

17. BEGLEITBLATT

13.5 The FORM Feature

13.5.1 FORM Values for Verbs

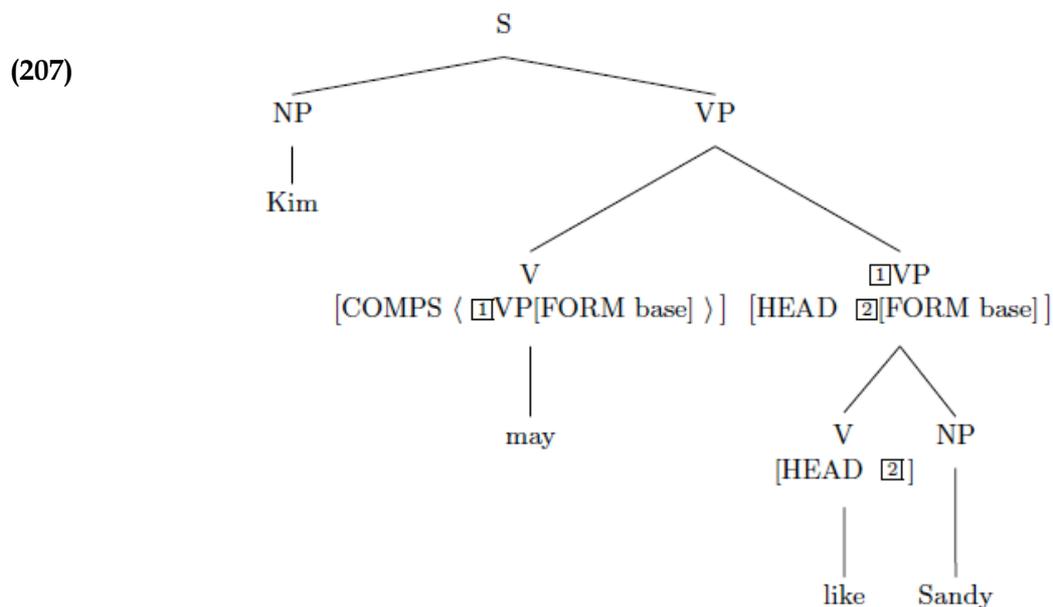
Nicht jede Verbform passt - mal ganz unabhängig von geltenden Kongruenzbedingungen - in jeden syntaktischen Kontext:

- (205)
- a. Kim may $\left\{ \begin{array}{l} \text{leave} \\ * \text{leaves} \\ * \text{leaving} \\ * \text{left} \end{array} \right\}$.
 - b. Kim has $\left\{ \begin{array}{l} * \text{leave} \\ * \text{leaves} \\ * \text{leaving} \\ \text{left} \end{array} \right\}$.
 - c. Kim $\left\{ \begin{array}{l} * \text{leave} \\ \text{leaves} \\ * \text{leaving} \\ \text{left} \end{array} \right\}$.

(206) Neue Werte für FORM bei Verben

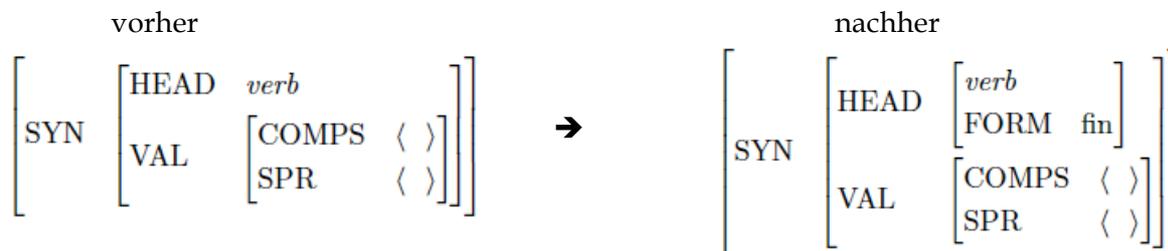
- [FORM base] : für den Infinitiv *eat, send, talk...*
- [FORM fin] : für finite Verbformen *ate, sends...*
- [FORM prp] : „Present Participle“ *eating, sending, talking...*
- [FORM psp] : „Past Participle“ *eaten, sent, talked...*
- [FORM pass] : „Passive“ *eaten, sent, talked...*

