

The uniquely suppletive inflection of the Indo-European  
demonstrative pronoun *\*to-/\*so-* 'that',  
and how pertinacious deficits of neuters help to explain it

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# 1. The word in question

The lexeme at issue: \*to-/\*so- 'that'

- the unmarked demonstrative pronoun ("*der*-Deixis" in the sense of Brugmann 1904), used for ana/cataphoric coreference; source of the definite article in West Germanic, Greek, certain Slavonic languages (Bulgarian, Macedonian, Sorbian, Czech);
- inflects for number (SG, PL, DU), case (NOM, ACC, INS, DAT, ABL, GEN, LOC), gender (MASC, FEM, NEUT)

There are many big and small questions about this demonstrative; mine is how to account for the distribution of the suppletive stems, \*to- and \*so-, over their paradigm. The question may seem innocent, but parts of the answer will make you shudder.

## 2. The fate of *\*to-/\*so-* suppletion: Not unexpected

### 2.1. A unique pattern

The original pattern of suppletion: very unequal partners!

- (1) PIE (Ringe 2006: 54–55, or whichever reconstruction you prefer – Brugmann 1904b: 399–406, Szemerényi 1970: 187–188, Beekes 1995: 201–205, ...)

	SG			PL			DU		
	MASC	NEUT	FEM	MASC	NEUT	FEM	MASC	NEUT	FEM
NOM	<i>só</i>	<i>tód</i>	<i>séh<sub>2</sub></i>	<i>tóy</i>	<i>téh<sub>2</sub></i>	<i>téh<sub>2</sub>es</i>	<i>tóh<sub>1</sub></i>	<i>tóy</i>	?
ACC	<i>tóm</i>	<i>tód</i>	<i>téh<sub>2</sub>m</i>	<i>tóns</i>	<i>téh<sub>2</sub></i>	<i>téh<sub>2</sub>ns</i>	<i>tóh<sub>1</sub></i>	<i>tóy</i>	?
GEN	<i>tósyo</i>	<i>tósyo</i>	<i>tósyeh<sub>2</sub>s</i>	<i>tóysoHom</i>	<i>tóysoHom</i>	<i>téh<sub>2</sub>soHom</i>	...	...	...
etc.									

This pattern of suppletion is peculiar, in fact unique;  
quite a few early languages instantiate it unchanged:

(2a) Sanskrit (Indo-Aryan, Indo-Iranian)

	SG			PL			DU		
	MASC	NEUT	FEM	MASC	NEUT	FEM	MASC	NEUT	FEM
NOM	<i>sa</i>	<i>tad</i>	<i>sā</i>	<i>tē</i>	<i>tā(ni)</i>	<i>tās</i>	<i>tā(u)</i>	<i>tē</i>	<i>tē</i>
ACC	<i>tam</i>	<i>tad</i>	<i>tām</i>	<i>tān</i>	<i>tā(ni)</i>	<i>tās</i>	<i>tā(u)</i>	<i>tē</i>	<i>tē</i>
GEN	<i>tāsya</i>	<i>tāsya</i>	<i>tāsyās</i>	<i>tēṣām</i>	<i>tēṣām</i>	<i>tāsām</i>	<i>tāyōs</i>	<i>tāyōs</i>	<i>tāyōs</i>
etc.									

(2b) Ancient Greek A (Hellenic) [see (3) below for B], with /s/ > /h/

	SG			PL			DU
	MASC	NEUT	FEM	MASC	NEUT	FEM	
NOM	ὁ	τό	ἡ	τοί	τά	ταί	τώ
ACC	τόν	τό	τήν	τούς	τά	τάς	τώ
GEN	τοῦ	τοῦ	τῆς	τῶν	τῶν	τῶν	τοῖν
etc.							

(2c) Gothic (EGmc, Germanic)

	SG			PL		
	MASC	NEUT	FEM	MASC	NEUT	FEM
NOM	<i>sa</i>	<i>þata</i>	<i>so</i>	<i>þai</i>	<i>þo</i>	<i>þos</i>
ACC	<i>þana</i>	<i>þata</i>	<i>þo</i>	<i>þans</i>	<i>þo</i>	<i>þos</i>
GEN	<i>þis</i>	<i>þis</i>	<i>þizos</i>	<i>þize</i>	<i>þize</i>	<i>þizo</i>

etc.

Equally Old Norse (SG.NOM.MASC, NEUT, FEM *sā*, *þat*, *sū*, etc.; NGmc) and Old English (*se*, *þæt*, *sēo*, etc.; WGmc) – hence Proto-Gmc will have been like this, too.

## 2.2. Paradigmatic extensions

Very rarely, the minority stem was actually gaining paradigmatic ground: at least once, \*so- was extended to the same case (NOM) and the same genders (MASC, FEM) in the plural (interestingly, not in the dual, lacking gender contrasts in the language concerned):

(3) Ancient Greek B (Ionian-Attic, Homeric, Lesbian ...; Rix 1976: 182–184)

	SG			PL			DU
	MASC	NEUT	FEM	MASC	NEUT	FEM	
NOM	ὁ	τό	ή	οῖ	τά	αῖ	τώ
ACC	τόν	τό	τήν	τούς	τά	τάς	τώ
GEN	τοῦ	τοῦ	τῆς	τῶν	τῶν	τῶν	τοῖν
etc.							

