

Split-ergativity in the Hittite language and possible sources of ergativity

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Structure of the talk

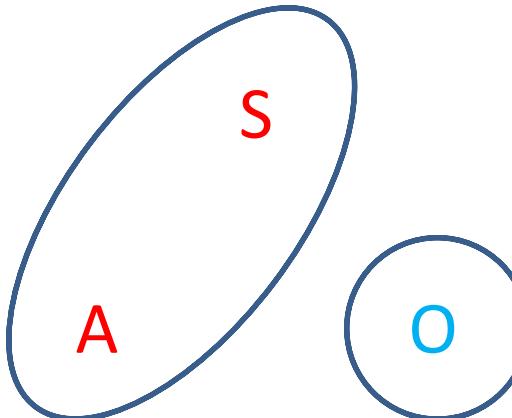
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Introduction to ergativity

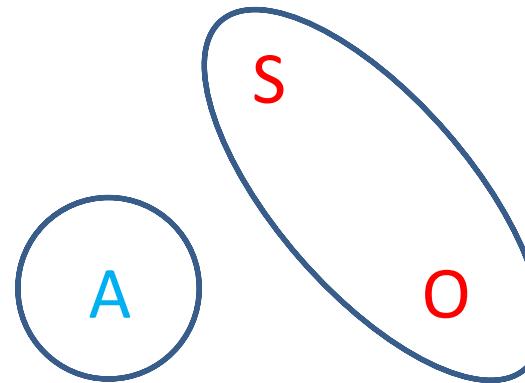
Relational typology – subject alignment – ergativity

- Relational typology = identifying types of how grammatical relations (S, A, O, T, R) behave with respect to each other (Velupillai 2012:239-242)
- Subject alignment = ‘combinations of S, A, O’ (Velupillai 2012:239-242)
- A = S / O **NOMINATIVE-ACCUSATIVE**
- S = O / A **ERGATIVE-ABSOLUTIVE**
- S / A / O **TRIPARTITE**
- S = A = O **NEUTRAL**
- A = O / S **DOUBLE-OBLIQUE**

Relational typology – subject alignment – ergativity

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- The diagram consists of three circles. A large oval on the left contains the letter 'S' in red. To its right is a smaller circle containing the letter 'O' in blue. Below the oval is another circle containing the letter 'A' in red.
- (1) Dominus^S curri-t.
 master.NOM run-3SG
 The master runs.
- (2) Dominus^A senator-em^O vide-t.
 master.NOM senator-AKK see-3SG
 The master sees the senator.

Relational typology – subject alignment – ergativity



- (3) Dominus^S curri-t.
 master.ABS run-3SG
 The master runs.

- (4) Dominu-m^A senator^O vide-t.
 master.ERG senator.ABS see-3SG
 The master sees the senator.

Alignment split and alignment shift

- **Alignment split:** two or more types of alignment in a language
- Conditioned by one or more language-internal factors
- Typical splits: TAM split (tense, aspect, mood), NP split (mostly animacy/gender), clause type split (main clause, subordinate clause)
(Dixon 1994: 70-104)
- Construction-based approach: alignment varies across constructions

Alignment split and alignment shift

- **Alignment shift:** the change of alignment in a language's (sub)system
- E.g. accusative → neutral (Old English → contemporary English)

	Nominative	Accusative
Old English	cear	cear-e
Contemporary English	sorrow	sorrow

Expressions of ergativity

- Morphematic marking

	Synthetic marking	Analytic marking
Head-marking	Ergative congruence marking on verbs	e.g. ergative sentence type markers
Dependent-marking	Ergative case	Ergative adpositions/particles

- Word order marking
- Suppletive stems

Possible sources of ergativity

Possible Sources: Ergative from passive

Passive:

- Patient: (often unmarked) subject/nominative
- Agent: either omitted or surfacing as a marked oblique

Ergative:

- Patient: (often unmarked) absolute
- Agent: marked ergative

Possible Sources: Ergative from passive

- (6) Bili kama dene-m
 dog.NOM eat fish-ACC

The dog eats the fish.

- (7) Dene kama-la bili-se.
 fish.NOM eat-PASS dog-OBL
The fish gets eaten by the dog.

