



New High German so-called “unparadigmatic” interfixation as a matter of paradigmaticity

Martina Werner, LMU Munich

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Warming up

Examples of nominal compounds in NHG with:

(a) so-called „paradigmatic“ interfixes:

Büch-er-tisch ,table with books‘ -> ~ PL

Jahr-es-tag ,anniversary‘ -> ~ GEN.SG.

(b) so-called „un-paradigmatic“ interfixes:

Asche-r-mittwoch ,Ash Wednesday‘ -> no PL

diachronically: vernacular PL (Kluge 2002)

Schön-heit-s-operation -> no GEN.SG.

,plastic surgery‘, lit.: ,operation for beauty‘

First constituent: unanswered questions

- Which word class? N, V, Adj?
- If it is a N: role of morphology?
 - Quantification: Mass Noun, Count Noun, ... -> only CN can be put in the PL
 - Markedness: derived: y/n?
 - semantics: *-er*-nominalisations for instance create nomina agentis, instrumenti, acti: any differences?
 - gender: traditional criterion of classifying nouns => application to interfixation

[suffixed N + interfix]-compounds as a matter of affix order

- Linguistic description shows a strong theoretical parallel:
 - finding a function of **gender**
 - finding a function of **interfixation**
- > One has to separate between paradigmatic organised nouns (with a transparent morphological structure) and lexicalised nouns (opaque)
- > **separation between productive grammatical forms** („paradigmatic“ forms) vs. **unproductive, lexicalised forms** („un-paradigmatic“ forms)
- -> rejection of „un-paradigmaticity“
=> looking for **motivated patterns**:
[[derived noun + interfix]+ N]

Structure of this talk

Productively suffixed, feminine nouns in NHG obligatorily select interfixes when being first constituents. Therefore, feminine gender can be seen as a trigger for the so-called „un-paradigmatic“ interfixation (> interfix -s-) in NHG.

This raises the following questions:

- What and why is grammatical gender?
- How is grammatical gender encoded? The role of suffixation (Wegener 2000, Leiss 2005)
- Interfixation: Where is it (not) and why?
- Affix order: Combining gender suffixes and interfixes
- Functional explanation for productive -s-interfixation

Former research

- Interfixes in NHG especially appear behind derived nouns with **certain suffixes** (see Aronoff/Fuhrhop 2002 so-called „re-opening“ for further morph. processes; Wegener 2003, Nübling et al. 2008, and others).
- Problem: no **functional** explanation, but several ‚explanations‘ offering different reasons (e.g. „morphologisation“ (Fuhrhop 2000), phonology, ...)
- Need of a purely morphological framework based on formal, grammatical (morphosyntactic) criteria

Idea of this talk: Morphology, and therefore, interfixation can be described in terms of **nominal quantification**.

General introduction: gender <-> interfixation

Firstly observed in the 19th century by Jean Paul (1804), who made the following observations:

1. fem. gender <=> interfix -s
2. deverbal, derived nouns (with *-ung*) can easily be replaced by a verbal stem
3. rejection of a purely phonological explanation
4. role of word-class of the first constituent

Jean Paul (1804)

„Aber mit dem **weiblichen Geschlecht** springt man, wie auch außerhalb der Sprachlehre, sündlich-unregelmäßig um, zumal da man den Wörtern auf *schaft*, *heit*, *keit*, *ung*, *ion* ein männliches Genitiv-s anheftet, das dadurch seine Unstatthaftigkeit nicht durch den Namen Biegung-S oder Biegung-s verliert. [...]“

Wohllaut allein war hier nicht der Ab- und Zusprecher; dagegen spricht Vernunftlehrer und Auskunftsmittel (mit seinem artigen Mitlauter-Quintett *nftsm*) oder die langen: Gerechtigkeitspflege, Beschimpfungswort etc. [...]“

Die Bestimmwörter auf *ung*, z.B. Bestimmungswörter, reichen eine kleine Hülfe. **Wozu nämlich denn die Substantiv-Endigung *ung*, da wir ja dem Zeitwort bloß den Infinitiv abzuschneiden brauchen; also nicht Denkungs-, Heilungskraft sagen sollen, sondern Denk-, Heilkraft; [...] “**

[Jean Paul: Vorschule der Ästhetik, p. 481. Digitale Bibliothek Band 1: Deutsche Literatur, p. 54329, emphasis added by M.W.]

What is grammatical gender?

- Several approaches since early 19th century
- In languages with gender, every noun possesses **inherently** a certain gender : German *Baum* ‘tree’: MASC / *FEM / *NTR
- Grammatical gender (genus) has to be distinguished from biological gender (so-called “sexus”).
- No regularity could be found concerning the question of why certain nouns belong to a certain gender class, gender in current linguistic research is defined of being a **purely formal category**.