FORM ist ein HEAD-Merkmal

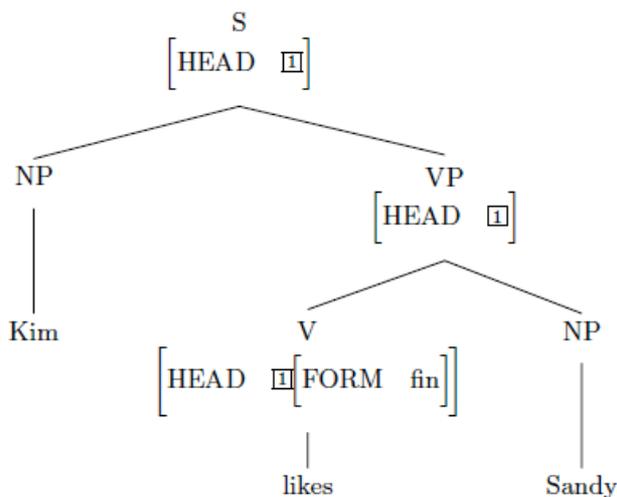


Es soll fortan jetzt gelten, dass Sätze ein finites Verb als Kopf haben. Der Satzbegriff wird also präzisiert und eingeschränkt:

(208)



(209)



13.5.2 FORM and Coordination

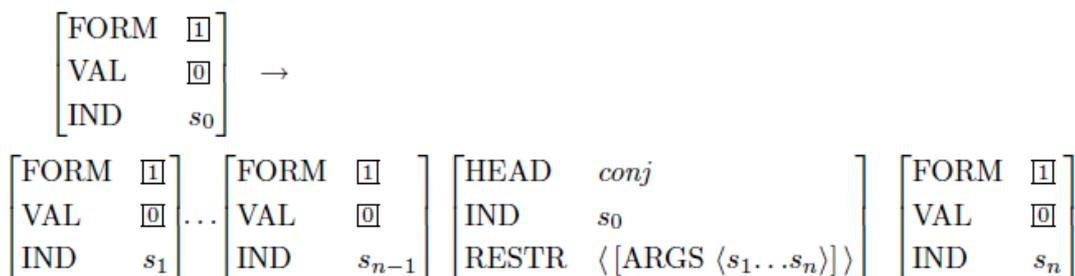
Auch für die Koordination gilt jetzt, dass die Konjunkte in ihrem FORM-Merkmal übereinstimmen müssen:

(210)

- a. Dana walked and Leslie ran.
- b. *Dana walking and Leslie ran.
- c. *Dana walked and Leslie running.
- d. *Dana walking and Leslie running.

(211)

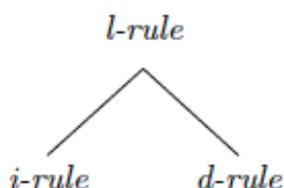
Coordination Rule (Chapter 8 Version)



13.6 Lexical Rules

Lexikalische Regeln (LR) sind - prozedural formuliert - Regeln die Lexeme (*lexemes*) als Input nehmen und Wortformen (*words*) als Output produzieren. Gewöhnlich haben Regeln die Form $X \rightarrow Y$. SWB wählen jedoch eine andere Form. LR werden als Merkmalsstrukturrepräsentation angegeben, die die Merkmale INPUT und OUTPUT enthalten.

- (212) **Zwei Arten von lexikalischen Regeln (lexical -rules):**
inflectional & derivational rules



- (213) **constraint für lexical rules:**

$$l\text{-rule} : \left[\begin{array}{l} \text{INPUT} \quad l\text{-sequence} \langle X, [\text{SEM} / \boxed{2}] \rangle \\ \text{OUTPUT} \quad l\text{-sequence} \langle Y, [\text{SEM} / \boxed{2}] \rangle \end{array} \right]$$

13.7 Inflectional Rules

- (214)

$$i\text{-rule} : \left[\begin{array}{l} \text{INPUT} \quad \left\langle X, \left[\begin{array}{l} \textit{lexeme} \\ \text{SYN} \quad \boxed{3} \\ \text{ARG-ST} \quad \boxed{A} \end{array} \right] \right\rangle \\ \text{OUTPUT} \quad \left\langle Y, \left[\begin{array}{l} \textit{word} \\ \text{SYN} \quad \boxed{3} \\ \text{ARG-ST} \quad \boxed{A} \end{array} \right] \right\rangle \end{array} \right]$$