- (8) Bili-se kama-la dene.
 dog-ERG eat-??? fish
The dog eats the fish.

→ what's -la?

Possible Sources: Ergative from passive

Possible splits:

Bili-se	kama-la	dene.	
dog-ERG	eat-tr	fish	→ -la as a marker of transitivity
	eat-perf		→ aspect split
	eat-past		→ tense split
	eat-3		→ person split
...			

The dog eats/has eaten/ate the fish.

Possible Sources: Ergative from nominalisations

The dog eats the fish.

The fish   the dog's eating.

- The formerly unmarked agent is morphologically marked and removed from subject position.
- The patient is moved from its marked object position into the unmarked subject position.

Possible Sources: Ergative from nominalisations

- (9) Bili kama dene-m
 dog.NOM eat fish-ACC

The dog eats the fish.

- (10) Bili-se kama-t dene.
 dog-GEN eat-NOMI fish.NOM → *Zero-copula presumed*
The dog's eating/food is the fish.

- (11) Bili-se kama-t dene
 dog-ERG eat fish.ABS → *What's -t?*
The dog eats the fish.

Possible Sources: Ergative from nominalisations

Possible splits:

Bili-se	kama-t	dene	
dog-ERG	eat-tr	fish	→ -t as a marker of transitivity
	eat-perf		→ aspect split
	eat-past		→ tense split
	eat-3		→ person split
...			

The dog eats/has eaten/ate the fish.

Possible Sources: Ergative from instrumental

- (12) Lik satu-ke lepa kili-m
3.NOM key-INST open door-ACC

They open the door with the key.

If the language is pro-drop the subject can be omitted:

- (13) Satu-ke lepa kili-m
key-INST open door-ACC

or: key-ERG open door-ACC → *tripartite*

The key opens the door.

Possible Sources: Ergative from instrumental

- (14) Satu-ke lepa kili-m
key-ERG open door-ACC
The key opens the door.

- High likelihood for animacy split
- However, by analogy this might turn into a person split or result in an alignment shift

Possible Sources: Ergative from indexical elements

- (15) Bili kama dene
 dog eat fish

The dog eats the fish.

- (16) Dene lik kama bili
 fish 3 eat dog

It's the fish that eats the dog. / The fish, it eats the dog.

- (17) Bili-lik kama dene.
 dog-ERG eat fish

The dog eats the fish.

Possible Sources: Ergative from indexical elements

Possible splits:

- Animacy split
- Emphasis split

Possible Sources: Ergative from directionality

- (18) Ko kama ba.
1 eat 2
I eat you.

- (21) Dene tul kama ko.
fish hither eat 1

ERG

The fish eats me.

- (19) Ko kama dene.
1 eat fish
I eat the fish.

- (22) Bili kama dene.
dog eat fish

The dog eats the fish.

- (20) Dene kama ko.
fish eat 1
It's the fish I eat. / I eat *the fish*.

Possible Sources: Ergative from directionality

- a very specific person split: only 3rd person agents acting on 1st/2nd person patients get ergative marking
- similar to direct-inverse systems

Interim conclusion

- The hypotheses for the origins of ergativity we examined are:
 - passive
 - nominalisations
 - instrumental
 - indexical elements
 - directionality
- These hypotheses are intertwined: **one split does not only have one possible origin** and one origin might lead to different splits
- There is not only one kind of ergativity – It can surface in many different forms, splits
- This has only been a simplified preview – reality is as per usual more complex.

Split-ergativity in the Hittite language?

The Hittite language 1: Basic facts

- Ancient Indo-European language (+)
- Spoken in Anatolia
- Language of the Hittite empire
- Written with cuneiform script on clay tablets



Map 1: Location of the Hittite empire around 1350BC (green line; CC BY-SA 4.0, created by Jan van der Crabben based on wikipedia).

