

# Dependents of German Indefinite Pronouns: from Genitive to Concord

Christopher D. Sapp & Dorian Roehrs  
 University of Mississippi & University of North Texas  
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## 1. Introduction

### 1.1 Main Claims

The group of words traditionally called “indefinite” pronouns (IndPron) can be semantically existential or universal and can be etymologically simplex or complex:

Original compositionality	Complex pronoun			Simplex pronoun	
	Q+noun	Q+pron.	Q+adj.		
Old/Middle High German	<i>ni+wiht</i>	<i>et+waz</i>	<i>io+wether</i>	<i>al</i>	<i>vil</i>
Modern German	<i>nichts</i> 'nothing'	<i>etwas</i> 'something'	<i>jeder</i> 'every'	<i>alles</i> 'all'	<i>viel</i> 'much'
Other modern examples	<i>niemand</i> 'nobody' <i>jemand</i> 'someone'				<i>wenig</i> 'little'
(Current) semantics	existential		universal		existential

IndProns can occur with a dependent (DEP) N and/or Adj, or DP. In the history of German:

- the DEP changed from genitive case (1a-b), facilitated by ambiguous forms (1c), to concord with the IndPron (1d).
- there was a strong correlation between case and word order: DEP could precede IndPron if DEP was genitive (1a) but not when the two agreed (2):

- (1) a. DEP<sub>GEN</sub> IndPron: *anders etwaz* (14th cent.)  
 other-GEN something (*OxBR*)  
 b. IndPron DEP<sub>GEN</sub>: *mit etwas susses* (15th cent.)  
 with something sweet-GEN (*Pillenreuth*)  
 c. IndPron DEP<sub>GEN/CON</sub>: *etwas merglichs* (15th cent.)  
 something strange-GEN/CON (*Rothe Chronik*)  
 d. IndPron DEP<sub>CON</sub>: *mit etwas Süßem* (Modern German)  
 with something sweet-DAT

- (2) \* DEP<sub>CON</sub> IndPron

- (3) (1a) —reordering—> (1b) —reanalysis—> (1d)

Main Claims:

- The loss of the genitive and changes in the word order within the DP are both a consequence of the reanalysis of the DEP from Spec,QP to a position on the right.
- The semantics of the different IndProns regulated the timing of the change (with the universal *al* going first), but the internal structure of the IndPron led to different structural relations between the IndPron and its DEP in Modern German.

Corpora:

- Old High German (OHG; 700-1050): *Tatian, Isidor, Otfrid* in TITUS database
- Middle High German (MHG; 1050-1350): tagged *Bochum Mittelhochdeutsch Korpus* (prose texts only; 9,000 IndProns with a DEP).
- Early New High German (ENHG; 1350-1650): tagged *Bonner Frühneuhochdeutsch-Korpus* (4,000 IndProns with a DEP).
- Modern Standard German: native speaker intuitions plus some Google searches

## 1.2 Assumptions and Proposal

Nouns assign genitive to their dependents, which could precede (4a,c) or follow (4b,d):

- (4)
- |    |                                |  |
|----|--------------------------------|--|
| a. | <i>evangeliono deil</i>        | (OHG)  |
|    | gospel-GEN.PL part             | ( <i>Otfrid</i> , cited in Behaghel 1932: 487) |
| b. | <i>ein hufo steino</i>         | (OHG)  |
|    | a pile stone-GEN.PL            | ( <i>Notker</i> , <i>ibid.</i> )               |
| c. | <i>des honiges übermaz</i>     | (12th cent.)                                   |
|    | the.GEN honey.GEN excess       | ( <i>Leys.Pred.</i> , <i>ibid.</i> )           |
| d. | <i>der hufe der guottaete</i>  | (13th cent.)                                   |
|    | the pile the.GEN.PL good-deeds | ( <i>Berthold</i> , <i>ibid.</i> )             |

Like nouns, IndProns could assign genitive in the older varieties:

- Both Ns (5a) and IndProns (5c) no longer allow preceding DEPs in genitive (cf. 1a, 4c)
- Unlike IndProns, Ns continue to assign genitive, (5b) vs. (5d):

- (5)
- |    |                                |                 |
|----|--------------------------------|-----------------|
| a. | * <i>des Honigs (ein) Teil</i> | (Modern German) |
|    | the.GEN honey.GEN a part       |                 |
| b. | <i>ein Teil des Honigs</i>     |                 |
| c. | * <i>des Honigs etwas</i>      |                 |
|    | the.GEN honey.GEN some(thing)  |                 |
| d. | * <i>etwas des Honigs</i>      |                 |

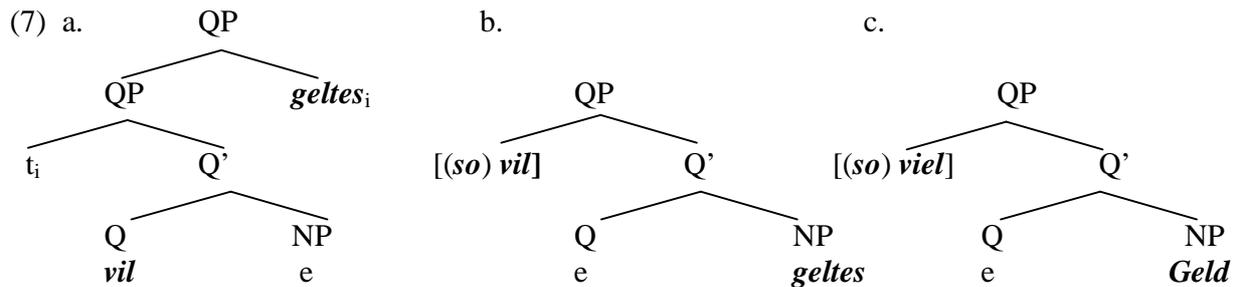
Assumptions:

- There is only one case assigner per nominal.
- Case assignment is under adjacency (local: Spec-head, head-complement).
- IndProns involved a quantifying element in Q, which assigned case to its Spec:
  - Simplex IndProns (*al, vil*) were in Q, with a null N.
  - Complex IndProns were composed of a Q head (*ni-, et-, io*) and an overt N (*io+man*, etc), D (*et+waz*) or Adj (*ia+wether*).
- The much more frequent order DEP<sub>GEN</sub> N in early OHG (Schrodt 2004: 22) indicates the base-generated order; if Q is similar to N, then genitive DEPs also preceded IndProns.
- DEP<sub>GEN</sub> and IndPron form a constituent, occurring in the *Vorfeld* (6a) or a PP (6b):

- (6)
- |    |   |                   |
|----|---|-------------------|
| a. | <i>vñ [andir vil] wurdin ouch gemartirt</i> | (13th cent.)      |
|    | and other.GEN.PL many were also martyred    | ( <i>JMart.</i> ) |
| b. | <i>in [der iewedir] ist ein hiwifch.</i>    | (12th cent.)      |
|    | in them.GEN.PL each is a family             | ( <i>Spec.</i> )  |

Proposal (exemplifying with simplex *viel* ‘much’):

- First, DEP was base-generated in Spec,QP and assigned genitive case by Q: the heavier DEP usually followed the lighter IndPron by undergoing movement to the right (7a).
- Next, case assignment of the genitive changed to the complement position of Q (i.e., NP).
- Now that Spec,QP is empty, the IndPron can be reanalyzed into that position taking on phrasal properties (7b) and adjectival morphology.<sup>1</sup>
- Finally, the DEP surfaces with concord (7c).