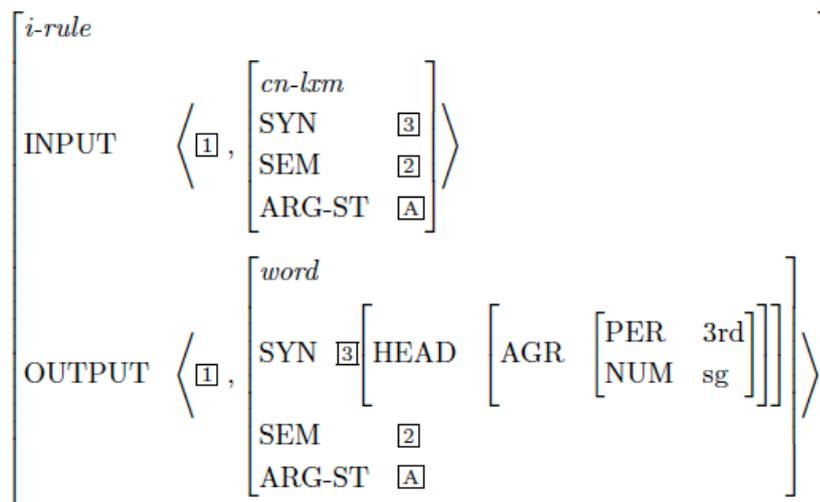
13.7.1 Rules for Common Noun Inflection

- (215) **Singular Noun Lexical Rule**

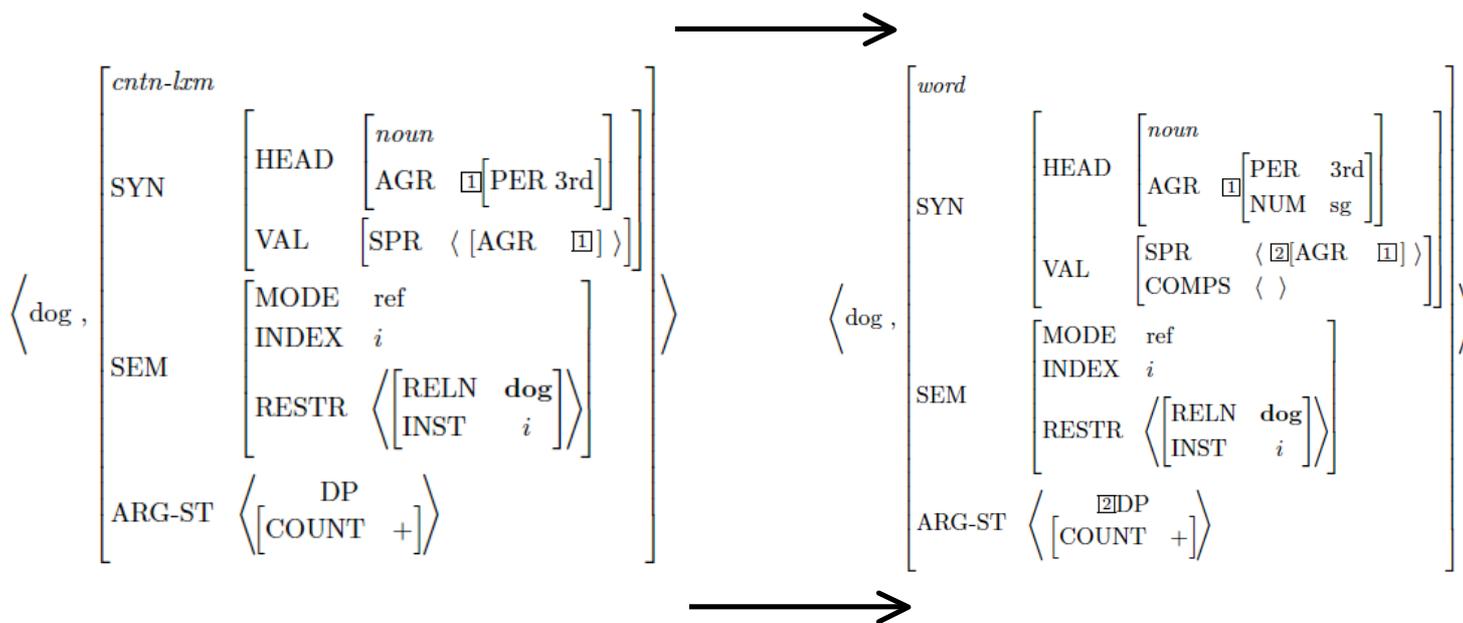
$$\left[\begin{array}{l} i\text{-rule} \\ \text{INPUT} \quad \langle \boxed{1}, \textit{cn-lex} \rangle \\ \text{OUTPUT} \quad \langle \boxed{1}, \left[\text{SYN} \left[\text{HEAD} \left[\text{AGR} \left[\text{NUM sg} \right] \right] \right] \right] \rangle \end{array} \right]$$

Für die lexikalischen Regeln gilt ebenfalls der Default-Vererbungsmechanismus:

(216) Singular Noun Lexical Rule (with inherited constraints)