Extensions of NOM.SG \*so- to cases other than NOM, rather than to numbers other than SG, are so sporadic and random that they appear dubious (Osthoff 1900: 39, Brugmann 1904b: 400, Whitney 1924: 190):

- Rig-Vedic Sanskrit has *sásmin* as a variant for LOC.SG.MASC/NEUT, but this is not half as frequent as *tásmin*
- the Chāndogya-Upaniṣad had a single occurrence of ABL.SG.MASC/NEUT *sasmāt* instead of *tasmāt*

Still, it's SG and MASC(/NEUT), as with \*so- in well-behaved paradigms; but the cases concerned are a far cry from NOM, if this conventional sequence says something valid about the case system of Sanskrit (Plank 1991a): VOC – NOM – ACC – INS – DAT – ABL – GEN – LOC

- in Early Latin \*so- is extended to ACC.SG and ACC.PL, but only in MASC: *sum*, *sōs* for *eum*, *eos* (Brugmann 1904b: 400)

ACC arguably is close to NOM in paradigm structure



## 2.3. Paradigmatic levelling

Far more commonly, suppletion didn't last.

Many IE languages which had this unmarked demonstrative *\*to-*/*\*so-*, despite its undoubted high frequency, got rid of suppletion, through discontinuing the minority stem *\*so-* and newly creating NOM.SG.MASC/FEM forms of the majority stem *\*to-*.

Why not continue *\*so-* and discontinue *\*to-*?

- Obvious: frequency, both in terms of paradigmatic representatives and textual occurrences.

for example: Old High German, uniquely (most innovatively) within Gmc

(4a) Old High German

	SG			PL		
	MASC	NEUT	FEM	MASC	NEUT	FEM
NOM	<i>der</i> <sup>†</sup>	<i>daʒ</i>	<i>diu</i> <sup>‡</sup>	<i>dē</i>	<i>diu</i>	<i>deo</i>
ACC	<i>den</i>	<i>daʒ</i>	<i>dia</i>	<i>dē</i>	<i>diu</i>	<i>deo</i>
GEN	<i>des</i>	<i>des</i>	<i>dera</i>	<i>dero</i>	<i>dero</i>	<i>dero</i>

etc.

<sup>†</sup> \*to- stem generalised, inflection analogically extended from 3sg personal pronoun *er*

<sup>‡</sup> \*to- stem generalised, regular WGmc inflection (cf. OE *sēo*), continuing that of a (special) IE form of the \*so- stem

(4b) Old Church Slavonic

	SG			PL			DU		
	MASC	NEUT	FEM	MASC	NEUT	FEM	MASC	NEUT	FEM
NOM	<i>tŭ</i>	<i>to</i>	<i>ta</i>	<i>ti</i>	<i>ta</i>	<i>ty</i>	<i>ta</i>	<i>tē</i>	<i>tē</i>
ACC	<i>tŭ</i>	<i>to</i>	<i>tŏ</i>	<i>ty</i>	<i>ta</i>	<i>ty</i>	<i>ta</i>	<i>tē</i>	<i>tē</i>
GEN	<i>togo</i>	<i>togo</i>	<i>toję</i>	<i>tēxŭ</i>	<i>tēxŭ</i>	<i>tēxŭ</i>	<i>toju</i>	<i>toju</i>	<i>toju</i>

etc.

Likewise Lithuanian ...

In Germanic, the ousting of \*so- can actually be witnessed to be gradual, hanging on longer in MASC than in FEM, on the evidence of OS (Krahe 1948: 58–64):

(5) Old Saxon (WGmc)

	SG			PL		
	MASC	NEUT	FEM	MASC	NEUT	FEM
NOM	<i>sē, the</i>	<i>that</i>	<i>thiu</i>	<i>thē</i>	<i>thiu</i>	<i>thē</i>
ACC	<i>thena</i>	<i>that</i>	<i>thia</i>	<i>thē</i>	<i>thiu</i>	<i>thē</i>
GEN	<i>thes</i>	<i>thes</i>	<i>thera</i>	<i>thero</i>	<i>thero</i>	<i>thero</i>

etc.

Why MASC? Because more frequent and therefore best entrenched?

Why did suppletion not last?

- Suppletion complicates learning and memorising and accessing:  
Ceteris paribus, it is easier to inflect a lexeme if it has only one stem rather than two or more.

Naturally, the more frequent a lexeme, the better are the learner's chances of actually encountering it and memorising its inflection, however idiosyncratic and complex (and there's few things more idiosyncratic and complex than suppletion).

Rarely occurring lexemes, if suppletive at some stage, will therefore be likelier to lose suppletion and thus be regularised than frequent lexemes.

But frequent lexemes, such as demonstratives and articles, will budge, too ...

## 2.4. The question:

Why is it that the suppletive stems of this IE demonstrative pronoun were paradigmatically distributed like this, with \*so-, as long as it existed, so narrowly circumscribed – which is without parallel in any other inflectional paradigm?

### 3. The origin of *\*to-*/*\*so* suppletion

#### 3.1. "Defectivwesen" rather than "Ergänzungswesen"

unequal distribution:

*\*to-* in (maximally) 69 cells

*\*so-* in only 2 cells

distribution rather complex:

- three categories are required to specify paradigmatic occurrence of minority stem: *\*so-* (i) SG, (ii) NOM, (iii) MASC & FEM (non-NEUT);  
*\*to-* elsewhere
- moreover, when paradigms are arranged as above, with NEUT and MASC in neighbouring columns and with FEM separated from MASC by NEUT (as motivated by numerous MASC=NEUT syncretisms), the minority stem does not even occupy a contiguous area

There are two possible **origins** of suppletion:

- combination of different stems
- phonological differentiation of a single stem

Such morphologically complex paradigmatic distributions typically point to differentiating phonology as the driving force; combinatory origins of suppletion typically respect the design principles of inflectional systems (Plank 2011).

However – pace Heller 1956, who has an implausible story of a single-stem-phonologically-differentiated origin – the communis opinio here is that *\*to-/\*so-* is a combinatory suppletion.



