

Introducing *Traveling Voices*

— The diachronic development of the voice system in the Baltic, Slavic, and Germanic branches from a migrational perspective

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Aiming at an interdisciplinary research

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Diachronic shift of the voice system
Indo-European comparative linguistics

&

Migrational perspective
the analysis of ancient DNA

Indo-European language family I

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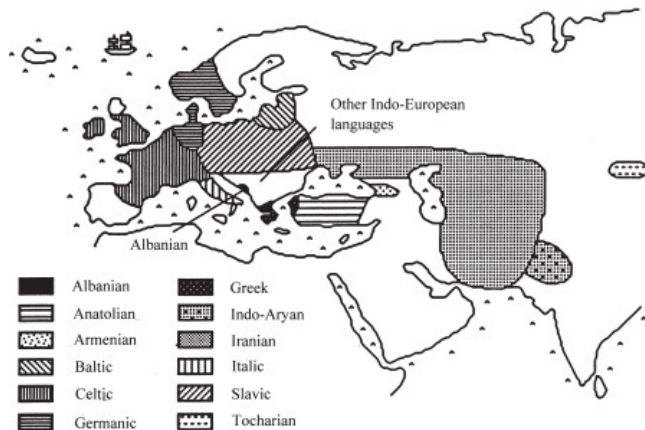
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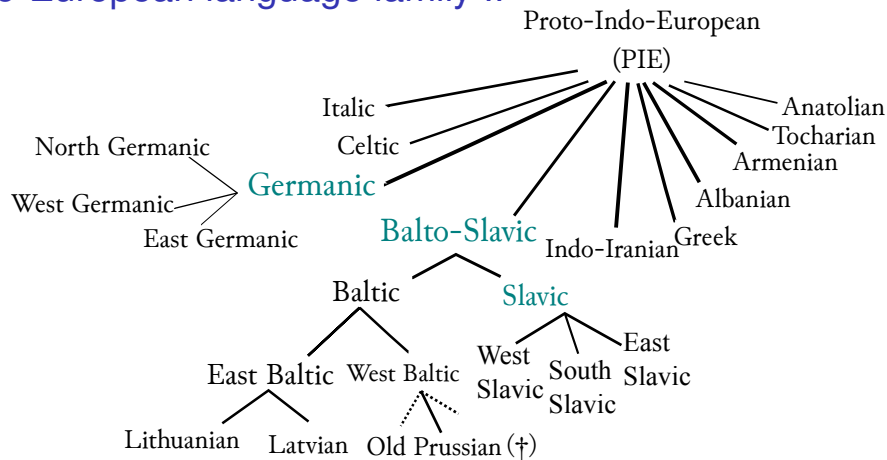
References



Approximate geographical distribution of Indo-European languages (ca. 1000 BC)

Hock and Joseph (2019: 37)

Indo-European language family II



A simplified family tree of the Indo-European branches based on Fortson (2010: 10).

Subgrouping the IE languages I

How do we identify the subgroups?

► Shared Innovations

- **satem branches** (Indo-Iranian, Armenian, Balto-Slavic): merger of plain velar and labio-velar ($*k^w$, g^w); sibilantization of PIE $*\hat{k}$, $*\hat{g}$, e.g., PIE $*\hat{k}mtom >$ Skt. *śatá-*, Ave. *satəm*, Lith. *šim̃tas*, OCS *sъto*.
- **centum branches** (Greek, Italic, Celtic, Germanic): preservation of labio-velar; merger of plain velar and palato-velar, e.g., PIE $*\hat{k}mtom >$ Lat. *centum*, (PGmc. $*xundān >$) Goth. *hunda*, OHG *hunt*.
- Indo-Iranian: satem feature; $*e$, $*a$, $*o > *a$; palatalization before a front vowel; Ruki-rule...
- Germanic: The first consonant shift (Grimm's Law)
- Baltic: PIE $*o > a$; Loss of number distinction of finite verbs in the 3rd person

etc...

Subgrouping the IE languages II

- The family tree in Ringe 2006: 5.