The lack of \*DEP<sub>CON</sub> IndPron (2) results from the order in which the changes above occurred:

- When the IndPron assigned gen. to its specifier or complement, DEP<sub>CON</sub> did not yet exist
- Once the IndPron is in Spec,QP, it no longer assigns genitive and concord arises to license the DEP
- DEP<sub>CON</sub> cannot appear to the left of IndPron, because the Spec position is occupied by IndPron itself at that point (7c).

All IndProns in 1.1 underwent the same basic development (i.e., climbing up the syntactic tree), (8)-(10), with interesting differences:

- In OHG, *filu* was just beginning grammaticalization from N to Q (cf. Schrodtt 2004: 29), (8a), while *al* had nearly completed the move to Spec,QP, (9a).
- Some (complex) IndProns became exclusively pronominal, moving to D, (10)
- Universal quantifiers underwent the additional development of moving up to Spec,DP, (9) (evidenced by the change on the DEP adjective from strong to weak inflection):

(8)	N	→ Q (+D)	→ Spec,QP	
a.	<i>filu</i>	<i>vil</i>	<i>viel(e)</i>	‘much/many’
b.		<i>et<sub>Q</sub>+waz<sub>D</sub></i>	<i>etwas</i>	‘some’
(9)		Q (+A)	→ Spec,QP	→ Spec,DP
a.		<i>al</i>	<i>all</i>	<i>alles</i>
b.		<i>io<sub>Q</sub>+wetheramo<sub>A</sub></i>	<i>ieweder</i>	<i>jeder</i>
(10)		Q (+N/D)	→ Q	→ D (+Q)
a.		<i>ni<sub>Q</sub>+wiht<sub>N</sub></i>	<i>niht</i>	<i>nichts</i>
b.		<i>et<sub>Q</sub>+waz<sub>D</sub></i>		<i>et<sub>Q</sub>+was<sub>D</sub></i>
				‘nothing’
				‘something’

<sup>1</sup> At this stage, there appears to be no case assigner for the genitive DEP. We will show that these constructions involve a null quantifier in MHG and ENHG, which assigns genitive to the complement NP.

## 2. Simplex existential indefinites: “viel” type

### 2.1. Simplex existential indefinites

The IndPron *vil* ‘much/many’:

- OHG-MHG: preceding (11a) or following (11b) DEP genitive
- late MHG, DEP follows either in genitive or concord (or ambiguous, as in 11c).
- Near the end of ENHG we have mostly unambiguous concord (11d).

- (11) a. DEP<sub>GEN</sub> IndPron  
*liebes vil* (12th cent.)  
love-GEN much (Nibelungenlied)
- b. IndPron DEP<sub>GEN</sub>  
*vil geltef* (13th cent.)  
much money-GEN (Freib.)
- c. IndPron DEP<sub>GEN/CON</sub>  
*vil bekorung* (14th cent.)  
much temptation.GEN/CON (Altväter)
- d. IndPron DEP<sub>CON</sub>  
*viel Gelt* (17th cent.)  
much money.NOM (Chronik Memmingen)

The following distributions are not attested (Deg = degree adverb, e.g. *so*):<sup>2</sup>

- (12) a. \* DEP<sub>CON</sub> IndPron  
b. \* DEP<sub>GEN</sub> Deg IndPron

The same development from gen. to concord occurs with *wenig* ‘little’:

- (13) a. DEP<sub>GEN</sub> IndPron  
*des silbers wenic* (12th cent.)  
the.GEN silver-GEN little (Walther, cited in Behaghel 1932: 488)
- b. IndPron DEP<sub>GEN</sub>  
*mit wenig hares* (15th cent.)  
with little hair-GEN (Eyb, cited in Behaghel 1932: 532)
- c. IndPron DEP<sub>GEN/CON</sub>  
*wenig freud* (16th cent.)  
little joy.GEN/CON (Nachbarn)
- d. IndPron DEP<sub>CON</sub>  
*wenig Geld* (Modern German)  
little money.NOM

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<sup>2</sup> The few instances of these surface orders most likely involve split-topicalization and as such, do not show base-generation but movement:

(i) *Ir hait vele ... heirllicher wercke, as: zo kore gain, syngen, liefen vnd... andere gude w'cke veile.* (Tauler 010r)  
you have many glorious works, like to choir go sing read and other.ACC good.ACC works.ACC many.ACC

(ii) *fo begriffin fie der vifche fo vile, daz ...*  
so caught they the.GEN fish.GEN.PL so many, that (PrMK 5r)

Note, that while the topicalized part of *andere gude wercke veile* in (i) is indefinite, Demske (2013) claims that such split topicalization happens only with definite DPs (as well as PPs regardless of definiteness).

*viel* and *wenig* have been claimed to be nouns in OHG (Behaghel 1932: 3-4) and even MHG (Paul 2007: 359), because:

- OHG *filu* appears to be a *u*-declension N, albeit uninflected
- even when the dependent N is plural, the verb may show agreement with singular:

(14) *vñ kumít vil schiffe dare von verrē landen* (13th cent.)  
and comes-SG much.SG ships-PL there from far lands (*Hleb.* 106r)

However, we argue that they are semi-lexical nouns in OHG/early MHG:

- they do not appear in the dative or genitive case or in the plural until after 1250 (15)
- they aren't modified by D or A (no examples in *Tatian*, *Otfrid*, or Bochum corpus)

## 2.2. Changes in MHG/ENHG

The development into a quantifier probably begins around 1250:

- *vil* begins to appear in gen. and dat. contexts (15) and to show inflection (15a)
- concord with *viel* (15a), alongside continued use of genitive (15b):