The most plausible diachronic scenario for the origin of *to-/so-* suppletion (essentially due to Prokosch 1939):

Starting point:

The single stem of the lexeme of the unmarked demonstrative was *\*to-*.

Question:

A further stem, *\*so-*, was recruited for this lexeme. Why?

(*\*so-* < sentence connective? [Sturtevant 1939; but reverse development perhaps more plausible: Brugmann 1904b: 400, Diessel 1999: 1325–127]; < strong deictic?)

Answer:

- to fill a gap in the paradigm of *\*to-*,
- namely a gap for a Subject/Agent form, which was lacking or rarely used, because Proto/Common IE was **Subject ProDrop**.

(Likewise alluding to a semantic contrast, Szemerényi 1970: 188–189 cryptically speculates about an original distinction of animate/MASC&FEM and inanimate/NEUT – which doesn't account for the suppletion pattern, with \*to- not confined to NEUT, but used for all cases and numbers of MASC and FEM too, except NOM.SG.)

Remaining questions:

- Why was \*so- only recruited for SG (mostly)?  
Is there less (or less salient) ProDrop in PL and DU than in SG?
- Why was \*so- only recruited for MASC & FEM, and not also for NEUTER? And was never extended to NEUTER either?

"Defectivwesen" (Gabelentz 1891):

- A paradigm that is joined by a different lexeme must have had gaps; the paradigm of a stopgap on the other hand is complete. Suppletion as "Ergänzungswesen" (Osthoff 1900) does not imply one defective paradigm as a point of departure.

(In the case of stopgap \*so- it is unclear whether this was in fact a lexeme with inflection: it has been assumed to have been a sentence connective.

But \*to- was defective, lacking a Subject/Agent form.)

- What is supposed to happen with those inflectional forms of a stopgap which are not really needed to fill gaps, because the host lexeme itself has the inflectional forms in question and they are adequate?
  - atrophy (with precisely complementary distribution of the suppletive stems; secondarily thus "Ergänzungswesen"); marginalisation/loss of the stopgap as an autonomous lexeme or
  - alongside being a stopgap, continuing existence as a separate lexeme of its own with complete inflection

## Compare German indefinite pronoun:

SG			PL
MASC	FEM	NEUT	
<i>wer</i>	<i>wer</i>	<i>was</i>	—
<i>einer</i>	<i>eine</i>	<i>eines</i>	—

gap in PL, due to meanings of source forms,  
filled by *welch-*, which continues to exist as  
interrogative and relative pronoun,  
and which as such has and keeps its SG forms

## Compare Engl. *go*:

PRES	PRET
<i>go</i>	<i>eo-d- (yode)</i>

gap in PRET?  
because (suppletive!) stem formally deficient?  
stopgap *wend(-t)*,  
continues to exist as separate lexeme,  
with all PRES and PRET forms,  
if now marginalised (*She wend-ed her way*)

### 3.2. A conflict of interest, and how it is resolved

Given that a second lexeme was to join the paradigm of \*to-, why did the suppletive stems, prior to (rare) extensions and (frequent) levellings, get distributed over the paradigm as in (6a)?

There are conceivable alternative patterns – such as (6b)–(6d) – but none came into consideration.

☞ (6a)

	SG			PL			DU		
	MASC	NEUT	FEM	MASC	NEUT	FEM	MASC	NEUT	FEM
NOM	<i>so</i>	<i>tod</i>	<i>sā</i>	<i>toi</i>	<i>tā</i>	<i>tās</i>	<i>tō</i>	<i>toi</i>	<i>toi</i>
ACC	<i>tom</i>	<i>tod</i>	<i>tām</i>	<i>tōns</i>	<i>tā</i>	<i>tāns</i>	<i>tō</i>	<i>toi</i>	<i>toi</i>
GEN	<i>tosyo</i>	<i>tosyo</i>	<i>tosyās</i>	<i>toisōm</i>	<i>toisōm</i>	<i>tāsōm</i>			

(6b)	SG			PL			DU			
	MASC	NEUT	FEM	MASC	NEUT	FEM	MASC	NEUT	FEM	
	NOM	<i>so</i>	<i>sod</i>	<i>sā</i>	<i>toi</i>	<i>tā</i>	<i>tās</i>	<i>tō</i>	<i>toi</i>	<i>toi</i>
	ACC	<i>tom</i>	<i>sod</i>	<i>tām</i>	<i>tōns</i>	<i>tā</i>	<i>tāns</i>	<i>tō</i>	<i>toi</i>	<i>toi</i>
	GEN	<i>tosyo</i>	<i>tosyo</i>	<i>tosyās</i>	<i>toisōm</i>	<i>toisōm</i>	<i>tāsōm</i>			



(6c)	SG			PL			DU		
	MASC	NEUT	FEM	MASC	NEUT	FEM	MASC	NEUT	FEM
NOM	<i>so</i>	<i>sod</i>	<i>sā</i>	<i>toi</i>	<i>tā</i>	<i>tās</i>	<i>tō</i>	<i>toi</i>	<i>toi</i>
ACC	<i>tom</i>	<i>tod</i>	<i>tām</i>	<i>tōns</i>	<i>tā</i>	<i>tāns</i>	<i>tō</i>	<i>toi</i>	<i>toi</i>
GEN	<i>tosyo</i>	<i>tosyo</i>	<i>tosyās</i>	<i>toisōm</i>	<i>toisōm</i>	<i>tāsōm</i>			

(6d)	SG			PL			DU		
	MASC	NEUT	FEM	MASC	NEUT	FEM	MASC	NEUT	FEM
NOM									
ACC		<i>so-</i>			<i>to-</i>			<i>to-</i>	
GEN									

- ☞ I suggest it was because the requirement for two case forms being non-distinct – "NOM=ACC in NEUTER!" (pertaining to stems as well as markers when both participate in inflection) – ranked higher than the requirement of having suppletive stems distributed over paradigms as simply as possible.