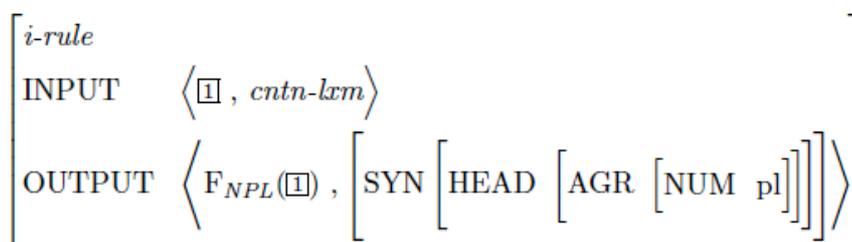


(217) Beispiel für die Wirkung der SNLR-Regel



(218) Plural Noun Lexical Rule

Mit „F_{NPL}“ wird eine morphologische Funktion bezeichnet, die eine Singularform als Argument der Funktion nimmt und eine Pluralform als Funktionswert ausgibt:



(219)

X	$F_{NPL}(X)$
child	children
ox	oxen
woman	women
fish	fish
index	indices
....	...
(otherwise)	X -s

(220) Plural Noun Lexical Rule and inherited constraints

$$\left[\begin{array}{l}
 \textit{i-rule} \\
 \text{INPUT} \left\langle \boxed{1}, \left[\begin{array}{l} \textit{cntn-lxm} \\ \text{SYN} \quad \boxed{3} \\ \text{SEM} \quad \boxed{2} \\ \text{ARG-ST} \quad \boxed{A} \end{array} \right] \right\rangle \\
 \text{OUTPUT} \left\langle F_{NPL}(\boxed{1}), \left[\begin{array}{l} \textit{word} \\ \text{SYN} \quad \boxed{3}[\text{HEAD} \quad [\text{AGR} \quad [\text{NUM} \quad \text{pl}]]] \\ \text{SEM} \quad \boxed{2} \\ \text{ARG-ST} \quad \boxed{A} \end{array} \right] \right\rangle
 \end{array} \right]$$

13.7.2 Rules for inflected Verbal Words

(221) 3rd-Singular Verbal Lexical Rule

$$\left[\begin{array}{l}
 \textit{i-rule} \\
 \text{INPUT} \left\langle \boxed{3}, \left[\begin{array}{l} \textit{verb-lxm} \\ \text{SEM} \quad [\text{RESTR} \quad \boxed{A}] \end{array} \right] \right\rangle \\
 \text{OUTPUT} \left\langle F_{3SG}(\boxed{3}), \left[\begin{array}{l} \text{SYN} \quad \left[\text{HEAD} \quad \left[\begin{array}{l} \text{FORM} \quad \textit{fin} \\ \text{AGR} \quad \textit{3sing} \end{array} \right] \right] \right] \\ \text{SEM} \quad [\text{RESTR} \quad \boxed{A} \oplus \dots] \\ \text{ARG-ST} \quad \langle [\text{CASE} \quad \textit{nom}], \dots \rangle \end{array} \right] \right\rangle
 \end{array} \right]$$

(222) Non-3rd-Singular Verb Lexical Rule

$$\left[\begin{array}{l}
 \textit{i-rule} \\
 \text{INPUT} \left\langle \boxed{1}, \left[\begin{array}{l} \textit{verb-lxm} \\ \text{SEM} \quad [\text{RESTR} \quad \boxed{A}] \end{array} \right] \right\rangle \\
 \text{OUTPUT} \left\langle \boxed{1}, \left[\begin{array}{l} \text{SYN} \quad \left[\text{HEAD} \quad \left[\begin{array}{l} \text{FORM} \quad \textit{fin} \\ \text{AGR} \quad \textit{non-3sing} \end{array} \right] \right] \right] \\ \text{SEM} \quad [\text{RESTR} \quad \boxed{A} \oplus \dots] \\ \text{ARG-ST} \quad \langle [\text{CASE} \quad \textit{nom}], \dots \rangle \end{array} \right] \right\rangle
 \end{array} \right]$$

(223) Past-Tense Verb Lexical Rule

$$\left[\begin{array}{l}
 \textit{i-rule} \\
 \text{INPUT} \quad \left\langle \boxed{3}, \left[\begin{array}{l} \textit{verb-lxm} \\ \text{SEM} \quad \left[\text{RESTR} \quad \boxed{A} \right] \end{array} \right] \right\rangle \\
 \text{OUTPUT} \quad \left\langle F_{\text{PAST}}(\boxed{3}), \left[\begin{array}{l} \text{SYN} \quad \left[\text{HEAD} \quad \left[\text{FORM} \quad \text{fin} \right] \right] \\ \text{SEM} \quad \left[\text{RESTR} \quad \boxed{A} \oplus \dots \right] \\ \text{ARG-ST} \quad \left\langle \left[\text{CASE} \quad \text{nom} \right], \dots \right\rangle \end{array} \right] \right\rangle
 \end{array} \right]$$

