Blocking, Intervention and Ablaut in German Verb Inflection

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DGfS Siegen, 2007
# Strong and Weak Verbs in German

<table>
<thead>
<tr>
<th>Infinitive</th>
<th>Past participle</th>
<th>Past finite (2sg)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>weak</strong></td>
<td>schweb-en</td>
<td>ge-schweb-t</td>
</tr>
<tr>
<td><strong>strong</strong></td>
<td>geb-en</td>
<td>ge-geb-en</td>
</tr>
<tr>
<td></td>
<td>heb-en</td>
<td>ge-hob-en</td>
</tr>
<tr>
<td></td>
<td>sing-en</td>
<td>ge-sung-en</td>
</tr>
</tbody>
</table>
Ablaut blocks past -t

<table>
<thead>
<tr>
<th>Present 1pl</th>
<th>Past 2sg</th>
<th>Past Participle</th>
</tr>
</thead>
<tbody>
<tr>
<td>schweb-en</td>
<td>schweb-t-est</td>
<td>ge-schweb-t 'fly'</td>
</tr>
<tr>
<td>heb-en</td>
<td>hob-st</td>
<td>ge-hob-en 'carry'</td>
</tr>
</tbody>
</table>
Do -t and Ablaut compete for the same position?
Complication 1: -t and -n block each other

<table>
<thead>
<tr>
<th>Present 2sg</th>
<th>Past 2sg</th>
<th>Past Participle</th>
</tr>
</thead>
<tbody>
<tr>
<td>schweb-st</td>
<td>schweb-t-e-st</td>
<td>ge-schweb-t</td>
</tr>
<tr>
<td>heb-st</td>
<td>hob-st</td>
<td>ge-hob-en</td>
</tr>
</tbody>
</table>

but -n and Ablaut don’t
Complication 2: Ablaut doesn’t block ge-

<table>
<thead>
<tr>
<th>Present 2sg</th>
<th>Past 2sg</th>
<th>Past Participle</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>schweb-st</td>
<td>schweb-t-e-st</td>
<td>ge-schweb-t</td>
<td>‘fly’</td>
</tr>
<tr>
<td>heb-st</td>
<td>hob-st</td>
<td>ge-hob-en</td>
<td>‘carry’</td>
</tr>
<tr>
<td>sing-st</td>
<td>sang-st</td>
<td>ge-sung-en</td>
<td>‘sing’</td>
</tr>
</tbody>
</table>
Complication 3: Umlaut doesn’t block 2sg/3sg affixes

<table>
<thead>
<tr>
<th>Present 1sg</th>
<th>Present 2sg</th>
<th>Present 3sg</th>
</tr>
</thead>
<tbody>
<tr>
<td>lall-e</td>
<td>lall-st</td>
<td>lall-t</td>
</tr>
<tr>
<td>fall-e</td>
<td>fäll-st</td>
<td>fäll-t</td>
</tr>
</tbody>
</table>
Basic Ideas

- Ablaut is morphemic and realizes different functional heads
- Ablaut blocks -t at a featural, not a positional level
- Locality & Intervention account for crucial complications
Overview

Assumptions
- Framework: Minimalist DM
- Morphophonology of Umlaut/Ablaut
- Phrase Structure of Verbs

Analysis
- Blocking in the Past Tense
- Zero in the Present Tense
- Intervention in Participles
- Exceptional Non-Blocking

Consequences
- Unified -n
- Wiese’s Generalization
- Allomorphic Assymetry
### Terminology

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>Ablaut</strong></td>
<td>Vowel change in [+past] verb forms</td>
</tr>
<tr>
<td><strong>Umlaut</strong></td>
<td>Vowel change in 2sg/3sg [–past] verb forms</td>
</tr>
<tr>
<td><strong>Strong Verbs</strong></td>
<td>Verbs showing Ablaut</td>
</tr>
<tr>
<td><strong>Weak Verbs</strong></td>
<td>Verbs not showing Ablaut</td>
</tr>
</tbody>
</table>
Standard Distributed Morphology (Halle & Marantz, 1993)

- Syntax manipulates abstract heads without phonological content
- Morphology interprets the output of Syntax
- Many different types of morphological operations
Operations in Standard DM