(6d) is a maximally simple paradigmatic distribution of two suppletive stems, insofar as it can be defined through just one category, number:

Use so- in all SG forms (all genders and all cases),  
and to- elsewhere!

However, while the most simple distribution conceivable, it does not reflect the "Defectivwesen" origin of this instance of suppletion: the original impetus of roping in another lexeme had been gap of \*to- for Subject/Agent (NOM case), not for SG number!

(6c) accurately reflects this impetus: *so-* occupies all NOM cells, at any rate in the SG, where ProDrop was perhaps most salient.

To specify the paradigmatic distribution of the suppletive stems requires two categories:

Use *so-* in NOM and SG, and *to-* for all other combinations of cases and numbers!

And, also relatively simple, *so-* and *to-* forms both occupy contiguous areas in the paradigm, as arranged here.

What (6c) violates is a constraint on the inflection of neuters: NOM=ACC! The case marker chosen in (6c) is the same, *-d*, but the stems are different, *so-* and *to-*.

Both (6a) and (6b) abide by the constraint that NOM=ACC! for neuters.

But the distribution of suppletive stems is complex, needing to be specified through three categories, in an even more complex combination in (6b) than in (6a):

Use *so-* in NOM SG MASC&FEM (non-NEUT), and *to-* elsewhere! (6a)

Use *so-* in NOM SG and in ACC SG NEUT, and *to-* elsewhere! (6b)

The "Defectivwesen" – gap for Subject/Agent – is reflected in (6a), except the neuter does have *to-* also in NOM.

It is also reflected in (6b), except the neuter has *so-* also in ACC.

Why then is (6a) the winner?

Did it win by chance or by necessity?

The constraint NOM=ACC! for neuter appears to outrank all other considerations about how best to distribute suppletive stems over inflectional paradigms, even when the origin of suppletion is combinatorial.

Still, this constraint and its exalted rank don't force a unique solution: Is there something our explanation is missing?

### 3.3. Non-distinction not symmetric, but directed

When a categorial distinction is neutralised in some subparadigm, such relationships of formal non-distinction appear to be **symmetric** in synchronic descriptions:

NOM=ACC in neuters  $\equiv$  ACC=NOM in neuters in German;  
DAT=ABL in the plural  $\equiv$  ABL=DAT in the plural in Latin;  
etc.

However, in morphological theory such relationships are often recognised as being **directed** – e.g., when implemented through "rules of referral" (Zwicky 1985) or "take-overs" (Carstairs 1987).

NOM=ACC can thus be interpreted as

"for NOM refer to ACC" ( $\text{NOM} \Rightarrow \text{ACC}$ ) or, non-equivalently, as

"for ACC refer to NOM" ( $\text{ACC} \Rightarrow \text{NOM}$ );

or as "ACC takes over NOM function" ( $\text{ACC} \Rightarrow \text{NOM}$ ) or, again non-equivalently, as "NOM takes over ACC" ( $\text{NOM} \Rightarrow \text{ACC}$ ).

It is only when non-distinctions are accounted for in terms of **underspecification** that identity of forms is inherently undirected.



Caveats:

Later, Zwicky 2000 considered any directedness illusory;

Stump 1993, 2001 also recognises bi-directional referrals (though still inherently directed);

Baerman et al. 2005: 133-150 further distinguish CONVERGENT and DIVERGENT bi-directional referrals.

Ringe 1995 surveys nominative-accusative syncretisms in Indo-European, distinguishing non-distinction as the result of phonological neutralisation (= symmetric) or of the replacement of morphological exponents across inflection classes (= directed):

\**to-d* NOM=ACC.SG.NEUT is a case of neither.

**Synchronically**, determining directedness of non-distinctions may be subtle or even impossible;

**diachronically** – unless a paradigmatic distinction happens to be obliterated by phonological change oblivious to morphological contrasts – directedness is usually unmistakable in syncretisms.

In the case at hand – which is not a syncretism in the diachronic sense of the term, but a failure ever to introduce a formal distinction! (see below) – what set the relevant developments in motion (according to the scenario above) was *\*to-*'s lack of a Subject/Agent form: therefore

- another stem, *\*so-*, was recruited to fill this NOM gap;
- filling this gap also for NEUTER would have resulted in a violation of the powerful constraint NOM=ACC in NEUTER! (6C);
- to avoid such a violation, the existing ACC.SG.NEUT form *\*to-d* was extended to also serve as NOM (6a) (a take-over of NOM by ACC, a referral of NOM to ACC – unidirectional on both accounts);
- with originally a gap for NOM, there simply was no form ACC could have taken over (or could have been referred to) in NEUTER, complying with NOM=ACC!

The assumption that NOM=ACC non-distinction is due to  $ACC \Rightarrow NOM$  as the take-over direction for neuters thus accounts for (6a) winning over (6b).

(6b) could only have emerged as the winner if the take-over direction had been the reverse,  $NOM \Rightarrow ACC$ , and if in a complication of developments an existing ACC.SG.NEUT form *\*to-d* had been replaced by the new paradigm member *\*so-d*.

### 3.4. Non-distinction singularly pervasive and pertinacious

In the present scenario, the requirement NOM=ACC in NEUT! (or rather ACC  $\Rightarrow$  NOM, with non-distinction interpreted as directed) crucially prevails over other considerations of potential influence on paradigmatic patterns of suppletion, in particular that of simplicity of distribution.

