corbett (2010). Defectiveness: Typology and diachrony. In M. Baerman et al (eds.), Defective paradigms: Missing forms and what they tell us. Oxford: OUP, 1-18.
Bach, X. \& L. Esher (2015) Morphological evidence for the paradigmatic status of infinitives in French and Occitan. In D. Haug (ed.), Historical Linguistics 2013. Amsterdam: John Benjamins, 135-154.

## Becoming uninflectable: sound change?

Common source of syncretism: regular sound change

- regular sound change is morphology-blind
- can eliminate previous formal alternation patterns (affecting stem, affixes, etc.)
- formal contrast sometimes restored by analogical innovation
- more often, formal identity embedded in inflectional system as recurrent distributional pattern


# Case in the history of French 

## Loss of feature and values from morphosyntax

Schøsler, L. (1984). La déclinaison bicasuelle en ancien français. Odense: Odense University Press.
Sornicola, R. (2011). Romance linguistics and historical linguistics: Reflections on synchrony and diachrony. In M. Maiden, J. C. Smith \& A. Ledgeway (eds.), The Cambridge history of the Romance languages, vol I: Structures. Cambridge: CUP, 1-49.

## Absence of distinction in modern French

'wall', modern French

| Ce mur | nous bloque la vue. |  |
| :--- | :--- | :--- |
| This.M.SG | wall[M].SG | blocks our view. |
| Je n'apprécie pas | ce | mur |
| I don't care for | this.M.SG | wall[M].SG |


| Les fondations | de | ce | mur |
| :--- | :--- | :--- | :--- |
| The foundations | of | this.M.SG | wall[M].SG |

No case distinction in content paradigm, form paradigm or realised paradigm: feature is completely absent

## It was not ever thus...

'wall', classical Latin

|  | SG | PL |  | SG | PL |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NOM | murus | muri: | NOM | rosa | rosae |
| ACC | murum | muro:s | ACC | rosam | rosa:s |
| GEN | muri: | muro:rum | GEN | rosae | rosa:rum |
| DAT | muro: | muri:s | DAT | rosae | rosi:S |
| ABL | muro: | muri:s | ABL | rosa: | rosi:S |
| VOC | mure | muri: | vOC | rosa | rosae |

12 sets of feature-values
=> 12 cells in content paradigm
7-8 distinct forms in realised paradigms

Case distinction in content paradigm (syntactically/morphosyntactically relevant feature) and formal contrast in form/realised paradigms

## Loss of featural and formal distinctions

| 'wall', later Latin |  |  | 'rose', later Latin |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | SG | PL |  | SG | PL |
| NOM | murus | muri: | NOM | rosa | rosae |
| ACC | muru | muro:s | ACC | rosa | rosa:s |
|  |  |  |  |  |  |
| ABL | muro: | muri:s | ABL | rosa: | rosi:s |
| vOC | mure | muri: | VOC | rosa | rosae |

Syntactic change: prep+ACC/ABL used in place of stand-alone GEN, DAT
Regular sound change: loss of final $-M$

Fewer content cells (8)
Fewer realised forms (5-7)

## Loss of featural and formal distinctions continues

'wall', old French
SG PL
NOM
VOC
ACC
ABL
murs
mur murs
'rose', old French
SG PL
NOM
VOC
ACC
ABL
roses
roses

Regular sound change: loss of final unstressed vowels

Analogical change: final -s in NOM-VOC.PL of 'rose' class

Fewer realised forms (NOM=VOC, $\mathrm{ACC}=\mathrm{ABL}$ )

Syncretism of all cases in plural

## Morphosyntactic relevance of case: masculine nouns

For masculine nouns, case is visible via agreement phenomena => of demonstrable morphosyntactic relevance


## Morphosyntactic relevance of case: feminine nouns

For feminine nouns, case is not visible via agreement => of questionable morphosyntactic relevance


## Gender and major inflectional classes for nouns (mediaeval French)

case is not visible in agreement:
lower morphosyntactic relevance

case is not visible in agreement: lower morphosyntactic relevance

## Gender and major inflectional classes for nouns (mediaeval French)



## Subsequently...

## Analogical change:

Oblique forms supplant nominative forms in all syntactic contexts where NOM was expected

- No case distinction in form or realised paradigm of any noun
- Case not visible in agreement for nouns of any inflectional class or gender

Sound change: loss of final -s

## Loss of case in late-mediaeval French

Early mediaeval period: case distinctions in some inflectional classes, and in agreement for masculine nouns

|  | SG | PL |  | SG | PL |  | SG | PL |  | SG | PL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NOM | rose | roses | NOM | murs | mur | NOM | bers | baron | NOM | suer | seror |
| OBL | rose | roses | OBL | mur | murs | OBL | baron | barons | OBL | seror | serors |

End of mediaeval period: no case distinction for any inflectional class, or in agreement for either gender

| SG | PL | SG | PL | SG | PL | SG | PL |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| rose | roses | mur | murs | baron | barons | sœur | sœurs |

2-cell content paradigm for all nouns, feature CASE is no longer present in morphosyntax

## Summary: loss of case inflection ('decay')

Inventory of forms in the realised paradigm reduces

- sound change produces syncretism between previously distinct forms
- analogical change produces syncretism between previously distinct forms

Inventory of morphosyntactic feature combinations in the content paradigm reduces

- syntactic change eliminates previously distinct feature values
- rise of syncretism in other word classes reduces visibility of feature via agreement