(15) a. *von vile luten* (13th cent.)  
from much-DAT.PL people-DAT.PL (*Hleb.* 106r)  
b. *mit vil getreides* (13th cent.)  
with much.DAT.SG. grain-GEN.SG (*DvATra.* 80r)

Change in progress from genitive to concord, with a great deal of variation in our corpus:

- *viel* + masc/neut singular N:
  - MHG: exclusively *viel* + genitive
  - ENHG: 43 instances of *viel* + genitive (16a); 27 of concord (16b):

(16) a. *deßhalb er vil geltes versamlet* (15th cent.)  
therefore he much money-GEN gathered (*Vita*)  
b. *Es gieng viel Gelt auff in diesem Stätt Krieg.* (17th cent.)  
it went much money.NOM up in this city war (*Chr. Memmingen*)

- *viel* + plural or fem N: because of lack of inflection, most are ambiguous, except in the dat.pl., where there is an additional ending *-n* on the noun (clearly concord):

(17) *mit so viel Stätten/ Dörffern/ Kirchen/ vñnd Schätzen gezieret habe*  
with so many.DAT cities-DAT villages-DAT churches-DAT ... (15th c.: *Amerika*)

- *viel* + Adj:
  - mostly genitive into 15<sup>th</sup> century but a few instances of concord even in MHG
  - Adjs are more inflected than Ns, so gen./con. distinction is clear, e.g. fem.sg. (18a-b).
  - but in neut.sg., the adj. inflection *-s* is ambiguous between gen. and concord (18c):

(18) a. *Da gab mir ir gnad vil schoner red vnd guten trost* (15th cent.)  
then gave me her grace much nice-GEN speech and good comfort (*Denkwürd.*)  
b. *daß sie ... so viel vngleiche Heyrath gekuppelt* (17th cent.)  
that it so many unequal-ACC marriage connected (*Gesichte*)

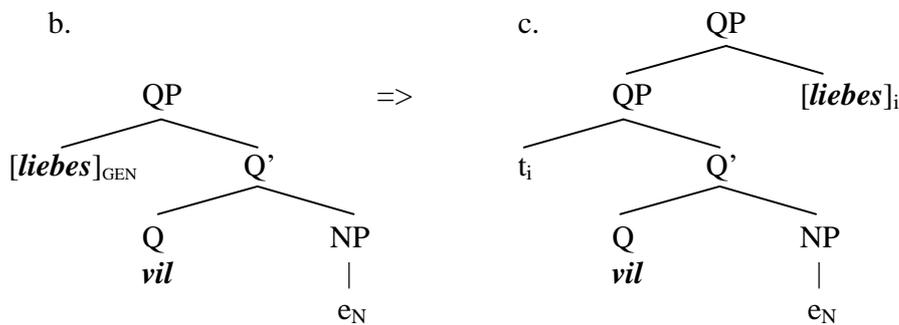
- c. *den hett er och vil gûtes getân* (14th cent.)  
 them had he also much good-ACC/GEN done (Altväter)

### 2.3 Structure of “viel”-type simplex indefinites

The OHG semi-lexical N *filu* appears in early MHG as the Q *vil*, leaving a null element in N.

Case assignment is to Spec,QP, and IndPron and genitive often reorder by right-adjunction (19c):

- (19) a. *liebes vil / vil liebes* (MHG)  
 love-GEN much



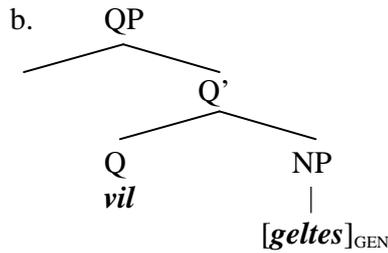
- reordering is due to the preference for heavier elements to appear further right in German:
  - from OHG to ENHG, DEP<sub>GEN</sub> tend to precede *viel* if pronominal (20)
  - DEP<sub>GEN</sub> strongly tend to follow *viel* (obligatorily after 1350) if non-pronominal (21)

- (20) a. *iro vili* (OHG)  
 them-GEN.PL many (Notker)
- b. *déro uilo* (11th cent.)  
 those-GEN.PL many (Williram)
- c. *deren vil* (16th cent.)  
 those-GEN.PL many (Gespenster)
- d. *jhrrer viel* (17th cent.)  
 them-GEN.PL many (Wiederholung)

- (21) a. *vil fchatzis* (14th cent.)  
 much treasure-GEN (JMart)
- b. *vil laref* (13th cent.)  
 much empty-GEN (DvTrA)
- c. *vil gûot<sup>r</sup> dinge* (13th cent.)  
 many good-GEN.PL things (PrSh)

In MHG, generation of DEP in Spec,QP and movement to adjoin to the right is replaced by the more economical base-generation on the right as the head of NP; following in the footsteps of N, IndPron now assign genitive to the right:

- (22) a. *vil geltes* (MHG)  
 much money-GEN

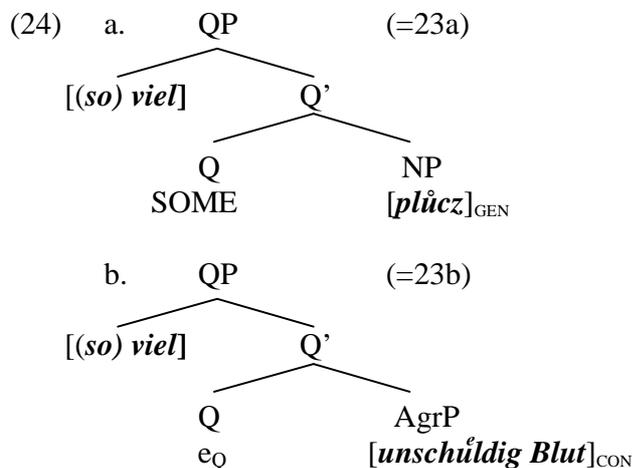


Late MHG/ENHG: *viel* is reanalyzed as an adjectival quantifier in Spec,QP, and DEP can no longer appear to its left:

- 1250: *vil* occurs in dative, genitive, and plural contexts; first instances of inflection (*vile*); can be modified by degree adverb (*so vil*, as in 23a).
- 1350: dependent NPs can only follow; can be genitive (23a) or concord (23b)
- 1550: *viel* shows more adjectival morphology (*vielem*, *vieler*, etc): morphology lags behind syntax

- (23) a. *so viel plûcz* (14th cent.)  
           so much blood-GEN (*Rationale*)  
 b. *viel vnschuldig Blut* (16th cent.)  
       much innocent blood.CON (*Bange Chronik*)

Now a phrasal constituent (modification by *so*), it no longer assigns case to its DEP. Genitive DEPs now appear to lack a case assigner; therefore we posit a null quantifier, call it SOME, that assigns genitive (24a). When SOME is absent (especially later), concord results (24b):<sup>3</sup>



### 3. Complex existential indefinites

#### 3.1 Structure of complex indefinites: *nichts*, *niemand*, *jemand*

The complex IndProns *nicht(s)*, *iht*, *niemand*, and *jemand*:

- OHG-MHG: preceding (25a) or following (25b) DEP genitive
- late MHG/ENHG: DEP follows, either in genitive or concord (or ambiguous, as in 25c).
- late ENHG/Modern German: unambiguous concord (25d).