Is there a reason for this ranking of factors?

It is at this point that we need to look beyond the single lexeme that has so far occupied centre-stage here.

Although the suppletion pattern is without parallel, the non-distinction pattern NOM=ACC (ACC  $\Rightarrow$  NOM) in NEUT! that is crucially involved in shaping it is not a peculiarity only of the demonstrative pronoun \*to-/ \*so- 'that'.

Rather, it is the most pervasive and pertinacious non-distinction of two cases in the Indo-European family.

Over 8,000 years or more (depending on one's dating of PIE), **not a single lexeme** inflecting for case and contrasting genders, of whichever word class, has had **a nominative distinct from an accusative in the neuter**, in whichever number (SG, PL, DU), in any of the 450–583 member languages of this family (going by Ethnologue or Glottolog figures respectively).

Assuming that the systematic non-distinction of a nominative from an accusative case was an original trait of the neuter gender (or also its ancestral INANIMATE class, before ANIMATE split up into MASC and FEM – but for present purposes we don't need to go into the question of the origin of Indo-European genders), it **never** happened over some 400 or more cycles of language acquisition for each of the languages descended from the proto-language, and over the lifespans of myriads of speakers of these 450–583 daughter languages, that **even a single lexeme** got itself a nominative distinct from its accusative when neuter (either inherently or by agreement).

Am I exaggerating?

— Not much, if at all.



In all of Indo-European, there are a few instances where, ostensibly, NOM≠ACC in the neuter, all from **Slavonic** (so far as I am aware).

- present active and past passive participle forms of verbs, since Old Church Slavonic times, here exemplified from Russian *nesti* 'to carry':

	PRES	PAST	
	SG		
	NEUT	NEUT	
NOM	<i>nesy</i>	<i>nes'</i>	(like MASC!)
ACC	<i>nesŏšte</i>	<i>nes'še</i>	

**Check!**

## Active Present Participle

делающий - doing/making

	Singular			Plural
	Masc.	Fem.	Neut.	
<b>Nominative</b>	делающий	делаящая	делаящее	делающие
<b>Genitive</b>	делаящего	делаящей	делаящего	делаящих
<b>Dative</b>	делаящему	делаящей	делаящему	делаящим
<b>Accusative</b>	N or G	делаящую	делаящее	N or G
<b>Instrumental</b>	делаящим	делаящей	делаящим	делаящими
<b>Prepositional</b>	делаящем	делаящей	делаящем	делаящих

## Active Past Participle

	Singular			Plural
	Masc.	Fem.	Neut.	
<b>Nominative</b>	делавший	делавшая	делавшее	делавшие
<b>Genitive</b>	делавшего	делавшей	делавшего	делавших
<b>Dative</b>	делавшему	делавшей	делавшему	делавшим
<b>Accusative</b>	N or G	делавшую	делавшее	N or G
<b>Instrumental</b>	делавшим	делавшей	делавшим	делавшими
<b>Prepositional</b>	делавшем	делавшей	делавшем	делавших

### ***Passive Past Participle***

написа́ть (*to write*) – написа́нный (written) / написа́н (short form)

	<b>Full form</b>	<b>Short form</b>
<b>Masculine</b>	написа́нный	написа́н
<b>Feminine</b>	написа́нная	написа́на
<b>Neuter</b>	написа́нное	написа́но
<b>Plural</b>	написа́нные	написа́ны

- 3rd person personal pronoun (here exemplified from Russian, with variations in other Slavonic languages): ACC  $\Leftarrow$  GEN,  $\neq$  NOM

	MASC	NEUT	FEM	PL
NOM	<i>on</i>	<i>onó</i>	<i>oná</i>	<i>oni</i>
ACC	<i>ego</i>	<i>ego</i>	<i>eě</i>	<i>ix</i>

suppletive stem in NOM\*

GEN  $\Rightarrow$  ACC;

elsewhere old ACC retained:

e.g. Upper Sorbian *wono* NOM, *jo* ACC)

in Polish in PL contrast of

PERSON (VIRILE) vs. THING (NEUT?);

with THINGS *one* NOM, *je/nie* ACC

GEN	<i>ego</i>	<i>ego</i>	<i>eě</i>	<i>ix</i>
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\* Nota bene: simplest paradigmatic distribution of suppletive stem (defined by single category: NOM; ignoring requirement NOM=ACC in NEUTER!

- animate nouns and adjectives in plural (also singular?):

ACC  $\Leftarrow$  GEN,  $\neq$  NOM

	Inanimate, 'dwelling'		Animate, 'monster'	
	Singular	Plural	Singular	Plural
Nominative	жи́ліще	жи́ліща	чудóвище	чудóвища
Accusative	жи́ліще	жи́ліща	чудóвища	чудóвищ
Genitive	жи́ліща	жи́ліщ	чудóвища	чудóвищ
Prepositional	жи́ліще	жи́ліщах	чудóвище	чудóвищах
Dative	жи́ліщу	жи́ліщам	чудóвищу	чудóвищам
Instrumental	жи́ліщ <sup>е</sup> м	жи́ліщами	чудóвищ <sup>е</sup> м	чудóвищами

However: neuter gender is only being distinguished in singular, genders are neutralised in plural.

(ACC  $\Leftarrow$  GEN also affects 2nd declension masculine singular nouns.  
Inanimates, on the other hand: ACC  $\Leftarrow$  NOM.)

However, before admitting even these few instances of NOM  $\neq$  ACC as counterexamples, let's clarify what is intended to fall and not to fall under the sweeping family-wide generalisation above, that nominative is never distinct from an accusative in the neuter in Indo-European.