13.7.3 Uninflected Words**(224) Constant Lexeme Lexical Rule**

$$\left[\begin{array}{l}
 \textit{i-rule} \\
 \text{INPUT} \quad \left\langle \boxed{1}, \textit{const-lxm} \right\rangle \\
 \text{OUTPUT} \quad \left\langle \boxed{1}, X \right\rangle
 \end{array} \right]$$

13.8 Derivational Rules

$$\text{(225)} \quad \left[\begin{array}{l}
 \textit{d-rule} : \\
 \text{INPUT} \quad \left\langle X, \left[\begin{array}{l} \textit{lexeme} \\ \text{SYN} \quad / \boxed{3} \end{array} \right] \right\rangle \\
 \text{OUTPUT} \quad \left\langle Y, \left[\begin{array}{l} \textit{lexeme} \\ \text{SYN} \quad / \boxed{3} \end{array} \right] \right\rangle
 \end{array} \right]$$

(226) Agent Nominalization Lexical Rule

$$\left[\begin{array}{l}
 \textit{d-rule} \\
 \text{INPUT} \quad \left\langle \boxed{2}, \left[\begin{array}{l} \textit{stv-lxm} \\ \text{SEM} \quad \left[\text{INDEX} \quad s \right] \\ \text{ARG-ST} \quad \langle X_i, NP_j \rangle \end{array} \right] \right\rangle \\
 \text{OUTPUT} \quad \left\langle F_{-er}(\boxed{2}), \left[\begin{array}{l} \textit{cntn-lxm} \\ \text{SEM} \quad \left[\text{INDEX} \quad i \right] \\ \text{ARG-ST} \quad \left\langle Y \left(\left[\text{FORM} \quad \text{of} \right] \right), PP_j \right\rangle \right] \right\rangle
 \end{array} \right]$$

(B412) *Der Kapitän nieste.*

(B413) *Der Kapitän nieste den Kompass vom Tisch.*

(B414) *Der Kapitän tanzte.*

(B415) *Der Kapitän tanzte die Mannschaft ins Meer.*

(233) Resultativ

(B416) *Der Kapitän schlug den Maat.*

(B417) *Der Kapitän schlug den Maat krankenhausreif.*

.....

(234) Present Participle Rule

(B418) *Kim is standing there.*

Present Participle Lexical Rule

$$\left[\begin{array}{l}
 \textit{d-rule} \\
 \text{INPUT} \left\langle \boxed{\text{3}}, \left[\begin{array}{l} \textit{verb-lxm} \\ \text{SEM} \quad [\text{RESTR} \quad \boxed{\text{A}}] \\ \text{ARG-ST} \quad \boxed{\text{B}} \end{array} \right] \right\rangle \\
 \text{OUTPUT} \left\langle \text{F}_{\text{PRP}}(\boxed{\text{3}}), \left[\begin{array}{l} \textit{part-lxm} \\ \text{SYN} \quad [\text{HEAD} \quad [\text{FORM} \quad \text{prp}]] \\ \text{SEM} \quad [\text{RESTR} \quad \boxed{\text{A}} \oplus \dots] \\ \text{ARG-ST} \quad \boxed{\text{B}} \end{array} \right] \right\rangle
 \end{array} \right]$$

(235) Past Participle Rule

(B419) *Sandy has eaten dinner.*

$$\left[\begin{array}{l}
 \textit{d-rule} \\
 \text{INPUT} \left\langle \boxed{\text{3}}, \left[\begin{array}{l} \textit{verb-lxm} \\ \text{SEM} \quad [\text{RESTR} \quad \boxed{\text{A}}] \\ \text{ARG-ST} \quad \boxed{\text{B}} \end{array} \right] \right\rangle \\
 \text{OUTPUT} \left\langle \text{F}_{\text{PSP}}(\boxed{\text{3}}), \left[\begin{array}{l} \textit{part-lxm} \\ \text{SYN} \quad [\text{HEAD} \quad [\text{FORM} \quad \text{psp}]] \\ \text{SEM} \quad [\text{RESTR} \quad \boxed{\text{A}} \oplus \dots] \\ \text{ARG-ST} \quad \boxed{\text{B}} \end{array} \right] \right\rangle
 \end{array} \right]$$