<sup>3</sup> At the end of the paper, we will show that SOME is needed for independent reasons, and has partitive semantics.

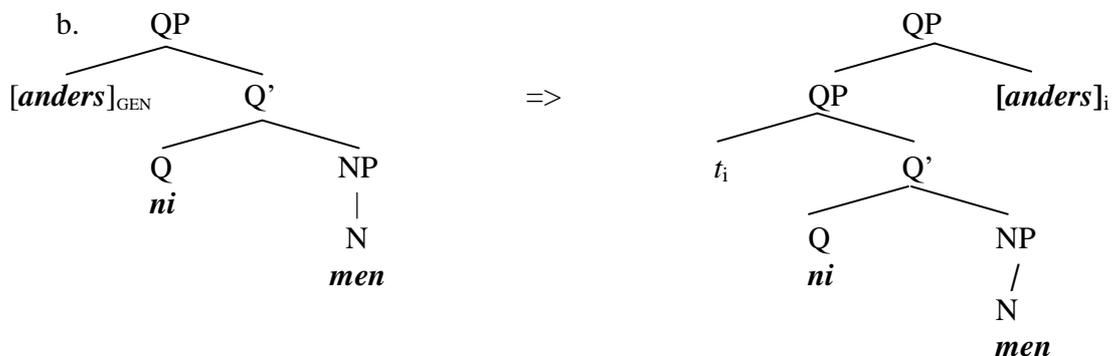
- (25) a. DEP<sub>GEN</sub> IndPron  
*dez Halben Pfyndes iht* (14th cent.)  
the.GEN half-GEN pound-GEN something (*Lands.* 03)
- b. IndPron DEP<sub>GEN</sub>  
*ieman armer liute* (13th cent.)  
somebody poor-GEN.PL people.GEN.PL (*Tristan*, cited in Paul 2007: 345)
- c. IndPron DEP<sub>GEN/CON</sub>  
*nichts anders dann hëring* (15th cent.)  
nothing other-GEN/CON than herring (*Denkwürdig.*)
- d. IndPron DEP<sub>CON</sub>  
*gegen niemand anderm* (16th cent.)  
from nobody.DAT other-DAT (*Rhetorica*, cited in Kehrein I:219)

(26) \* DEP<sub>CON</sub> IndPron

In OHG, consisted of a quantifier in Q plus a noun in N (*io+man, nio+man, io+wiht, nio+wiht*).

- We assume that these are still complex in MHG.
- The quantifying part assigned genitive to its specifier.
- OHG/MHG structure, with movement (of heavy DEP) to a right-adjoined position:

- (27) a. *anders niemen / niemen anders* (13th cent.)  
other-GEN nobody 'nobody else' (*StBA*)



These IndProns were not (yet) in the DP layer:

- they could be modified (by D):

- (28) a. *diu trügevreude ist ein niht* (ca. 1200)  
the false-joy is a nothing (*Iwein* 4413)
- b. *deist allez hie wider ein niht* (13th cent.)  
that-is all here against a nothing (*Tristan*, cited in Paul 2007: 345)

- they could be strengthened by a genitive form (in Spec,QP):

- (29) a. *nihtes niht* (13th cent.)  
of.nothing nothing (*Parzival*, cited in Paul 2007: 377)
- b. *ihtes iht* (13th cent.)  
of.something something (*Tristan*, cited in Paul 2007: 377)

### 3.2 Changes to Modern German

Unlike *viel*, the complex pronouns are not in Spec,QP and still assign genitive to their specifiers: the order GEN > IndPron is still robust in MHG (e.g. 19x *anders nichts* vs. 12x *nichts anders*).

These pronouns plus Adj. in concord first appear in MHG around 1250 (30a). However, many examples are ambiguous between genitive and concord:

- genitive plural *-er* (30b) is ambiguous with masc.nom.sg. *-er* if no overt noun is present; reanalysis to masc.sg. was easiest with the animate IndProns *niemand* and *jemand*.
- when /z/ and /s/ merge, neut.sg. Adjs became ambiguous between genitive and nom/acc. (Ebert et al. 1993: 334); this reanalysis to a neuter ending occurred with inanimate *nichts*.

- (30) a. *mít nieman anderm* (13th cent.)  
 with nobody.DAT other-DAT (*Freib.*)  
 b. *nieman gûtir* (12th cent.)  
 nobody.NOM.SG good-GEN.PL/MASC.NOM.SG (*Muri.*)  
 c. *nicht anders* (15th cent.)  
 nothing other-NEUT.NOM/ACC/GEN.SG (*Denkwürdigkeiten*)

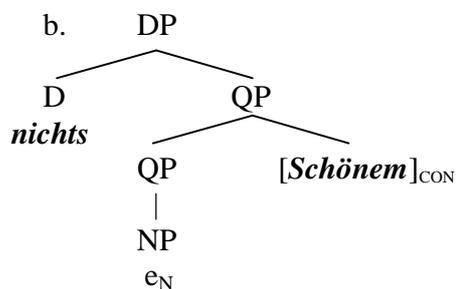
Although these IndProns eventually moved higher than Q, their DEPs did not complete the change to a complement:

- Assuming that these IndProns were still complex in MHG (Q and N are filled), during the transition from genitive to concord, reanalysis of the DEP to the head N was not possible.
- Instead, by late ENHG the DEP is base-generated in an adjunct position; as this is not a position for case assignment, we believe that the adjectival inflections *-er* (30b) and *-s* (30c) are concord.<sup>4</sup>

DEPs of complex existential IndProns are still adjuncts in (31) in Modern German:

- These IndProns are the only ones that cannot take an overt N.
- There is concord (*mit nichts Schönem*, *jemand Netter*) but no genitive.

