

Variation in Verbal Inflection: Dutch Dialects

Alies MacLean
& Hans Bennis
Meertens Institute Amsterdam


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<http://home.hum.uva.nl/variflex>
www.meertens.knaw.nl





Outline of this presentation

- Introduction: Geographic variation in inflection
 - Variflex
- The verbal paradigm:
 - Data
 - Generalisations (5) and feature organisations
- Summary




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Geographic variation in inflection

Aims to describe and explain the boundaries and structure of geographic variation in verbal and adjectival inflection.

Research Question:
Which morphosyntactic features are relevant within the Dutch inflectional system and how is this system organised?



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Variflex Project

Research on verbal and adjectival inflection in:


- First language acquisition (Daniela Polisenska, UvA)
- Second language acquisition (Elma Blom, UvA)




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Data I

Data for verbal inflection are taken from a database created by the Meertens Institute:



Syntactic Atlas of the Dutch Dialects
<http://www.meertens.nl/projecten/sand>




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Data II

229 paradigms of the verbs *leven* ('to live') and *gaan* ('to go') of 117 Dutch dialects. Attested through translation sentences:

Als ik ga, ga ik
'When I go, I go'


Als hij nog drie jaar leeft, leeft hij langer dan zijn vader.
'If he lives three more years, he'll be living longer than his father'



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Focus in this presentation

The syntactic features that are minimally required to describe the observed variation




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Examples of variation in the Netherlands I

Paradigms with 3 forms (n=146)

Standard Dutch (n=52/146)	
1sg	leef- \emptyset
2sg	leef- t
3sg	leef- t
1pl	lev- en
2pl	lev- en
3pl	lev- en




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Examples of variation in the Netherlands II

Paradigms with 4 forms (n=47)

	Groningen (n=37/47)	Limburg (n=10/47)
1sg	ga- \emptyset	leef- \emptyset
2sg	gaa- st	leef- s
3sg	gaa- t	leef- t
1pl	gaa- n	lev- e
2pl	gaa- n	leef- t
3pl	gaa- n	lev- e



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Examples of variation in the Netherlands III

Paradigms with 2 forms (n=36)

	Overijssel (n=13/36)	Noord-Holland (n=3/36)
1sg	leef-∅	gaa-n
2sg	leef-t	gaa-n
3sg	leef-t	gaa-t
1pl	leef-t	gaa-n
2pl	leef-t	gaa-n
3pl	leef-t	gaa-n



Map 1: 3, 2, or 4 forms

- 3 verbal forms within a paradigm (130)
- ▲ 4 verbal forms within a paradigm (44)
- 2 verbal forms within a paradigm (33)



Generalisation 1a: plural has one form

Exception: 2nd person plural
→ map 2



map 2: dialects with a deviant 2nd person plural

- Paradigms with a deviant [2pl] (27)



Generalisation 1a: exception [2plu]

- Most dialects with a deviant [2plu] use the pronoun *gij* for both singular and plural;
- The polite pronoun for 2nd person *u* is also used for both singular and plural;
- German also has a deviant [2plu]:
ihr komm-t vs wir/sie kommen
You come *we/they come*



Generalisation 1a: exception [2plu] *continued*

2nd person plural does not count as an exception to generalisation 1a



Generalisation 1b: the morphological form of plural = the default form of verbs

- **-(e)n** (n=215/229) OR **-t** (n=14/229)
- Plural forms represent the default spell out of verbs:
 - infinitives: **leven** (*to live*)
 - nominalisations: **het leven** (*the life*)



Notation for describing the organisation of features

- [1] → 1st person
- [2] → 2nd person
- [3] → 3rd person
- [-] → rest/default



Organisation of features

With these notations, the paradigms with maximum spell out look like this:
[1], [2], [3], [-]



Strategies for reduction of forms in paradigms

- A) enlarging the default
- B) syncretisms of [1], [2], [3]



Strategy A enlarging the default

Predicts the following organisations of features:

3 forms		2 forms	
A1	[1],[2], [-]	A4	[1], [-]
A2	[1],[3], [-]	A5	[2], [-] → does not occur
A3	[2],[3], [-]	A6	[3], [-]



Strategy A: examples I

Paradigms with 3 forms

	A1 (n=1) Overijssel	A2 (n=54) Noord-Holland	A3 (n=17) Friesland
1sg	lev- e	ga- Ø	gaa- n
2sg	leef- Ø	gaa- n	gaa- st
3sg	leef- t	gaa- t	gaa- t
1pl	leef- t	gaa- n	gaa- n
2pl	leef- t	gaa- n	gaa- n
3pl	leef- t	gaa- n	gaa- n



Strategy A: examples II

Paradigms with 2 forms

	A4 [1], [-] (n=13) Drenthe	A6 [3], [-] (n=3) Noord-Holland
1sg	leef- Ø	gaa- n
2sg	leef- t	gaa- n
3sg	leef- t	gaa- t
1pl	leef- t	gaa- n
2pl	leef- t	gaa- n
3pl	leef- t	gaa- n



Strategy B syncretisms of [1], [2], [3]

Predicts the following organisations of features:

3 forms		2 forms	
B1	[1], [2/3], [-]	B4	[1/2/3], [-]
B2	[1/2], [3], [-]		
B3	[1/3], [2], [-]		



Strategy B: examples I

paradigms with 3 forms

	B1 (n=64)	B2 (n=5) Gelderland	B3 (n=5) Limburg
1sg	leef- Ø	ga- Ø	leef- Ø
2sg	leef- t	ga- Ø	leef- s
3sg	leef- t	gaa- t	leef- Ø
1pl	lev- en	gaa- n	lev- e
2pl	lev- en	gaa- n	(leef- Ø)
3pl	lev- en	gaa- n	lev- e



Strategy B: examples II

paradigms with 2 forms

	B4 [1/2/3], [-] (n=11) Utrecht
1sg	gaa- t
2sg	gaa- t
3sg	gaa- t
1pl	gaa- n
2pl	gaa- n
3pl	gaa- n



Strategy C: A + B enlarging default + syncretisms

2 strategies in 1 paradigm predicts the following organisations of features:

2 forms	
C1	[1/2], [-] → does not occur
C2	[1/3], [-] → does not occur
C3	[2/3], [-]



Strategy C: example

Paradigms with 2 forms

	[2/3], [-] (n=9) Zuid-Holland
1sg	gaa- n
2sg	gaa- t
3sg	gaa- t
1pl	gaa- n
2pl	gaa- n
3pl	gaa- n

A
B



Generalisation 2: spell out for [3] = stable

In all Dutch dialects the spell out for third person is **-t**



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Generalisation 2: violation

paradigms with [3sg] = -∅

B3 [1/3], [2], [-]
(n=5)

1sg	leef-∅
2sg	leef- s
3sg	leef-∅
1pl	lev- e
2pl	leef-∅
3pl	lev- e



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Generalisation 2: solution

-t-deletion: Process that deletes word-final **-t**

Assumption: dialects that violate generalisation 2 undergo **-t** deletion: they occur in areas where **t**-deletion takes place (Goeman 1999)
Thus, underlyingly **-t** is present in [3]



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Generalisation 2: solution *continued*

B3	[1], [2], [3], [-]	[1/3], [2], [-]
1sg	leef-∅	leef-∅
2sg	leef- st →	leef- s
3sg	leef- t →	leef-∅
	before -t deletion	after -t deletion
1pl	lev- e	lev- e
2pl	leef-∅	lev-∅
3pl	lev- e	lev- e



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Generalisation 2: Consequence

[3] can only coincide with the default when the default is also spelled out with a **-t** morpheme.



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Generalisation 3: [1] = a unique form in the paradigm

- In paradigms with 4 forms: 100%
- In paradigms with 3 forms: 85% (125/146):
 - Most frequent paradigms:
 - A2 (n=54) [1], [3], [-]
 - B1 (n=64) [1], [2/3], [-]
 - Violation in
 - A3 (n=17) [2], [3], [-]
 - B2 (n=5) [1/2], [3], [-]



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Generalisation 3: [1] = a unique form in the paradigm *continued*

- Paradigms with 2 forms: 41% (13/32)
 - Violation
 - A6 (n=3) [3], [-]
 - B4 (n=11) [1/2/3], [-]
 - C3 (n=5) [2/3], [-]
- Generalisation 2 overrules generalisation 3



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Generalisation 4: [2] = a unique form iff there's **-st** inflection

- In 67% (154/229) [2] has a syncretism with [1], [3] or [-] if not → [2] = **-st**
- Paradigm A5: [2], [-] does not occur



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Generalisation 5: syncretisms and natural classes

- [2/3] is found in the most frequent paradigm,
 - B1 (n=54) [1], [2/3], [-]
 - C3 (n=9) [2/3], [-]
 - [1/2/3] occurs 11 times: B4
- But:
- [1/2] and [1/3] do not occur: B3, C1 and C2



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Generalisation 5:
syncretisms and natural classes continued

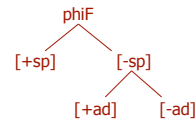
[2/3] is a natural class
[1/2/3] is a natural class

[1/2] is not a natural class
[1/3] is not a natural class



Hypothesis:

The relevant phi-features are not [1], [2], [3]
but [\pm speaker] and [\pm addressee]



Hypothesis:
continued

Only [-sp] and phiF are natural classes for
syncretisms

Violation: B2 (n=5) [1/2], [3], [-]



Variflex project

Generalisation 1 and 2 are strong and show
little variation. →

Predicts little variation for inflection of
plural and third person in L1/L2 acquisition data
Generalisation 3 and 4 are weaker and
show more variation. →

Predicts more variation for inflection of
first and second person in L1/L2 acquisition data



To sum up I:

- There are verbal paradigms with either 2, 3
or 4 forms
- There are 2 strategies to reduce the number
of forms in the paradigm



To sum up II:
5 generalisations

1. Plural has one default form
2. The spell out for [3] is stable
3. [1] is a unique form in the paradigm
4. [2] is a unique form iff there's **-st** inflection
5. [-sp] and phiF are natural classes for
syncretisms



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