Formal-functional approach to gender (I)

The function of gender is agreement:

German: *d-er* *schön-e Baum*
 DET.M. ADJ.M. N:M

- Problem 1: languages like Arabic (gender, but no agreement in the NP)
- Problem 2: other nominal categories (like number, case) also provide agreement
- Problem 3: Agreement is not a grammatical function in the narrower sense.

Formal-functional approach to gender (II)

- Especially in recent times, grammatical gender is considered as being a **category for nominal quantification** (cf. Vogel 1996, Leiss 1997, 2005, Weber 2001, Froschauer 2003, Balles 2004, Siemund 2008, and many others, following Brugmann 1897).
- Greenberg (1963), universal # 36:
Gender > Number

Common ground of gender and number: mass-/count distinction

[- homogenous]

vs. [+ homogenous]

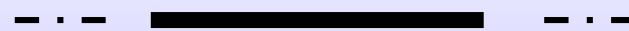


house

[- additive]

[- divisible]

-> **count noun**



sand

[+ additive]

[+ divisible]

-> **mass noun**



houses

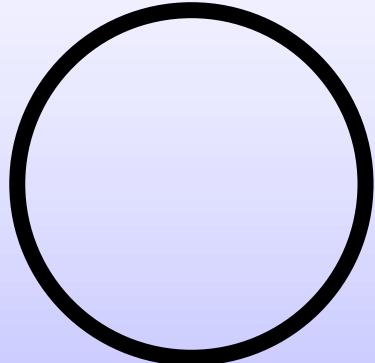


sand

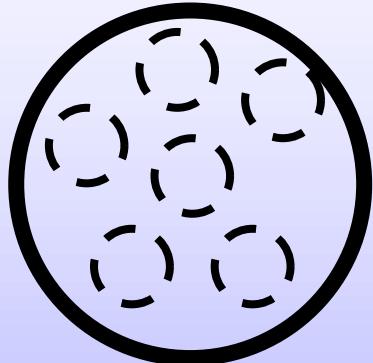
(cf. Krifka 1986 with respect to number)

Gender and countability

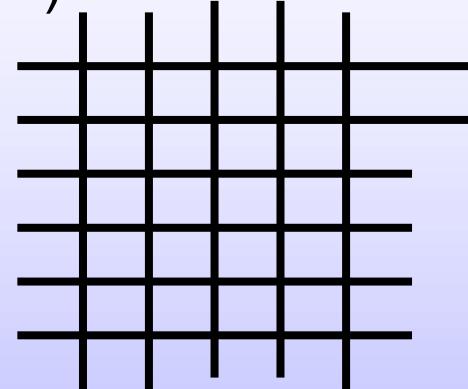
Visualisation (following Bittner 2002: 211)



masculine
individuative
[+ count]
der Lacher
'a single laugh'



feminine
collective/abstr.
[+ iterative]
die Lacherei
'laughing'



neuter
continuative
[- count]
das Lachen
'laughing'

Some examples of multiple gender in OHG

- *luft*, 3 genders:
‘wind gust’ MASC
‘air’ NTR
‘heaven, summary of airs’ FEM
 - *buoh*, 3 genders:
,code‘ MASC
,chapter‘ NTR
,Holy Bible, literary work‘ FEM
- > Systematic gender variation within one and the same text(s) (Froschauer 2003).

Parallel processes

- The OHG multiple gender system has ceased to exist. In NHG, gender variation does not exist (apart from 1-2 nouns, cf. Talanga 1987).
- For late OHG, a strong increase of nominal suffixes can be attested (Froschauer 2003).
- Nominal suffixes (so-called “gender-markers“, Wegener 2000) carry the function of inherited gender systematicity in terms of a process of grammaticalisation (Leiss 2005).

Morphological patterns in NHG

Paradigmatic organisation (following Leiss 2005; **bold**: suffixes):

<i>Schrei-</i>	\emptyset	,cry‘	MASC
	-en	,crying‘	NTR
	-erei	,crying‘	FEM
<i>Schreib-</i>	-er	,writer‘	MASC
	-en	,writing‘	NTR
	-ung/-erei	,spelling/writing‘	FEM
<i>Lustig-</i>	-er	,s.o./s.th.funny‘	MASC
	-es	,s.th. funny‘	NTR
	-keit	,funnyness‘	FEM

Suffixes combining with interfix -s- ?