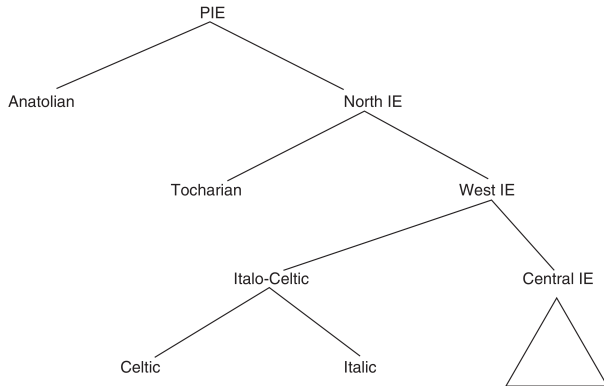
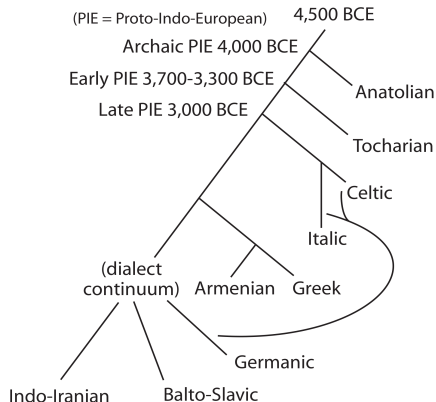


FIG. 2.1

Subgrouping the IE languages III

- The family tree in Anthony (2007: 57) based on Ringe, Warnow & Taylor (2002).



- Computational simulations (cf. Ringe, Warnow & Taylor 2002)

Subgrouping the IE languages IV

Shared innovation or dialectal diffusion / language contact? — they are often difficult to distinguish.

- ▶ Diffusion (I.-Ir. → Slavic → Baltic):
 - ▶ Ruki rule
 - ▶ Lith. *aušrà-*, Skt. *uśas-* < **h₂eus-* 'dawn'
 - ▶ OCS *uxo* < **h₂euso-* 'ear', but Lith. *ausìs* 'ear'
 - ▶ satem feature
 - ▶ **k̂* and **ĝ*, as sibilants; Skt. *śatá-*, Ave. *satəm*, Lith. *šim̃tas*, OCS *sъto* '100' < PIE **k̂mtom*
 - ▶ Lith. *klausýti* – Skt. *śṛṇóti*, OCS *slyšati* < **k̂leus-* 'to hear'
- ▶ Shared innovation?:
Plural oblique cases in **-m-* in Germanic and Balto-Slavic,
e.g., Old Norse *-ms*; OLith. *-mus*, OPru. *-mans* / *-mas*, OCS *-mъ* vs.
**-b^h-* elsewhere (e.g., Skt. *-bhyas*, Lat. *-bos* / *-bus*; Brugmann &
Delbrück 1892: II, 708–709)

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Subgrouping the IE languages V

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“The processes of historical change of the inflectional middle” can be placed in this context?

1. How did the shifts of the inflectional voice system in the Baltic, Slavic, and Germanic languages take place?
 - ▶ Do those changes indicate any shared developments among them, or contact-induced developments?
 - ▶ What sort of language contacts or branching-out processes could or could not be postulated in those processes?
2. **Migrational perspective:** Are the hypotheses compatible with the migration routes predicted by the genetic evidence?

What the analysis of ancient DNA tells us about the migration routes:

- ▶ Haak et al. 2015: a support of a hypothesis of a massive migration into Europe from the Eurasian steppes (cf. Anthony 2007: 83ff.); Narasimhan et al. 2019 suggest a more detailed migration routes of the people of Yamnaya-derived ancestry (on the next slide).
- ▶ NB: genetic information itself does not tell anything about the language that its carrier spoke.
- ▶ But the spread of a language was surely caused by the migration / move of its speakers.

Migration Routes II



Figure modified from Narasimhan et al. (2019) based on Fortson (2010: map 1.1, p. 12), Hock & Joseph (2019: 37).

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The inflectional middle I

- ▶ PIE voice system (dual is omitted in this chart)

active		:	medio-passive	
1sg.	*-mi		1sg.	*-h ₂ er
2.	*-si		2.	*-th ₂ er
3.	*-ti		3.	*-or / *-tor
1pl.	*-me-		1pl.	*-med ^h h ₂ -?
2.	*-te-		2.	*-d ^h (u)we-?
3.	*-(é)nti		3.	*-ro(r) / *-ntor

- ▶ Medio-passive: the doer is at the same time acted upon or indirectly affected by the action.