- **Impoverishment**: deletes morphosyntactic features
- **Fission**: dissect one head into different separate heads
- **Fusion**: fuses different lexical items into one
- **Vocabulary Insertion**: inserts VIs into lexical items, restricted by Elsewhere Condition and Feature Hierarchies
- **Readjustment**: Phonological modification of VIs
Minimalist Distributed Morphology (Trommer, 1999, 2003a,b)

Only 1 Morphological Operation: Vocabulary Insertion

Vocabulary insertion: If \( M \) is a VI with syntactic features \( \alpha \) and phonological features \( \beta \), and \( S \) is a head with features \( \gamma \), where \( \alpha \) is a subset of \( \gamma \), then delete the features of \( \alpha \) in \( \gamma \) and add \( \beta \) to the phonological representation of \( S \)
Georgian Verb Agreement

a. g-xedav
   O2-see
   ‘I see thee’

b. g-xedav-t
   O2-see-PL
   ‘I see you (pl.)’

c. g-xedav-en
   O2-see-S3p
   ‘they see thee’

d. g-xedav-en/*g-xedav-t-en
   O2-see-S3p
   ‘they see you (pl.)’
# Derivation in Standard DM

(Halle & Marantz, 1993)

<table>
<thead>
<tr>
<th></th>
<th>2pl ← 1sg</th>
<th>2pl ← 3pl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocabulary</td>
<td>g- -t</td>
<td>g- -en</td>
</tr>
<tr>
<td>Insertion</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Derivation in Minimalist DM** (Trommer, 2003)

<table>
<thead>
<tr>
<th>V. Insertion</th>
<th>Syntax</th>
<th>2pl ← 1sg</th>
<th>2pl ← 3pl</th>
</tr>
</thead>
<tbody>
<tr>
<td>V. Insertion</td>
<td>V [+pl]</td>
<td>V [+3+pl] [+pl]</td>
<td></td>
</tr>
<tr>
<td>V. Insertion</td>
<td>V [+pl]</td>
<td>V [+3+pl] Ø</td>
<td></td>
</tr>
<tr>
<td>V. Insertion</td>
<td>V [+pl] -t</td>
<td>V [+3+pl] -en</td>
<td></td>
</tr>
</tbody>
</table>
Subset Principle

1. Only VIs which specify a subset of a head’s features can be inserted

2. Only the most specific VI is inserted (the one specifying the most features)
Locality Constraint on Allomorphic Conditioning

A VI V with context restriction $R$

can only be inserted into a head $H$

if $R$ is satisfied in $H$

or a head which is string-adjacent to $H$.

(Trommer, 2000, 2001)
Locality Constraint on Allomorphic Conditioning

Licensed

Blocked

*
The Morphophonology of Umlaut/Ablaut

- Umlaut/Ablaut are (part of) VIs
- Umlaut/Ablaut consist of floating vocalic features
- Umlaut/Ablaut features dock to root vowels by phonological fusion

(Similar Views in Lieber, 1987; Wolf, 2005)
The Morphophonology of Umlaut/Ablaut

<table>
<thead>
<tr>
<th>singular</th>
<th>plural</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vater</td>
<td>Väter</td>
<td>‘father’</td>
</tr>
<tr>
<td>Mutter</td>
<td>Mütter</td>
<td>‘mother’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Root</th>
<th>Affix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphology</td>
<td>Vater</td>
</tr>
<tr>
<td>Phonology</td>
<td>Väter</td>
</tr>
</tbody>
</table>
Phrase Structure of Verbs

Finite Verbs

\[
[[[[ \text{v} ]] \text{Tense}]] \text{Finiteness} \text{Agree}
\]

Infinite Verbs

\[
[[[[ \text{v} ]] \text{Tense}]] \text{Finiteness} \text{Participial}
\]
## Features in V