- **-ling:** *Liebling-s-essen* ,favourite dish‘
- **-sal:** *Schicksal-s-melodie* ,melody of fate‘
- **-schaft:** *Schwangerschaft-s-vertretung* ,substitution during pregnancy‘
- **-tum:** *Altertum-s-forscher* ,researcher on antiquity‘
- **-ität:** *Grammatikalität-skriterium* ,criterion of grammaticality‘
- **-ion:** *Religion-s-unterricht* ,religious education‘
- **-ung:** *Umgeh-ung-s-straße* ,by-pass‘
- **-heit/-ig)keit:** *Schön-heit-s-operation* ,operation for beauty
(Aronoff/Fuhrhop 2002, Wegener 2003, Nübling et al. 2008: 4, and others)

Problems with this approach (I)

Not each of these suffixes mentioned is (fully) productive anymore in NHG. This holds for:

-ling: **Cool-ling*, **Hässlich-ling*, **Klug-ling*, **Fahrling*, but *ein Cooler / Hässlicher / Kluger / Fahrer* -> unproductive suffix (Kluge 2002)

-sal: *Scheusal*, but **Schönsal* -> unproductive suffix (Kluge 2002).

-schaft/-tum: restrictions: derives only some personal nouns (-> “semi-lexicalisation”)

-ion/-tät: non-native suffixes do not derive native stems (Aronoff 1976, Corbin et al. 1997), but productive native/“nativised“ suffixes do: *Grammatikalisierung / Grammatikal-isierung, Absurdität / Absurdheit; Cool-ness / Cool-heit*, but not: **Schön-ness / Schön-heit*

=> morphological criterion of a ‚real‘, productive suffix: non-nativity of a stem does not play any role.

Problems with this approach (II)

- Some inherited but semantically productive patterns of suffixation do not provoke interfixation (*Lehrer-zimmer*, 'room for teachers', *Bohrer-spitze*, 'top of a drill').
- Some derived nouns within the same suffixal pattern avoid being first constituent of a compound such as **deverbal nomina acti** with -er: **Jodlerversuch*, but *Jodel-versuch*, **Räuspererpause*, but *Räusperpause*, 'break because of throat clearing'
- -> (de)verbal first constituents are verbal stems, this holds also for the though highly productive patterns of conversion: *Turnschuh*/**Turnen-s-schuh*, *Laufband*/**Laufen-s-band*. Exceptions: only extremely old conversions, already observed in OHG times such as *Leben*, *Essen* => *Leben-s-versicherung*, *Essen-s-ausgabe*
- Some derived nouns (such as *Schwangerschaft*) are synchronically not transparent anymore (<-> diachrony)

Solution:

Looking for motivated patterns in NHG

Where is interfixation: the role of parts-of-speech (I)

Deverbal N as first constituents:

- **?-erei**: ?**Schreiberei**-situation ,situation of writing‘
- ***Ge-...-e**: ***Geschreibe**-situation
- **-ung+-s**: **Umgeh-ung-s-straße** ,by-pass‘
- **-er**: ok with n. agentis/instrumenti: **Lehrer-zimmer** ,room for teachers‘, **Bohrer-set** ,set with drills‘, but not with nomina acti: ?**Räusperer-pause** ,break because of throat clearing‘
- conversions: no NHG examples: ***Turnen-s-schuh**, but **Turn-schuh**,sneaker‘ (ex.like *Leben* mostly from diachrony)
- > tendency to take verbal stems: **Schreib**-situation, **Räusper**-pause, **Lauf**-band

Where is interfixation: the role of parts-of-speech (II)

Deadjectival N as first constituents:

- **-heit, -keit, -igkeit**: obligatorily with **-s-** interfix, consider:

Schönheit-s-*operation* lit., operation for beauty‘
Hässlichkeit-s-*test* , test of ugliness‘

Knabenhafzigkeit-s-*ideal* , ideal of boyishness‘

- **-er**: no examples: *ein Klug-er* = inflection!
-ling: not productive in NHG: **Chatling*,
**Fahrling*, but: *Chatter*, *Fahrer* , driver‘

Where is interfixation: the role of parts-of-speech (III)

Denominal N as first constituents:

- Collective nouns with *-schaft* and *-tum* take the *-s*-interfix:

?*Studenten-schaft*-s-*demo* ,demonstration of
?*Studenten-tums*-s-*demo* student body‘

But there are semantic restrictions:

**Bäumeschaft*, **Wellensittichschaft*,
?*Chatterschaft*
-> strong tendency of being/becoming
inproductive

Intermediate conclusion: [NHG derivation + interfixation]