To qualify, a language needs a nominative, an accusative, and a neuter. And these are not universal possessions in Indo-European.

But how do you recognise a "nominative" and an "accusative" case and a "neuter" gender when you see one in an Indo-European language? Obviously we don't want to be misled by mere labels.

"Cases" are morphologically bound markers of dependent nominals identifying (or distinguishing) their syntactic relations.

"Genders" are noun classes identified (or distinguished) on words in construction with them through morphologically bound agreement markers (or also on nouns themselves by virtue of influencing the selection of exponents of case and number when there are alternatives).

NOMINATIVE and ACCUSATIVE are cases

- whose central functions are to mark subject/agent and direct object/patient relations,
- these functions are exclusively performed by them and no other cases,
- covering all nouns and pronouns (or other case-marked words in nominal constituents) alike, regardless of any class distinctions among them,
- with the relational alignment across intransitive and transitive clauses being nominative-accusative.

NEUTER is a gender

- which is in contrast with one (UTER, aka COMMON) or more (MASC, FEM) other genders whose central members are male and female (i.e., gender classification must be sex-based,
- with its own central membership therefore negatively circumscribed as non-male and non-female,
- and therefore centrally subsuming inanimates – even though animacy is subordinate to sex as classificatory criterion;
- being the unmarked member of gender contrasts, with negative semantics, predisposes this gender to serve as default.



Do Russian and other Slavonic languages have an accusative in this sense?

Not prototypically.

Their accusative is not the only case to mark the direct object: but it shares this function with genitive and nominative, with animacy (along with negation) as a crucial influence on which of these cases to use; thus different classes of nouns take different direct object case marking.

Do Russian and other Slavonic languages have a neuter in this sense?

Not prototypically.

Sex-based gender classification has acquired a strong competitor in animacy-based classification, which is of superior importance in particular for the relational marking of subjects and object.

Probably these are mitigating circumstances for offences against NOM=ACC (ACC  $\Rightarrow$  NOM) in NEUT! in precisely these languages.

You wouldn't expect them in languages such as Sanskrit, Greek, or German.

(Nouns which are agreed with like masculines in the singular and like feminines in the plural are sometimes also labelled "neuters"; but such "alternating" genders aren't neuters in the above sense either. Need to check whether they present problems for NOM=ACC.)

We can rest assured, then, that the non-distinction pattern NOM=ACC (ACC  $\Rightarrow$  NOM) in NEUT!, Slavonic notwithstanding, is really extraordinarily pervasive across Indo-European and extraordinarily pertinacious over its history.

However, when we subsume the particular case of the demonstrative pronoun *\*to-*/*\*so-* under this generalisation, do we **explain** it?

No: however general, we just state it and declare it to be an inviolable constraint.

That nominatives never differ from accusatives in neuter paradigms could be a historical coincidence:

Perhaps, with NOM=ACC in NEUT (or INANIMATE) as the original state of affairs, no means – new distinctive forms, ways of differentiating identical old forms, paradigmatic rearrangements – were ever found to create a formal contrast to go with the categorial contrast of NOM and ACC also in neuter paradigms, just as in the other genders (if not consistently, especially in marked numbers)?

Possible, but hardly likely.

The pervasive and pertinacious absence of a **formal** distinction would be explained if we could assume that nowhere and never in Indo-European was there a **categorical** contrast between these two cases, ACC and NOM, in neuter inflectional paradigms.

On this account, while masculines and feminines have two cases for subject and direct object, NOM and ACC, neuters have only one single case with a more comprehensive function, hence distinct from both NOM and ACC – call it NOCCUSATIVE.

What this categorially parsimonious analysis amounts to is that relevant Indo-European languages show **split alignment** in case marking:

- the alignment of masculines and feminines is **nominative-accusative**, with intransitive and transitive subjects receiving NOM case and direct objects receiving ACC case;
- the alignment of neuters is **neutral**, with all three core syntactic relations marked identically, receiving the case we're calling NOCCUSATIVE.

(For comprehensive typologies of alignment patterns, including neutral, see Bechert 1979 and Kibrik 1979.)

For present purposes we don't need to go into the historical question of what the NOCCUSATIVE itself derives from: an earlier ABSOLUTIVE marking direct objects and intransitive subjects, with an ERGATIVE reserved for transitive subjects, assuming ergative-absolutive alignment for Proto-Indo-European (as was first done by Uhlenbeck 1901 [interestingly, but implausibly, tracing the supposed ERG suffix -s of masculines and feminines to demonstrative \*so-]), or a yet earlier PASSIVUS/INACTIVUS case for direct objects and non-agentive intransitive subjects, with an ACTIVUS for transitive subjects and agentive intransitive subjects, assuming active-inactive alignment (following Klimov 1973 and others).



Is there something wrong with assuming that different subclasses of lexemes inflecting for the same category have different term inventories for the category concerned?

Would this be wronger than assuming a categorial contrast that goes unrecognised by a formal distinction in even a single lexeme in hundreds of daughter languages over thousands of years?

Arguably, it is a mere matter of descriptive philosophy how we choose between these two evils. The question is how we conceive of the interaction between the syntax and the morphology of inflection.

If our preference is to keep the syntax of case assignment simple, with general rules assigning cases to all nominals alike, regardless of the formal distinctness or non-distinctness of exponents, then the same categorial distinctions are forced on neuters as on the other genders. Neuters are assigned nominative case when subjects, just like masculines and feminines are, and neuters are assigned accusative case when direct objects, just like masculine and feminines are – regardless of whether NOM and ACC exponents are distinct or non-distinct.

This is one way of doing grammar, ours. But there are others (instructively contrasted in Comrie 1991).