- (31) a. *mit nichts Schönem* (Modern German)  
 with nothing nice-DAT.ST

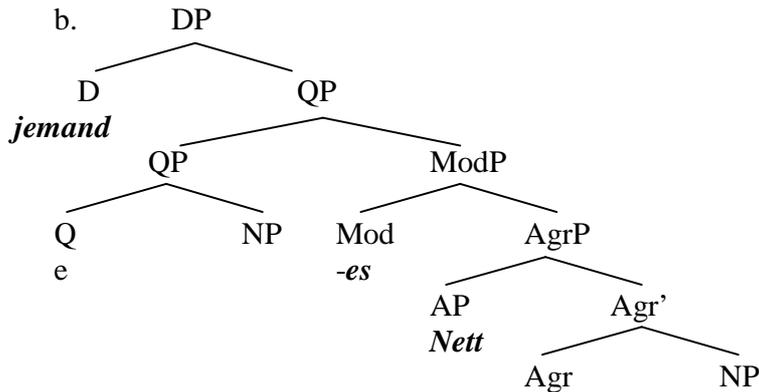


<sup>4</sup> That *-s* represents concord (neut.nom/acc.sg) rather than genitive is clearest in texts where the strong gen.sg. inflection on adjectives is no longer *-es* (i) but *-en* (ii):

- (i) *hohes vnd nidriges standes* (16th cent.)  
 high-GEN and low-GEN status-GEN (*Summaria*)  
 (ii) *hohen und niedern Stands* (17th cent.)  
 high-GEN and low-GEN status-GEN (*Deo Gratias*)

Besides concord, these adjuncts may have the “special” ending *-es* (e.g. *jemand Nett-es* ‘somebody nice’), which is neither concord (*-er*) nor genitive (*-en*). With Roehrs (2008), we assume that this *-es* mediates adjunction, like French *de* (e.g. *quelqu’un de bien*), and is hosted in the Modifier Phrase:

(32) a. *jemand Nett-es* (Modern German)  
 somebody nice-S



By Modern German, we propose that Q and N have fused into one element surfacing in D:

- *Niemand/jemand* may decline like pronouns
- Modern German [-animate] *nichts* cannot be modified by certain elements anymore:
  - (33a) is out as *nichts* itself is now in D
  - (33b) is out as modified *nichts<sub>D</sub>* is higher than the modifier in Spec,QP (modifiers precede modified elements)

(33) a. \* *ein nichts*  
 a nothing  
 b. \* *nichts nichts*  
 nothing nothing

### 3.3 Structure of complex indefinites: *etwas*

*Etwas* goes through the same stages as previous IndProns (but allows for a second development):

(34) a. DEP<sub>GEN</sub> IndPron  
*oder anders etwaz* (14th cent.)  
 or other-GEN something (OxBR)

b. IndPron DEP<sub>GEN</sub>  
*mit etwas susses* (15th cent.)  
 with something sweet-GEN (Pillenreuth)

c. IndPron DEP<sub>GEN/CON</sub>  
*etzwaz merglichs* (15th cent.)  
 something strange-GEN/CON (Rothe Chronik)

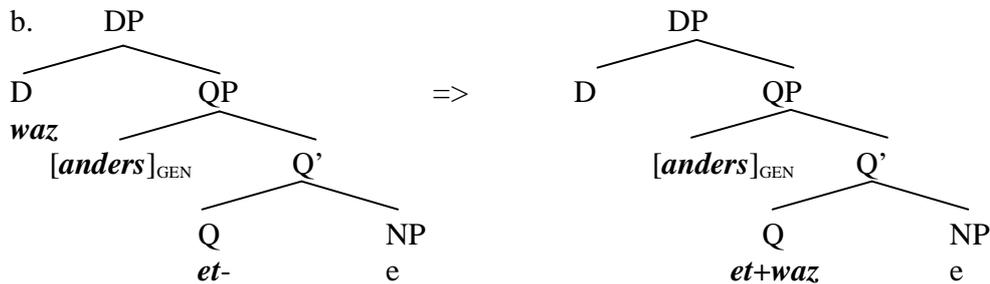
d. IndPron DEP<sub>CON</sub>  
*mit etwas Süßem* (Modern German)  
 with something sweet-DAT

(35) \* DEP<sub>CON</sub> IndPron

The *-waz* element is a *wh*-pronoun and inflects (cf. *etwer*).

- Like personal pronouns, we assume that *waz* is in D.
- *et-* was a proclitic Q in MHG, and like other MHG Qs assigns genitive case
- *waz* underwent Morphological Merger with *et* to yield *etwaz* in Q
- unlike the other complex IndProns, there is a null N

(36) a. *anders etwaz* (MHG)  
'something else'



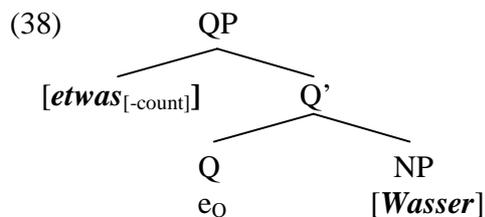
With the null N position available, there were two options for the position of DEP: adjoined or reanalyzed as the complement, both of which developed with a different distribution and semantics by Modern German:

- *etwas*<sub>[-count]</sub> means 'some' and may have an overt noun as a DEP (37a)
- *etwas*<sub>[±count]</sub> means 'something' and may only have a DEP Adj with neuter *-es* (37b)

(37) a. *etwas kaltes Wasser* [-count]<sup>5</sup>  
'some cold water'  
 b. *(et)was Kaltes* [+count] or [-count]  
'something cold'

*etwas*<sub>[-count]</sub> 'some' developed like *viel*: Q>Spec,QP:

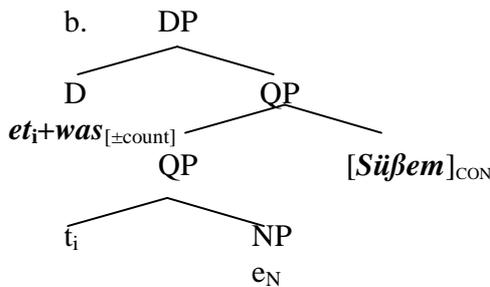
- *et+waz* was lexicalized into one word (i.e., *et-* must be present: \**was kaltes Wasser*)
- DEP is in complement position and may have an overt N (the only formerly complex existential IndPron that can do so)
- because *etwas* never consisted of an overt N, the DEP was reanalyzed into the N<sup>0</sup> position in this case:



<sup>5</sup> This *etwas* cannot be [+count]: *etwas kaltes Wasser* cannot mean 'something consisting of cold water' and cannot take a count noun: \**etwas Auto* 'some car'.