<table>
<thead>
<tr>
<th>Features</th>
<th>Forms</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>[V ]</td>
<td>Weak verbs</td>
<td>schweb-en ge-schweb-t</td>
</tr>
<tr>
<td>[V C₁]</td>
<td>Strong verbs of class 1</td>
<td>heb-en ge-hob-en</td>
</tr>
<tr>
<td>[V C₂]</td>
<td>Strong verbs of class 2</td>
<td>sing-en ge-sung-en</td>
</tr>
<tr>
<td>[V C₃]</td>
<td>Strong verbs of class 3...</td>
<td>...</td>
</tr>
</tbody>
</table>

\[ V = \text{Verb (Categorial Feature)} \]
## Features in Tense

<table>
<thead>
<tr>
<th>Features</th>
<th>Forms</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>[T –Past]</td>
<td>Present finite forms</td>
<td>schweb-st</td>
</tr>
<tr>
<td></td>
<td>Present participles</td>
<td>schweb-end</td>
</tr>
<tr>
<td></td>
<td>Infinitives</td>
<td>schweb-en</td>
</tr>
<tr>
<td>[T +Past]</td>
<td>Past finite forms</td>
<td>schweb-te-st</td>
</tr>
<tr>
<td></td>
<td>Past participles</td>
<td>ge-schweb-t</td>
</tr>
</tbody>
</table>

\[ T = \text{Tense (Categorial Feature)} \]
Features in Finiteness

<table>
<thead>
<tr>
<th>Features</th>
<th>Forms</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>[F Fin]</td>
<td>Finite present forms</td>
<td>schweb-st</td>
</tr>
<tr>
<td></td>
<td>Finite past forms</td>
<td>schweb-t-est</td>
</tr>
<tr>
<td></td>
<td>Infinitives</td>
<td>schweb-en</td>
</tr>
<tr>
<td>[F ]</td>
<td>Present Participles</td>
<td>schweb-end</td>
</tr>
<tr>
<td></td>
<td>Past Participles</td>
<td>ge-schweb-t</td>
</tr>
</tbody>
</table>

$F = \text{Finiteness (Categorial Feature)}$

(cf. Wiese, 2006)
# Features in Participial

<table>
<thead>
<tr>
<th>Features</th>
<th>Forms</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Finite present forms</td>
<td>schweb-st</td>
</tr>
<tr>
<td></td>
<td>Finite past forms</td>
<td>schweb-t-est</td>
</tr>
<tr>
<td>[P ]</td>
<td>Infinitives</td>
<td>schweb-en</td>
</tr>
<tr>
<td>[P Part]</td>
<td>Present Participles</td>
<td>schweb-end</td>
</tr>
<tr>
<td></td>
<td>Past Participles</td>
<td>ge-schweb-t</td>
</tr>
</tbody>
</table>

\[P = \text{Participial (Categorial Feature)}\]
## Features in Agree

<table>
<thead>
<tr>
<th>Features</th>
<th>Forms</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>[A +1 –2 –pl]</td>
<td>1sg</td>
<td>schweb-e</td>
</tr>
<tr>
<td>[A –1 +2 –pl]</td>
<td>2sg</td>
<td>schweb-st</td>
</tr>
<tr>
<td>[A –1 –2 –pl]</td>
<td>3sg</td>
<td>schweb-t</td>
</tr>
<tr>
<td>[A +1 –2 +pl]</td>
<td>1pl</td>
<td>schweb-en</td>
</tr>
<tr>
<td>[A –1 +2 +pl]</td>
<td>2pl</td>
<td>schweb-t</td>
</tr>
<tr>
<td>[A –1 –2 +pl]</td>
<td>3pl</td>
<td>schweb-en</td>
</tr>
</tbody>
</table>

\[ A = \text{Agree (Categorial Feature)} \]

(cf. Müller, 2006)
# Blocking in the Past Tense

## Ablaut

<table>
<thead>
<tr>
<th>Ablaut</th>
<th>[+Past]</th>
</tr>
</thead>
<tbody>
<tr>
<td>-t</td>
<td>[Tense +Past]</td>
</tr>
<tr>
<td>-n</td>
<td>[Tense]</td>
</tr>
</tbody>
</table>

- Blocks

This diagram illustrates the blocking in the past tense of German verbs, particularly focusing on Ablaut and how it affects the verb inflection. The table shows how the past tense marker (+Past) interacts with other elements to form the complete past tense form of verbs. The Ablaut process, indicated by the arrows, blocks the application of additional suffixes, ensuring the correct past tense formation.
Vocabulary Items for Tense

a. +Past : +round +back /_____ T C₁ (ge-hob-en)
b. T +Past : /-t/ (ge-schweb-t)
c. T : Ø /_____ Fin (hob-Ø)
d. T : /-n/ (ge-hob-en)
Ablaut blocks -t: Strong past finite forms (hob-st)