In the Australianist tradition, for example, when relational alignment is split in terms of animacy (Silverstein-splits), different syntactic rules of assigning ergative, absolutive, and accusative cases are typically assumed for subclasses of nouns differing in animacy.

Adopting this tradition for all relevant Indo-European languages, which arguably do show a Silverstein-split of alignments, we would have syntactic rules for assigning NOM and ACC to masculines and feminines, and a different syntactic rule for assigning NOCCUSATIVE to neuters.

With this loss of syntactic generality there would come a gain in morphological simplicity: each subset of genders would have only those categorial contrasts which are supported by formal contrasts.

Needless to add, this analytic strategy is not perforce applicable to all instances of syncretism: especially the more accidental instances will not have such syntactic repercussions.

But when a non-distinction is so pervasive and pertinacious as NOM=ACC ( $\text{ACC} \Rightarrow \text{NOM}$ ) in NEUT!, which is not a syncretism in the diachronic sense of the term, then we are probably entitled to wonder whether it is not really the lesser evil.

After all, it is explanatory.

And there are unobjectionable parallels from other inflectional categories (Schmidt 1889 and others after him):

In Indo-European neuters/inanimates also differed in number inflection: they had no PLURAL; only masculines and feminines/animates had the contrast SG – PL (and perhaps DUAL).

Neuters had an (inflectional or derivational?) COLLECTIVE (in  $*-eh_2$ ,  $-a/-\bar{a}$ ; originally a marker for abstract nouns? later also a source of FEM?); COLL forms were singular or unspecified for number; hence SG verb agreement with COLL neuters as subjects.

Secondarily, COLLECTIVE was reanalysed as PLURAL, with all classes of (count) nouns thus participating in the same number contrasts.

4. What else are neuters lacking, other than a NOM distinct from ACC?

Answer:

**Any** case forms other than ACC distinct from those of masculines.

And this is again a pattern of non-distinction that is extraordinarily pervasive and pertinacious across Indo-European!  
It is virtually unexceptional, like NOM=ACC for NEUT.

(2a') Sanskrit (Indo-Aryan, Indo-Iranian), with all cases

	SG			PL			DU		
	MASC	NEUT	FEM	MASC	NEUT	FEM	MASC	NEUT	FEM
NOM	<i>sás</i>	<i>tat</i>	<i>sā́</i>	<i>té</i>	<i>tā(ni)</i>	<i>tās</i>	<i>táu</i>	<i>té</i>	<i>té</i>
ACC	<i>tám</i>	<i>tat</i>	<i>tām</i>	<i>tān</i>	<i>tā(ni)</i>	<i>tās</i>	<i>táu</i>	<i>té</i>	<i>té</i>
INS	<i>téna</i>	<i>téna</i>	<i>táyā</i>	<i>tāis</i>	<i>tāis</i>	<i>tābhis</i>	<i>tābhyām</i>	<i>tābhyām</i>	<i>tābhyān</i>
DAT	<i>tásmai</i>	<i>tásmai</i>	<i>tásyai</i>	<i>tébhyas</i>	<i>tébhyas</i>	<i>tābhyas</i>	<i>tābhyām</i>	<i>tābhyām</i>	<i>tābhyān</i>
ABL	<i>tásmāt</i>	<i>tásmāt</i>	<i>tásyās</i>	<i>tébhyas</i>	<i>tébhyas</i>	<i>tābhyas</i>	<i>tābhyām</i>	<i>tābhyām</i>	<i>tābhyān</i>
GEN	<i>tásya</i>	<i>tásya</i>	<i>tásyās</i>	<i>téṣām</i>	<i>téṣām</i>	<i>tāsām</i>	<i>táyōs</i>	<i>táyōs</i>	<i>táyōs</i>
LOC	<i>tásmin</i>	<i>tásmin</i>	<i>tásyām</i>	<i>téṣu</i>	<i>téṣu</i>	<i>tāsu</i>	<i>táyōs</i>	<i>táyōs</i>	<i>táyōs</i>



## Sanskrit, noun inflection

### a-stems

	Masculine ( <i>rāma-</i> )			Neuter ( <i>āśya-</i> 'mouth')			Feminine ( <i>kānta-</i> 'beloved')		
	Singular	Dual	Plural	Singular	Dual	Plural	Singular	Dual	Plural
<b>Nominative</b>	rāmaḥ	rāmau	rāmāḥ	āśyam	āśye	āśyāni	kāntā	kānte	kāntāḥ
<b>Accusative</b>	rāmam	rāmau	rāmān	āśyaṃ	āśye	āśyāni	kāntām	kānte	kāntāḥ
<b>Instrumental</b>	rāmena	rāmābhyām	rāmāiḥ	āśyēna	āśyābhyām	āśyāiḥ	kāntayā	kāntābhyām	kāntābhiḥ
<b>Dative</b>	rāmāya	rāmābhyām	rāmebhyaḥ	āśyāya	āśyābhyām	āśyebhyaḥ	kāntāyai	kāntābhyām	kāntābhyaḥ
<b>Ablative</b>	rāmāt	rāmābhyām	rāmebhyaḥ	āśyāt	āśyābhyām	āśyebhyaḥ	kāntāyāḥ	kāntābhyām	kāntābhyaḥ
<b>Genitive</b>	rāmasya	rāmayaḥ	rāmānām	āśyasya	āśyayaḥ	āśyānām	kāntāyāḥ	kāntayaḥ	kāntānām
<b>Locative</b>	rāme	rāmayaḥ	rāmeṣu	āśye	āśyayaḥ	āśyeṣu	kāntāyām	kāntayaḥ	kāntāsu
<b>Vocative</b>	rāma	rāmau	rāmāḥ	āśya	āśye	āśyāni	kānte	kānte	kāntāḥ