- etwas*<sub>[±count]</sub> ‘something’ has developed like *nichts* and *nie/jemand* into a pronoun in D:
- bimorphemic: its individual parts exist elsewhere: *et+liche* ‘many’ and *was* ‘what’
  - DEP elements are adjectives in an adjunct position:

(39) a. *(et)was Süßem* (Modern German)  
 something sweet-DAT



#### 4. Universal indefinites

##### 4.1 The simplex universal: *all*

The universal IndPron *all* underwent two changes:

- as with *viel*, DEP was reanalyzed from Spec,QP to the head of the extended NP projection and the IndPron becomes a Specifier
- later, *all* is further reanalyzed up the tree, resulting in a change of inflection on the dependent Adjective, with variation already present in MHG (40d):

- (40) a. DEP<sub>GEN</sub> IndPron<sup>6</sup>  
*manno gil̄th* (OHG)  
 men-GEN every (cited in Braune 2004: 255)
- b. IndPron DEP<sub>GEN</sub>  
*fól al mannes* (OHG)  
 fully all man-GEN (*Otfrid*)
- c. IndPron DEP<sub>GEN/CON</sub>  
*al erdha* (OHG)  
 all earth.GEN/CON (*Isidor*)
- d. IndPron DEP<sub>CON</sub>  
*elliu lebendú / lebenden wunder* (13th cent.)  
 all living.ST living.WK wonders (Walther v.d.V., in Paul 2007: 358)

(41) \* DEP<sub>CON</sub> IndPron<sup>7</sup>

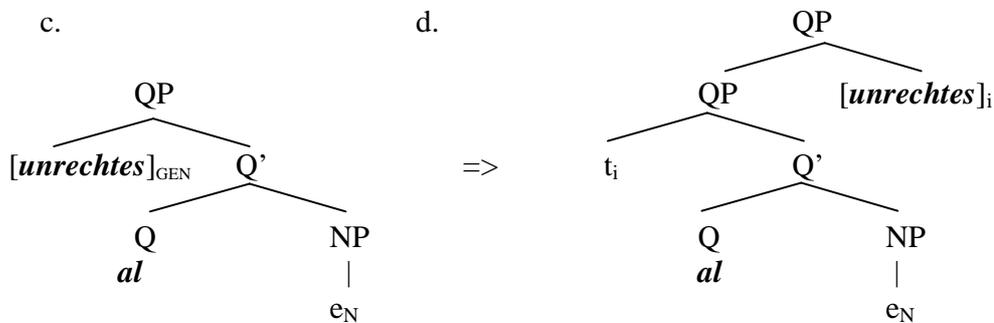
*All* with a genitive is already rare in OHG (42a), but it is robustly attested in Gothic (42b):

- we assume that OHG *all* + DEP<sub>GEN</sub> is a relic of Proto-Germanic
- on par with attested OHG *vil*, we assume that pre-OHG *all* assigned genitive to its Spec:

<sup>6</sup> Since we have no example involving *all*, we provide a datum with a different universal quantifier for (40a).

<sup>7</sup> Preceding DEPs in concord are due to quantifier float (Schrodt 2004: 31).

- (42) a. *al unrechtes* (OHG)  
 all unjust-GEN (*Lampr.*, cited in Behaghel 1932:493)  
 b. *all dagis* (Gothic)  
 all.ACC day-GEN (Romans 8:36)



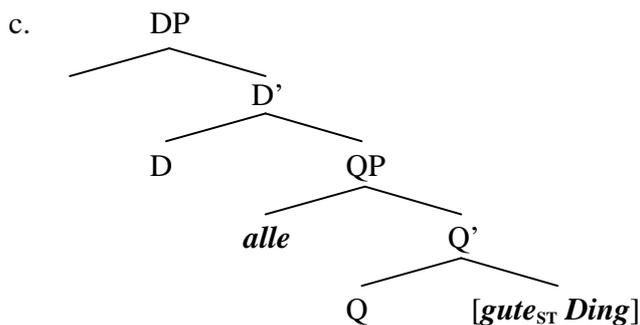
By OHG, *all* has already been reanalyzed as Spec,QP, explaining the usual absence of genitive:

- (43) *allen richtuom* (11th cent.)  
 all-ACC wealth.ACC (*Williram*, in Behaghel 1932:394)

Unlike the complex pronouns (*nichts*, *niemand*, *jemand*), here N is empty and the (reordered) DEP from the specifier was reanalyzed into this position.

The adjective following *all* was originally strong:

- (44) a. *an allem bo<sup>e</sup>sem leben* (14th cent.)  
 on all evil-ST life (*Altväter*)  
 b. *Alle gute Ding seynd Drey.* (17th cent.)  
 all good-ST things are three (*Deo Gratias*)



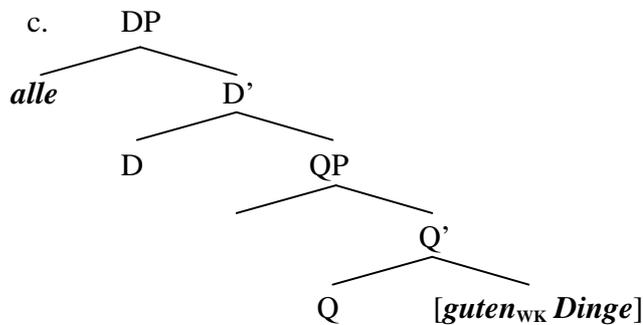
Because *all* was lower than D in the earlier stages of German, it could follow a determiner:

- (45) *den andern allenn tugenden* (16th cent.)  
 the other all virtues (*Seelenparadies*, cited in Ebert et al. 1993:321)

In ENHG, the adjective following *alles* changed from strong inflection (44) to weak (46):

- we propose that *alles* changed from being merged in Spec,QP like a quantifier (cf. Modern German *viele nette Leute* 'many nice people') to a determiner-like element in Spec,DP (cf. *diese netten Leute* 'these nice people').