<table>
<thead>
<tr>
<th>[V C₁] [T +Past] [F Fin] 2sg</th>
<th>heb</th>
</tr>
</thead>
<tbody>
<tr>
<td>[V C₁] [T leck] [F Fin] 2sg</td>
<td>hob</td>
</tr>
<tr>
<td>[V C₁] [] [F Fin] 2sg</td>
<td>hob</td>
</tr>
<tr>
<td>[V C₁] [ ] [F Fin] 2sg</td>
<td>heb</td>
</tr>
</tbody>
</table>

**Past:**

<table>
<thead>
<tr>
<th>[V C₁] [T +Past] [F Fin] 2sg</th>
<th>heb</th>
</tr>
</thead>
<tbody>
<tr>
<td>+Past:    +rd+bk    /_____ T C₁</td>
<td></td>
</tr>
<tr>
<td>T +Past:  /-t/</td>
<td></td>
</tr>
<tr>
<td>T:        Ø      /_____ Fin</td>
<td></td>
</tr>
<tr>
<td>T:        /-n/</td>
<td></td>
</tr>
</tbody>
</table>
Emergence of -t: **Weak past finite forms** (schweb-te-st)

<table>
<thead>
<tr>
<th>V</th>
<th>T +Past</th>
<th>F Fin</th>
<th>2sg</th>
<th>schweb-t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>+Past:</td>
<td></td>
<td></td>
<td>-t/</td>
</tr>
<tr>
<td></td>
<td>T:</td>
<td></td>
<td>Ø</td>
<td>Fin</td>
</tr>
<tr>
<td></td>
<td>T:-n/</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Past**

- +rd+bk
- T C₁

**Exceptional Non-Blocking**

- Weak past finite forms
- Intervention and ablaut in German verb inflection

Jochen Trommer  
Blocking, Intervention and Ablaut in German Verb Inflection
-t blocks -n: *Weak* past participle (ge-\textit{schweb-t})

<table>
<thead>
<tr>
<th>[V] [T +Past] [F] [P Par]</th>
<th>schweb</th>
</tr>
</thead>
</table>
|                           | +Past:  \( +\text{rd+bk} \) \( /\_
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<tbody>
<tr>
<td></td>
<td>( T ) ( +\text{Past} ): ( /-t/ )</td>
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|                           | \( T \): \( \emptyset \) \( /\_
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<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( T ): ( /-n/ )</td>
</tr>
</tbody>
</table>

\textit{Jochen Trommer}  

\textit{Blocking, Intervention and Ablaut in German Verb Inflection}
Emergence of -n: **Strong past participles (ge-hob-en)**

<table>
<thead>
<tr>
<th>[V C₁] [T +Past] [F] Par</th>
<th>heb</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>[V C₁] [T [Nos] [F] Par</td>
<td>hob</td>
<td>+Past: +rd+bk /</td>
</tr>
<tr>
<td></td>
<td></td>
<td>T +Past: /-t/</td>
</tr>
<tr>
<td></td>
<td></td>
<td>T: Ø /___ Fin</td>
</tr>
<tr>
<td>[V C₁] [F] Par</td>
<td>hob-en</td>
<td>T: /-n/</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Jochen Trommer

Blocking, Intervention and Ablaut in German Verb Inflection
Zero in the Present Tense: \textbf{Tense}

\begin{center}
\begin{tabular}{|c|c|}
\hline
$\emptyset$ & [ \text{Past} ] \\
\hline
$\emptyset$ & [ Tense ] \\
\hline
$\emptyset$ & [ ] \\
\hline
\end{tabular}
\end{center}

\textbf{Exception:}

\begin{center}
\begin{tabular}{|c|c|}
\hline
-n & [ Tense ] \\
\hline
\end{tabular}
\end{center}

(in infinite forms)
Zero in the Present Tense: Finiteness

\[
\begin{array}{|c|c|}
\hline
[\text{Fin}] & \emptyset \\
\hline
[F] & \emptyset \\
\hline
\end{array}
\]
Zero Vocabulary Items for Present Tense

a. [ ] : Ø / ___ –Past

b. –Past : Ø

c. [F (Fin)] : Ø- / V ___
Zero in present finite forms (weak: schweb-st)