(1) examples from Sanskrit

- act. 3sg. pres. *muñcáti* 'releases'
- mid. 2sg. pres. *múcyase* 'you (sg.) become free'

- ▶ The voices in IE languages (cf. Luraghi, Inglese & Kölligan 2021: 342ff.)

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The inflectional middle II

- ▶ Anatolian, Albanian, Indo-Iranian, Greek: retention of Active : Medio-passive system
- ▶ **Active** : **Passive** in Italo-Celtic and Germanic (Gothic)
IE inflectional middle → passive or deponent verbs in Old Irish and Latin (e.g., *morior* ‘to die’; cf. Grestenberger 2019) / passive in Gothic.
[▶▶ skip slide](#)
- ▶ Latin and Gothic display a tense-based split concerning the encoding of the passive voice (Luraghi, Inglese & Kölligan 2021: 348, 365):
 - ▶ **inflected middle in the infectum** (PIE **present** and new imperfects), **periphrastic passive in the perfectum** in Latin
 - ▶ **inflected middle in the present** and in the optative, **periphrastic passive elsewhere** in Gothic.
- ▶ It appeared that the inflectional middle tended to persist in the present tense.
- ▶ The inflectional middle was eventually taken over by **periphrastic passive** and **reflexive construction** in Italic, Germanic, and Balto-Slavic.

Transformation of inflectional middle I

It is known that the function of the lost middle inflection was taken over by

- ▶ periphrastic passive (the verb meaning 'to be' + participle)
- ▶ reflexive construction (active inflection + reflexive marker).

This happened not only in Germanic and Balto-Slavic, but also in Italic as well. The replacement processes are documented relatively late:

- ▶ Italic: Late Latin (3c AD –)
- ▶ Germanic: Old Norse (7c AD –), OHG (8c AD –)

In Baltic and Slavic, the processes were completed already when they started to be documented (Baltic: 14c –; Slavic: 9c –).

What happened to the inflectional system before (or during) this shift happened? Did the middle inflection simply disappear without any trace? Here are some topics to investigate:

- ▶ **Baltic inflection**
 - ▶ 1sg. OLith. 1sg. *ėmi* 'I eat', OPru. 1sg. *asmai* 'I am', 2sg. *essei* 'you are', cf. the middle endings 1sg. **-ai* (< **-h₂e-i / -r*), 2sg. **-sai* (← **-th₂er*)(cf. Stang 1966: 406).
 - ▶ The thematic inflection: 1sg. *-u* < **-ō* < **-oh₂* ~ mid. **-h₂e* (Watkins 1969: 105ff.); Where does 2sg. *-i* < PB **-ĕ* < PBS **-ei* come from? (cf. Stang 1966: 407)
- ▶ **Anticausative nasal presents** (the anticausative medio-passives often developed to reflexive verbs, cf. Luraghi, Inglese & Kölligan 2021: 351)

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Transformation of inflectional middle III

Nasal present verbs are **intransitive / anticausative exclusively in Germanic and Balto-Slavic**, while they are usually transitive elsewhere. Gorbachov (2007) and Villanueva Svensson (2011: 43ff.) suggested that the Germanic and Balto-Slavic intransitive nasal presents may have originated from an ancient conjugation type called the *h₂e*-conjugation or the medio-passive inflection, respectively.

- ▶ The Baltic preterit system, a part of which shows diathetic contrast in the stem formations, i.e., intransitive *ā*-preterit and transitive *ē*-preterit.
- ▶ Relics of the IE middle inflection
 - ▶ Majer 2012: the the second part of the Proto-Slavic particle (nom. sg.) **kъ-žbdo* (cf. OCS *kъžido*, Old Slovenian dat. sg. *comufdo* 'every, each') may be a valuable relic of the lost middle 3sg. **žbdor* 'is wished, desired'.
 - ▶ Vine 1998: 76: OCS *sluti*, *slovq* 'to be called' from the middle inflection, cf. κλέομαι.

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Thank you for your attention.