- **deverbal**: *-er; (-ung); -erei, Ge-...-e*:
restrictions; preference of taking the verbal stem
- **denominal**: *-schaft/-tum*:
restrictions; not fully or really productive
-> but take the *-s-*
- **deadjectival**: *-heit, -keit, -igkeit*; (**not -ling!**)
fully productive in NHG
-> *-heit* with adjectival bases and past participles:
schön > Schönheit, verloren > Verlorenheit lit.:
'lostness'
-> *-keit* and *-igkeit* with (pseudo)suffixed adjectives:
lustig > Lustig-keit lit.: 'funniness'
knabhaft > Knabenhaf-igkeit lit.: 'boyishness'

Conclusion and outlook I

- NHG productively derived, feminine nouns paradigmatically select interfix *-s-* (see also Nübling et al. 2008).
- This does not hold for other genders. Productively formed masculine nouns with {-er} show restrictions concerning appearing as 1st constituents: only nomina agentis and instrumenti (not acti) act as first constituents (possessive relation, but without interfix). No neuter (deverbal) nouns (conversions, circumfixations) act as first constituents.
- Only the suffix *-erei* forms fem. N, but these N do not appear as first constituents of compounds
But: deverbal nouns in general avoid the first position (see next slide). The same holds for pejorative nouns (consider also circumfixation!).

Conclusion and outlook II

- Tendency in diachrony: Deverbal (derived) N are continuously replaced by verbal stems. If the productivity of the suffix *-ung* has come to an end (which Demske 2000, and Werner, to app., assume), one can argue **that abstract activity nouns in principle avoid being first constituents of compounds** (**Räuspererpause*. This rule also integrates the question of the ‚dubious‘ *-erei*-nouns).
- **Property nouns** in contrast do not display such a restriction. They **can act as first constituents, obligatorily interfixed**, in NHG (*Schönheit-s-operation*) although adjectival stems cannot (**Cool-lehrer*, but *cooler Lehrer* ‚cool teacher‘; **Schönblume*, but *schöne Blume* ‚beautiful flower‘).

Conclusion and outlook III

- Considering the quantifying role of the suffixes: FEM collective/iterative [\pm count], MASK [+count], NTR [count], **interfixation in principle can be interpreted as a matter of quantification.**
- Etymology: Traditionally “paradigmatic” interfixes go back to PL or genitive morphemes -> both quantifying categories!
- The interfix *-s* itself as an old genitive marker has/had a quantifying function: MHG *des wazzers* ‘some water’, NHG *Gefroren-es*, *Schweinern-es* (partitivity as one function of the genitive).
- Interpretation: The **interfix *-s*** in this regard **neutralises more complex forms of gender quantification (abstractness)** in NHG.

Conclusion and outlook IV

- Further research would be required, especially in order to elucidate diachronical developments and in order to find more covert patterns of quantifying interfixation.
- Theory and axiomatics of (nominal) quantification („mereology“) can serve as a tool for describing and explaining matters of affix order.

~ THANKS! ~

➤ martina.werner@germanistik.uni-muenchen.de

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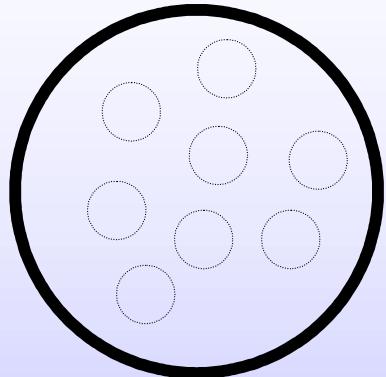
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Affix order(s)

- *-heit/-keit/-igkeit* + *-s-* for property N
- *-ung*: not fully productive anymore (**Hustung*, **Chattung*)
- *-erei*: pejoration leads to semantic restrictions
- Productively derived deverbal N in NHG avoid being first constituents of a compound. This holds for all gender classes.
- Property nouns appear at first position. This is relatively exotic (consider English!) and goes back to a diachronical development where simple count nouns were marked by interfixes (Werner, to app.)

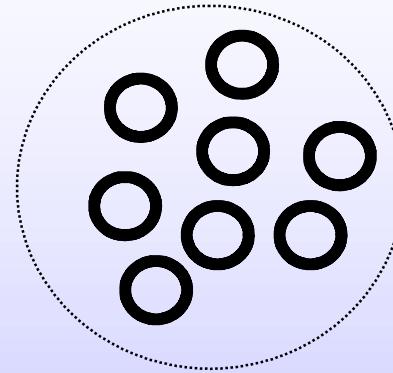
Feminine vs. neuter collectives



FEMININE
[+ iterative],
but primarily [+ count]

SG: *Studentenschaft*
PL: *Studentenschaften (aus aller Welt)*

SG: *Schlägerei*
PL: *Schlägereien*



NEUTER
[+ iterative],
but primarily [- count]

SG: *Studententum*
PL: **Studententümer (aus aller Welt)*
SG: *Geschlage*
PL: **Geschlage*