<table>
<thead>
<tr>
<th>[V] [T –Past] [F Fin] 2sg</th>
<th>schweb</th>
</tr>
</thead>
<tbody>
<tr>
<td>[V] [T –Past] [F Fin] 2sg</td>
<td>[ ]: Ø  /___ –Past</td>
</tr>
<tr>
<td>[V] T [F Fin] 2sg</td>
<td>–Past: Ø</td>
</tr>
<tr>
<td>[V] T [F Fin] 2sg</td>
<td>T: Ø  /___ Fin</td>
</tr>
<tr>
<td>[V]</td>
<td>T: /-n/</td>
</tr>
<tr>
<td>[V]</td>
<td>[F (Fin)]: Ø- / V ____</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>[V] [T –Past] [F Fin] 2sg</th>
<th>schweb</th>
</tr>
</thead>
</table>
### Zero in (present) Infinitives (schweb-en)

<table>
<thead>
<tr>
<th>Structure</th>
<th>schweb</th>
<th>[V] [T –Past] [F][P]</th>
<th>[V] [T –Past] [F][P]</th>
<th>[V] T [F][P]</th>
<th>schweb-en</th>
<th>[V] [F][P]</th>
<th>schweb-en</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>[____ ]: Ø / _____ –Past</td>
<td>[____ ]: Ø / _____ –Past</td>
<td>–Past: Ø</td>
<td>T: Ø / _____ Fin</td>
<td>T: /-n/</td>
<td>[F (Fin)]: Ø- / V _____</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[F (Fin)]: Ø- / V _____</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
[+Past] vs. [–Past] after Spelllout

[+Past]

[V] [ F ] [A 2sg]  schweb-te-st

[–Past]

[V] [ F ] [A 2sg]  (schweb-st)
Intervention in Participles

- [Par] -d (in non-past forms)
- [Par] -g (in past forms)

-d $\gg$ blocks ge-
Vocabulary Items for Participles

a. Par :  -d    / V ____

b. Par :  ge-
# Derivation of present participle form (schweb-en-d)

<table>
<thead>
<tr>
<th>[V] [T –Past] [F] [P Par]</th>
<th>schweb</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>[V] [I –Past] [F] [P Par]</td>
<td>schweb-en</td>
<td>T: /-n/</td>
</tr>
<tr>
<td>[V] [P –Past] [F] [P Par]</td>
<td></td>
<td>[____]: Ø /_____ –Past</td>
</tr>
<tr>
<td>[V] [P Par]</td>
<td></td>
<td>–Past: Ø</td>
</tr>
<tr>
<td>[V] [F (Fin)]: Ø / V _____</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[V] [P Par]</td>
<td>schweb-en-d</td>
<td>Par: /-d/ / V _____</td>
</tr>
<tr>
<td>[V] [P ]</td>
<td></td>
<td>Par: /ge-/</td>
</tr>
<tr>
<td>[V] [P ]</td>
<td>schweb-en-d</td>
<td></td>
</tr>
</tbody>
</table>

---

**Note:**
- The table outlines the derivation process for the present participle form of the verb 'schweben' in German.
- The steps include the transformation rules and morphological changes indicated by the symbols and notations in the table.
- The table highlights the thematic and paratactic aspects of the verb's inflection.
**Derivation of past participle form (weak: ge-schweb-t)**

<table>
<thead>
<tr>
<th>[V] [T +Past] [F] [P Par]</th>
<th>schweb</th>
</tr>
</thead>
<tbody>
<tr>
<td>[V] [schweb] [F] [P Par]</td>
<td>schweb-t</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Par: /-d/ V _____</td>
</tr>
<tr>
<td>[V] [ge-schweb-t] [F] [P Par]</td>
<td>ge-schweb-t</td>
</tr>
<tr>
<td></td>
<td>Par: /ge-/</td>
</tr>
<tr>
<td>[V] [ge-schweb-t] [F] [P]</td>
<td>ge-schweb-t</td>
</tr>
</tbody>
</table>
Allomorphy and Intervention