### i-stems

	Masc. and Fem. ( <i>gāti-</i> 'gait')			Neuter ( <i>vāri-</i> 'water')		
	Singular	Dual	Plural	Singular	Dual	Plural
<b>Nominative</b>	gātiḥ	gātī	gātayaḥ	vāri	vāriṇī	vāriṇi
<b>Accusative</b>	gātim	gātī	gātīḥ	vāri	vāriṇī	vāriṇi
<b>Instrumental</b>	gātyā	gātibhyām	gātibhiḥ	vāriṇā	vāribhyām	vāribhiḥ
<b>Dative</b>	gātaye, gātyāi	gātibhyām	gātibhyaḥ	vāriṇe	vāribhyām	vāribhyaḥ
<b>Ablative</b>	gāteḥ, gātyāḥ	gātibhyām	gātibhyaḥ	vāriṇaḥ	vāribhyām	vāribhyaḥ
<b>Genitive</b>	gāteḥ, gātyāḥ	gātyoḥ	gātīnām	vāriṇaḥ	vāriṇoḥ	vāriṇām
<b>Locative</b>	gātāu, gātyām	gātyoḥ	gātiṣu	vāriṇi	vāriṇoḥ	vāriṣu
<b>Vocative</b>	gāte	gātī	gātayaḥ	vāri, vāre	vāriṇī	vāriṇi

u-stems

	u-stems					
	Masc. and Fem. ( <i>śātru-</i> 'enemy')			Neuter ( <i>mādhu-</i> 'honey')		
	Singular	Dual	Plural	Singular	Dual	Plural
<b>Nominative</b>	śātruḥ	śātrū	śātravaḥ	mādhu	mādhunī	mādhūni
<b>Accusative</b>	śātrum	śātrū	śātrūn	mādhu	mādhunī	mādhūni
<b>Instrumental</b>	śātruṇā	śātrubhyām	śātrubhiḥ	mādhunā	mādhubhyām	mādhubhiḥ
<b>Dative</b>	śātrave	śātrubhyām	śātrubhyaḥ	mādhune	mādhubhyām	mādhubhyaḥ
<b>Ablative</b>	śātroḥ	śātrubhyām	śātrubhyaḥ	mādhunaḥ	mādhubhyām	mādhubhyaḥ
<b>Genitive</b>	śātroḥ	śātrvoḥ	śātrūṇām	mādhunaḥ	mādhunoḥ	mādhūnām
<b>Locative</b>	śātrāu	śātrvoḥ	śātruṣu	mādhuni	mādhunoḥ	mādhūṣu
<b>Vocative</b>	śātro	śātrū	śātravaḥ	mādhu	mādhunī	mādhūni

(4a') Old High German, with all cases

	SG			PL		
	MASC	NEUT	FEM	MASC	NEUT	FEM
NOM	<i>der</i>	<i>daz</i>	<i>diu</i>	<i>dē</i>	<i>diu</i>	<i>deo</i>
ACC	<i>den</i>	<i>daz</i>	<i>dia</i>	<i>dē</i>	<i>diu</i>	<i>deo</i>
GEN	<i>des</i>	<i>des</i>	<i>dera</i>	<i>dero</i>	<i>dero</i>	<i>dero</i>
DAT	<i>demu</i>	<i>demu</i>	<i>deru</i>	<i>dēm</i>	<i>dēm</i>	<i>dēm</i>

## Old High German, noun inflection

### a-stems (strong declension)

		MASC		NEUT	
SG	NOM	der	tag	daz	wort
	ACC	den	tag	daz	wort
	GEN	des	tages	daz	wortes
	DAT	demo	tage	demo	worte
PL	NOM	dia	taga	diu	wort
	ACC	dia	taga	diu	wort
	GEN	dero	tago	dero	worto
	DAT	dēm	tagum	dēm	wortum

### n-stems (weak declension)

		MASC		NEUT		FEM	
SG	NOM	der	boto	daz	herza	diu	zunga
	ACC	den	boton	daz	herza	dia	zungūn
	GEN	des	boten	des	herzen	dera	zungūn
	DAT	demo	boten	demo	herzen	deru	zungūn
PL	NOM	dia	boton	diu	herzun	dio	zungūn
	ACC	dia	boton	diu	herzun	dio	zungūn
	GEN	dero	botōno	dero	herzōno	dero	zungōno
	DAT	dēm	botōm	dēm	herzōm	dēm	zungōm

Is it a coincidence that that gender which systematically lacks a nominative case distinct from the accusative also systematically lacks any direct case distinct from the corresponding direct cases of masculines?

Suggested answer: No; neuters mostly **are** masculines.  
Given they started out as opposites, as INANIMATE  
VS. ANIMATE, with ANIMATE then splitting up into  
MASC and FEM, a remarkable historical re-alignment!

Is this non-distinction between the direct cases of masculines and neuters merely **formal**, to be implemented through a morphological take-over rule: OBLIQUE of MASC  $\Rightarrow$  OBLIQUE of NEUT?  
Or are there no **categorical** distinctions in the first place?

Suggested answer: The latter.

The categorially most parsimonious analysis,  
coming at the cost of some heterogeneity of inflectional systems  
(different gender systems for oblique and for direct cases;  
different case systems for neuter and for masculine/feminine):

- For OBLIQUE cases (GEN, DAT, ABL, INS, LOC, ...), there are only two genders, MASC and FEM.
- For DIRECT cases, there are three genders, MASC, NEUT, FEM, with NEUT as a subclass of MASC.
- MASC and FEM inflect for two DIRECT cases, NOM and ACC.
- NEUT only has one DIRECT case, NOCC.