Ultimately, reduction to a single form and loss of feature from morphosyntax
Interplay of processes produces uninflectability in some lexemes before this point

# Number in the history of French 

Morphosyntactic contrast (content paradigm) retained
Syncretism (form, realised paradigms) due to sound change

## Number agreement in modern French

Morphosyntactic feature with 2 values: singular, plural
Number value of controller (noun) visible via agreement on targets (adjectives, determiners...)

| SG | sə | livs | e | $\int \varepsilon \measuredangle$ |
| :--- | :--- | :--- | :--- | :--- |
| PL | se | livs | sõ | $\int \varepsilon є$ |
|  | this | book | be | dear |

Determiner and verb both show number agreement

## Content paradigm of French nouns

2 values for NUMBER are required by morphosyntax
Content paradigm must include 2 cells

SG PL
\{livre, SG\} \{livre, PL\}

## Realised paradigm of French nouns

2 values for NUMBER are required by morphosyntax
Content paradigm must include 2 cells

For most nouns, no formal distinction: forms in realised paradigm are identical

| SG | PL | SG | PL |  |
| :---: | :---: | :---: | :---: | :---: |
| $\{$ livre, SG $\}$ | $\{$ livre, PL $\}$ |  | livs | livs |

## Form paradigm of French nouns

2 values for NUMBER are required by morphosyntax
Content paradigm must include 2 cells

For most nouns, no formal distinction: forms in realised paradigm are identical

| SG | PL | SG | PL | SG | PL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\{$ livre, SG $\}$ | $\{$ livre, PL $\}$ | $\{X\}$ | $\{X\}$ | livs | livs |

Form paradigm: identical cells

## Uninflectability in French nouns

2 values for NUMBER are required by morphosyntax
Content paradigm must include 2 cells

For most nouns, no formal distinction:
forms in realised paradigm are identical

| SG | PL | SG | PL | SG | PL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\{$ livre, SG $\}$ | $\{$ livre, PL $\}$ | $\{X\}$ | $\{X\}$ | livs | livs |

Form paradigm: identical cells

Syncretism: morphosyntactically relevant distinction, no formal distinction Uninflectability: syncretism in some lexemes for all values of number

## Emergence of number syncretism in French

End of mediaeval period: singular/plural distinction borne by absence/presence of final $-s$ in most nouns

| SG | PL | SG | PL |
| :--- | :--- | :--- | :--- |
| mur | murs | sœur | sœurs |

Loss of final /s/ via regular sound change produces syncretism

| SG | PL | SG | PL |
| :--- | :--- | :--- | :--- |
| mys | тук | sœь | sœь |

## Lexical incidence of number syncretism

Loss of final /s/ via regular sound change produces syncretism in many nouns

Formal contrasts not dependent on final /s/ are preserved
SG -al
PL -als > -aws > -os > -o

Number remains visible in agreement

| 'book' | $\begin{aligned} & \text { SG } \\ & \text { livg } \end{aligned}$ | PL livs | 93\% |
| :---: | :---: | :---: | :---: |
| 'paper' | SG | PL | 0.36\% |
|  | 3usnal | 3usno |  |
| 'work' |  | PL | 0.034\% |
|  | tsavaj | travo |  |
| 'eye' | SG | PL |  |
|  | œj | jø |  |

## Lexical incidence of number syncretism

Loss of final /s/ via regular sound change produces syncretism in many nouns

Formal contrasts not dependent on final /s/ are preserved

SG -al
PL -als > -aws > -os > -o

Number remains visible in agreement

|  |  |  | Uninflectable <br> [for number] |
| :---: | :---: | :---: | :---: |
| 'book' | SG <br> livs | PL <br> livs | $93 \%$ |
| 'paper' | SG <br> 3usnal | PL <br> 3usno | $0.36 \%$ |
| 'work' | SG <br> tsavaj | PL <br> travo | $0.034 \%$ |


|  | SG | PL |
| :--- | :--- | :--- |
|  | eye' | œj |

## Summary: loss of number inflection

Inventory of morphosyntactic feature combinations in the content paradigm remains stable
Feature remains relevant for morphosyntax and visible in inflection

Inventory of forms in the realised paradigm reduces

- sound change produces syncretism between the 2 previously distinct forms

Result is uninflectability in the largest inflectional class

- majority inflectional class shows non-canonical phenomenon
- no conflict: canonicity is an ideal used for calibration, independently of statistical incidence
(Corbett 2009, Corbett \& Fedden 2018, Audring 2019)


## Conclusions

Case, number and uninflectability

## Overview

Uninflectability occurs for the features CASE and NUMBER in the history of French

- Loss of inflection
- Recalls 'decay' in defectiveness (lexemes lose paradigm cells/forms)

A non-canonical property, but can occur stably over centuries and in an inflectional class which is a statistical majority, as for NUMBER in French

## Conditions on emergence via loss of inflection

Uninflectability arises via interplay of multiple syntactic/analogical/sound changes

- Retention of (low number of) functional contrasts:
- 2 values of a feature are distinguished in agreement, maintained in content paradigm
- if these are lost, as for CASE in French, feature is entirely lost from content paradigm and it is no longer meaningful to speak of uninflectedness
- Reduction in formal contrasts:
- sound change and analogical change produce syncretism between forms in realised paradigm for certain lexemes/inflectional classes
- other lexemes/inflectional classes retain formal contrast


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