Present Participle

Past Participle

Present PARTICIPLE

Past PARTICIPLE

-d

* -d

V

V

Par

Par

V

V

V

Participle

V

Participle

V

Participle

V

Participle

V
## Derivation of past participle form (strong: ge-hob-en)

<table>
<thead>
<tr>
<th>[V C₁]</th>
<th>[T]</th>
<th>+Past</th>
<th>[F]</th>
<th>[P Par]</th>
<th>heb</th>
</tr>
</thead>
<tbody>
<tr>
<td>[V C₁]</td>
<td>[T]</td>
<td>+Past</td>
<td>[F]</td>
<td>[P Par]</td>
<td>hob</td>
</tr>
<tr>
<td>[V C₁]</td>
<td>[ ]</td>
<td></td>
<td>[F]</td>
<td>[P Par]</td>
<td>hob-en</td>
</tr>
<tr>
<td>[V C₁]</td>
<td>[ ]</td>
<td></td>
<td>[F]</td>
<td>[P Par]</td>
<td>ge-hob-en</td>
</tr>
<tr>
<td>[V C₁]</td>
<td>[ ]</td>
<td></td>
<td>[F]</td>
<td>[P Par]</td>
<td>ge-hob-en</td>
</tr>
</tbody>
</table>

- **hob**
  - +Past: +rd+bk /_____ T C₁
  - T +Past: /-t/
  - T: /-n/
  - [F (Fin)]: Ø / V _____
  - Par: /-d/ / V _____
  - Par: /ge-/
“Exceptional” Non-Blocking with Umlaut

<table>
<thead>
<tr>
<th>Present 1sg</th>
<th>Present 2sg</th>
<th>Present 3sg</th>
</tr>
</thead>
<tbody>
<tr>
<td>lall-e</td>
<td>lall-st</td>
<td>lall-t</td>
</tr>
<tr>
<td>fall-e</td>
<td>fäll-st</td>
<td>fäll-t</td>
</tr>
</tbody>
</table>
VIs for Agree (following Müller, 2006)

<table>
<thead>
<tr>
<th></th>
<th>sg</th>
<th>pl</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>[A +1 –2 –pl]</td>
<td>-e</td>
</tr>
<tr>
<td>2</td>
<td>[A –1 +2 –pl]</td>
<td>-st</td>
</tr>
<tr>
<td>3</td>
<td>[A –1 –2 –pl]</td>
<td>-t</td>
</tr>
</tbody>
</table>

A –2+pl : -n
+2–pl : -s
–1 : -t

A : –back / _____ –1 –pl C_x
A : -e
Derivation of present finite form (weak: fäll-st)

<table>
<thead>
<tr>
<th>[V C\textsubscript{x}]</th>
<th>[A +2 –1 –pl]</th>
<th>fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>[V C\textsubscript{x}]</td>
<td>[[2] +2 –1 –pl]</td>
<td>fäll</td>
</tr>
<tr>
<td></td>
<td></td>
<td>\textit{A:-bk} \quad / \quad __ \quad –1 –pl \textit{C}_x</td>
</tr>
<tr>
<td>[V C\textsubscript{x}]</td>
<td>[[2] –1 [3]]</td>
<td>fäll-s</td>
</tr>
<tr>
<td></td>
<td></td>
<td>\textit{+2-pl:-s}</td>
</tr>
<tr>
<td>[V C\textsubscript{x}]</td>
<td>[[2] [3]]</td>
<td>fäll-s-t</td>
</tr>
<tr>
<td></td>
<td></td>
<td>\textit{–1:-t}</td>
</tr>
<tr>
<td>[V C\textsubscript{x}]</td>
<td>[[3]]</td>
<td>fäll-s-t</td>
</tr>
</tbody>
</table>
## Exceptional Non-Blocking: Verbs with Ablaut and participle -t

<table>
<thead>
<tr>
<th>Present 1pl</th>
<th>Past 2sg</th>
<th>Past Participle</th>
</tr>
</thead>
<tbody>
<tr>
<td>schweb-en</td>
<td>schweb-<strong>te</strong>-st</td>
<td>ge-schweb-t</td>
</tr>
<tr>
<td>heb-en</td>
<td>hob-st</td>
<td>ge-hob-en</td>
</tr>
<tr>
<td>kenn-en</td>
<td>kann-t-est</td>
<td>ge-kann-t</td>
</tr>
</tbody>
</table>
Analysis of Verbs with Ablaut and -t