- (46) a. *an allem bösen Leben*  
 on all evil-WK life  
 b. *alle guten Dinge*  
 all good-WK things



Now that *alle* is above D, it can no longer be preceded by determiners and adjectives:

- (47) \* *den anderen allen Tugenden*  
 the other all virtues

#### 4.2 The (originally) complex universal: *jeder*

OHG *eogihwedār* > MHG *ieweder* > *ieder* (Behaghel 1932: 358-359):

- Originally meant ‘each of two’ (cf. Eng. *whether*, Germ. *entweder*)
- OHG/MHG: DEP pronouns are always gen. pl., and always preceded the IndPron (48a).
- DEP nouns could only agree (singular) with IndPron and always followed (48b).
- The two other possibilities are unattested: the lack of following genitive DEPs is probably accidental, but the lack of preceding concord DEPs (49) is a systematic gap (cf. other IndProns):

- (48) a. DEP<sub>GEN</sub> IndPron  
*iro iawether* (OHG)  
 them-GEN.PL each (Behaghel 1932:389)
- b. IndPron DEP<sub>CON</sub>  
*iedem knechte* (14th cent.)  
 every-DAT servant-DAT (*WüPo*)

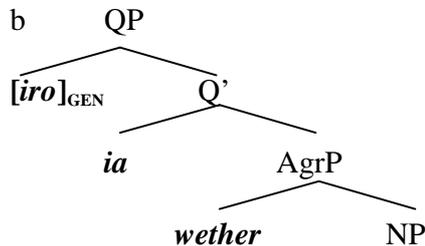
- (49) \*DEP<sub>CON</sub> IndPron

Note that *-er/-ar* is part of the stem at this stage, not an inflectional ending: *ieweder ors* ‘every horse.NEUT’ (Behaghel 1932: 388-389). Based on Behaghel’s examples, *io-(gi)-wēdar* was endingless (50a), or inflected like a pronoun/determiner (50b). It shares this property with OHG/MHG strong adjectives:

- (50) a. *iogiuuedar, iawethar, ieweder* (OHG/MHG)  
 b. *iogiwetharamo, iouuederiz, iewederiu, ieweders*

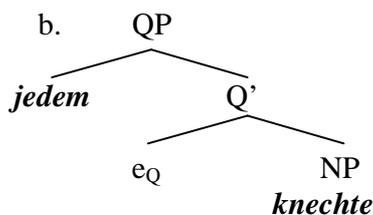
In OHG, we assume the following structure (different from the other complex IndProns, which do not involve an adjectival part):

- (51) a. *iro iawether* = (48a)  
 ‘each of them (two)’



By ENHG, the *-er* has been reanalyzed as the masc.nom.sg. inflection, so that the new stem is *jed-* (52a). It has become an adjectival quantifier in Spec,QP, like its MHG simplex counterpart *all*:

- (52) a. *iedem knechte* = (48b)  
 ‘each servant’



Like *all*, we assume that *jeder* ends up in Spec,DP, as any following adjectives show weak inflection:

- (53) *bey jeder Romantischen Erzehlung* (17th cent.)  
 during every romantic.WK story (Mythoscopia)

## 5. Numerals

Our analysis can be extended to numerals, another type of quantifier, which underwent similar word-order changes and lost genitive assignment:

- (54) a. DEP<sub>GEN</sub> IndPron  
*boser fvnfiu* (13th cent.)  
 bad-GEN five ‘five bad (years)’ (BKön)
- b. IndPron DEP<sub>GEN</sub>  
*drei ganzer jar* (16th cent.)  
 three whole-GEN years (Sebastian Frank)
- c. IndPron DEP<sub>GEN/CON</sub>  
*driv iar* (13th cent.)  
 three years.GEN/CON (BKön)
- d. IndPron DEP<sub>CON</sub>  
*drei ganze Jahre* (Mod. German)  
 three whole-NOM years

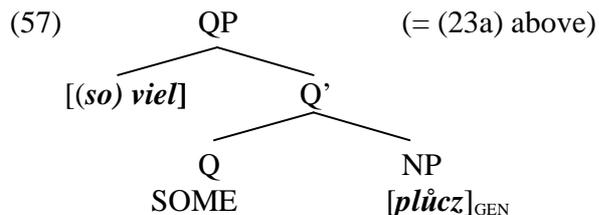
(55) \* DEP<sub>CON</sub> IndPron

## 6. Excursus: the null quantifier SOME

Above, we noted that the presence of a degree adverb requires that the IndPron be in a phrasal position, because the degree adverb scopes only over the IndPron (cf. Svenonius 1994: 445-6):

- (56) a. *so viel kaltes Wasser*  
 so much cold water  
 #‘so much so cold water’  
 b. *fast alle zwei Meter großen Männer*  
 almost all two meter tall men  
 #‘almost all almost two meter tall men’

An element embedded inside a specifier position cannot assign case to the complement of a different maximal projection for locality reasons; so MHG/ENHG examples with *so viel* appear to lack a case assigner for the DEP<sub>GEN</sub>. Therefore, we posit the null quantifier SOME:



We believe that there is independent evidence for a null Q in MHG/ENHG:

- with *viel*, genitive case and concord both occur, even within a single text; SOME allows us to assume just one analysis of *vil* (in Spec,QP) and not two (in Q or Spec,QP)
- direct objects (58a) and even subjects (58b) can occur in the gen. (‘partitive genitive’)
- *was* ‘something’ (an alternate form of *etwas*), lacks the (overt) case assigner *et-* (59)
- interrogative *was* (should not assign case) occurs with gen. (60)

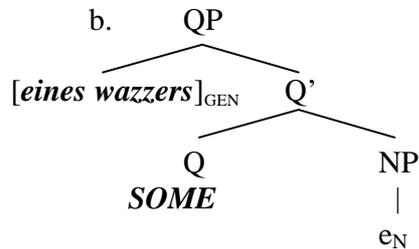
- (58) a. *er az daz brôt und tranc dô zuo eines wazzers* (ca. 1200)  
 he ate the bread and drank thereto a-GEN water-GEN  
 ‘he ate the bread and drank some water with it’ (Iwein, Paul 2007:341)  
 b. *do reis im uz einer swalwen nest des mistes in die ougen* (13th cent.)  
 then rose him from a swallow nest the-GEN dung-GEN in the eyes  
 ‘then dung flew into his eyes from a swallow’s nest’ (Griesh., Paul 2007:341)

(59) *habt ihr was neuwer sachen?* (17th cent.)  
 have you something new-GEN things (Opel-Cohn, cited in *Deutsches Wörterbuch*)

(60) *waz zeichens wil ditz gefleht (?)* (14th cent.)  
 what sign-GEN wants this generation  
 ‘What kind of sign does this generation want?’ (ObEv 52b)

All of these examples have two coinciding properties: lack of an overt case assigner and availability of partitive/quantified reading.