Ablaut expresses the class feature

\[ C_y : \text{+low} / \text{_____ +Past} \]

\((C_y = \text{Class feature of } \text{kennen})\)
Derivation of past participle form (ge-kann-t)

<table>
<thead>
<tr>
<th>[V C_y] [T +Past] [F] [Par]</th>
<th>kēnn</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>[V ] [T +Past] [F] [Par]</td>
<td>kann</td>
<td></td>
</tr>
<tr>
<td>[V ] [T +Past] [F] [Par]</td>
<td>kann-&lt;t&gt;</td>
<td></td>
</tr>
<tr>
<td>[V ] [F] [Par]</td>
<td>ge-kann-t</td>
<td></td>
</tr>
<tr>
<td>[V ] [F] [Par]</td>
<td>ge-kann-t</td>
<td></td>
</tr>
</tbody>
</table>

\[C_y : +low / \_
\]  
\[T +Past: /-t/ \]
\[T: /-n/ /\_
\infin\]
\[Par: -d / V \_
\]  
\[Par: ge- \]
Unified infinite -n (cf. Sternefeld, 2006)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Past participle</td>
<td>ge-sung-\textit{en}</td>
</tr>
<tr>
<td>Present Participle</td>
<td>sing-\textit{en}-d</td>
</tr>
<tr>
<td>Infinitive</td>
<td>sing-\textit{en}</td>
</tr>
</tbody>
</table>

⇒ T : /-\textit{n}/
Wiese’s Generalization

<table>
<thead>
<tr>
<th>Infinitive</th>
<th>Past participle</th>
<th>Past finite (2sg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>schweb-en</td>
<td>ge-schweb-t</td>
<td>schweb-te-st</td>
</tr>
<tr>
<td>geb-en</td>
<td>ge-geb-en</td>
<td>ab-st</td>
</tr>
<tr>
<td>schieb-en</td>
<td>ge-schob-en</td>
<td>schob-st</td>
</tr>
<tr>
<td>sing-en</td>
<td>ge-sung-en</td>
<td>ang-st</td>
</tr>
<tr>
<td>*teb-en</td>
<td>*ge-tab-en</td>
<td>*teb-st</td>
</tr>
</tbody>
</table>

Ablaut in past participle implies ablaut in past finite forms
No allomorphy of +Past specific to infinite (participle) forms:

- Fin is a privative feature
- Part/P is not adjacent to Tense
Deriving Wiese’s Generalization

Three Possibilities for +Past:

<table>
<thead>
<tr>
<th>Allomorph sensitive to Class + Fin</th>
<th>⇒</th>
<th>Ablaut in past finite forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allomorph sensitive to Class</td>
<td>⇒</td>
<td><strong>Same</strong> Ablaut in past finite and past participle forms</td>
</tr>
<tr>
<td>Allomorphs of both types</td>
<td>⇒</td>
<td><strong>Different</strong> Ablaut in past finite and past participle forms</td>
</tr>
</tbody>
</table>
The Allomorphic Sensitivity Asymmetry

Ablaut is sensitive to Tense, but not to Agr

Umlaut is sensitive to Agree, but not to Tense
Deriving the Allomorphic Sensitivity Asymmetry

Past Finite Forms

\[
[[[[\text{Class}_V] \ Tense] \ Fin] \ Agr
\]

Present Finite Forms

\[
[[[[\text{Class}_V] \ Agr]
\]

Jochen Trommer  Blocking, Intervention and Ablaut in German Verb Inflection
## Summary

<table>
<thead>
<tr>
<th>Observation</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ablaut blocks past -t</td>
<td>Both realize [+Past]</td>
</tr>
<tr>
<td>-t and -n block each other</td>
<td>Both realize [T]</td>
</tr>
</tbody>
</table>
| Ablaut, ge-, -and n don’t block each other | Ablaut realizes [+Past]  
|                                          | ge- realizes [Part]                             |
| Umlaut and Agreement don’t block each other | Umlaut and Affixes  
|                                          | realize different Agr-features                  |
| Exceptional Non-Blocking of Ablaut and -t | Ablaut realizes Class                            |
Summary

Distribution of Ablaut is governed by featural blocking and locality