- (61) a. *eines wazzers* (MHG)  
 a water-GEN



SOME undergoes the same development as the overt Q *viel*, eventually changing from genitive assignment (62a) to concord with the adjective (62b):

- (62) a. *immer* [SOME] *guotes jehen* (12th cent.)  
 always good-GEN to say  
 ‘always say (something) good’ (Erec)
- b. *zu Nutz ... vnd* [SOME] *Guttem* (17th cent.)  
 for use and good-DAT  
 ‘for the use and (something) good’ (Augs. Arzt)

Illustrating with Modern German (now exclusively concord with neut.sg), SOME is needed for quantification in (63b-c), turning the interrogative in (63b) into an IndPron and making the adjective in (63c) into a nominal to satisfy a theta-role:

- (63) a. *Ich mag eigentlich nur etwas Saures.* (Modern German)  
 I like actually only something sour
- b. *Ich mag eigentlich nur was Saures.*  
 I like actually only something sour
- c. *Ich mag eigentlich nur Saures.*  
 I like actually only sour  
 ‘Actually, I like only sour (stuff)’
- (64) a. *etwas Saures*  
 b. *SOME was Saures*  
 c. *SOME Saures*  
 d.\* *et Saures* (*et* has no appropriate host)

As for interrogative *waz* + gen. ‘what kind of’, *waz* doesn’t license a DP. Thus we assume a PP (with a null P) as a complement of the null N (65a), with genitive assigned by SOME. By Modern German, the loss of the genitive has been compensated by an overt P (65b):

- (65) a. [ *waz* e<sub>N</sub> [PP e<sub>P</sub> SOME *zeichens* ] ] (MHG, cf. (60) above)  
 b. [ *was* e<sub>N</sub> [PP *für ein Zeichen* ] ] (Modern German)  
 what for a sign

## 6. Summary and Conclusion

The semantics of the different IndProns regulated the timing of the change (with universal *all* going first), but the internal structure of the IndPron led to different structural relations between the IndPron and its DEP in Modern German.

	Complex existential	Simplex existential	universal
OHG	<i>iht pitteres</i>	<i>filu manno</i>	<i>al guotes / allen richtum</i>
MHG	<i>nih̄t lebendes</i> Genitive Overt noun possible Modifiers/reinforcers possible [DP [QP GEN [Q' <i>ni</i> [NP <i>wiht</i> ]]]]	<i>liebes vil</i> Genitive Overt noun possible [DP [QP GEN [Q' <i>vil</i> [ e <sub>N</sub> ]]]]	<i>alles gutes</i> Concord (rarely gen.) Overt noun possible Strong adjective [DP [QP <i>all</i> Q [ Adj-ST...]]]
ENHG	Genitive > concord	Genitive > concord	Strong > weak adj.
Mod. Germ.	<i>mit nichts Schȫnem</i> Concord No overt noun: behaves like pron No modifiers/reinforcers Strong adjective [DP <i>nichts</i> [NP [NP e <sub>N</sub> ] [ CON]]]	<i>viel Wein</i> Concord Overt noun possible Pron. behaves like adj. Weak adjective [DP [QP <i>viel</i> Q [ CON]]]	<i>alles Gute</i> concord Overt noun possible Pron. behaves like det. Weak adjective [DP <i>alles</i> D [ Adj-WK...]]

In all these changes, the IndProns have “moved” up the tree.

### Discussion:

Our proposal is compatible with Roberts & Roussou’s (2003) view of grammaticalization:

- (Semi-)lexical projection (e.g. *filu<sub>N</sub>*) to functional projection (*vil<sub>Q</sub>*)
- Category change (N>Q, Q>D)
- Phonological reduction (*nioman*>*niemand*; *niwicht*>*nicht(s)*; *iogiwethar*>*jeder*)
- Semantic bleaching (*iogiwethar* ‘each of two’ > *jeder* ‘each’)
- Affects isolated lexemes rather than a whole class of words, and at different times

The change in the syntactic properties (word order and case) of the DEP is evidence for head-to-Spec reanalysis (*pace* van Gelderen’s 2004 Head Preference or Spec to Head Principle):

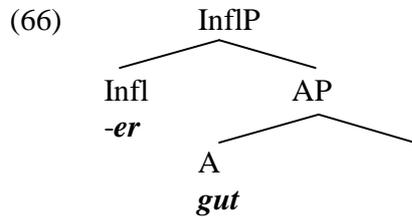
- IndProns that were originally N<sup>0</sup> (*filu*) or Q<sup>0</sup> (*all*, *etwas*<sub>[count]</sub>, numerals) are now in specifiers.
- When the IndProns change from light nouns in Q to adjectival quantifiers in Spec,QP, they start building their own extended projection
- adjectives are also Specs (Cinque 1994, 2005, 2010), so adjectival IndProns in Spec,QP become more adjective-like in morphology (*viel*, *wenig*)

Although we find counter-evidence for van Gelderen’s Spec to Head Principle, we can confirm her Merge Over Move Principle: e.g. post-Q genitives begin in Spec,QP with movement to the right of Q but are later reanalyzed as base-generated in that position.

Why do quantifiers become more adjectival (structurally and inflectionally)?

- in comparison with Spec-head (impoverishment of morphology as lexical item becomes functional, cf. the complementizers *that*, *dass*, *que*), head-Spec reanalysis may be rare
- in this case: head-Spec reanalysis involves morphological enrichment, establishing inflectional harmony

- assume that inflected elements consist of a stem and an inflection where both project a phrase in the syntax: *gut-er* ‘good-INFL’:



- in OHG: demonstratives and adjectives have this structure already: XP and InflP
- MHG to ENHG: quantifiers develop adjectival inflection, which means they project InflP; taken together, quantifier stems and inflection make up phrases, which occur in Specs (Q > Spec, QP)
- numerals changed from nominal inflection in OHG (*zweio* ‘two-GEN.PL’, cf. *tago* ‘day-GEN.PL’) to adjectival inflection in MHG (*zweier* ‘two-GEN.PL’, cf. *blinder* ‘blind-GEN.PL’), consistent with this harmonization. I.e. numerals also underwent N > Q > Spec, QP. Note, however, that unlike IndProns, numerals have (mostly) lost their inflection by Modern German (MHG *zweier* > Modern *zwei*).

As a final note, the simplex IndProns (67a) and *jeder* (67b) still allow genitives in certain contexts today. These genitive DPs have a partitive reading and an overt D *below* the IndPron, thus they must involve one DP embedded in another. We assume that head N of the higher DP assigns genitive to the right (like any lexical noun) and is elided:

- (67) a. *viele ~~Leute~~ dieser Leute*  
 many people these.GEN people
- b. (?) *jeder ~~Freund~~ meiner guten Freunde*  
 every friend my.GEN good friends

The (formerly) complex IndProns *etwas*, *nichts*, *niemand*, and *jemand* do not allow an overt head N, and consequently do not allow these partitive genitives in Modern German:

- (68) a. \**etwas / nichts meiner guten Sachen*  
 something nothing my.GEN good things
- b. \**jemand / niemand meiner guten Freunde*  
 somebody nobody my.GEN good friends

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