The Hittite language 2: Genealogy

- Ancient Indo-European language (†)
- Earliest attestation of IE:
 - 1550 B.C. (textual witness)
- Part of the Anatolian branch (†)

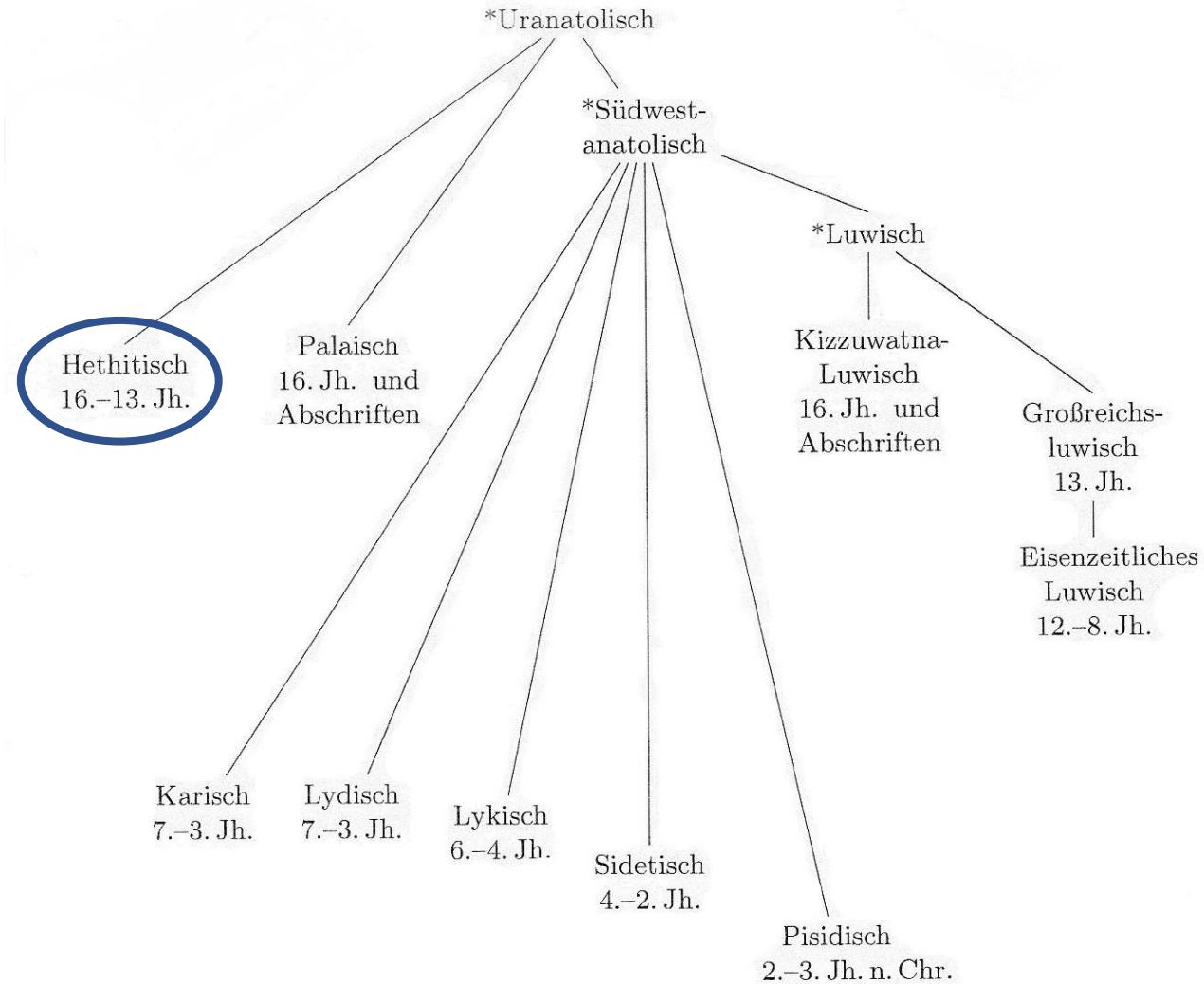


Figure 1: Structure of the Anatolian branch of Indo-European (Rieken 2015: 26).

The Hittite language 3: Research history

- Cuneiform script known from Sumerian & Assyrian
- Deciphered and classified in the early 20th century:
 - 1902: tentative interpretation as Indo-European
 - 1906: excavations in Turkey find the capital Hattusa → large archives
 - 1917: classification affirmed
- Nowadays best-attested and most intensively studied Anatolian language (over 25.000 fragments of clay tablets)

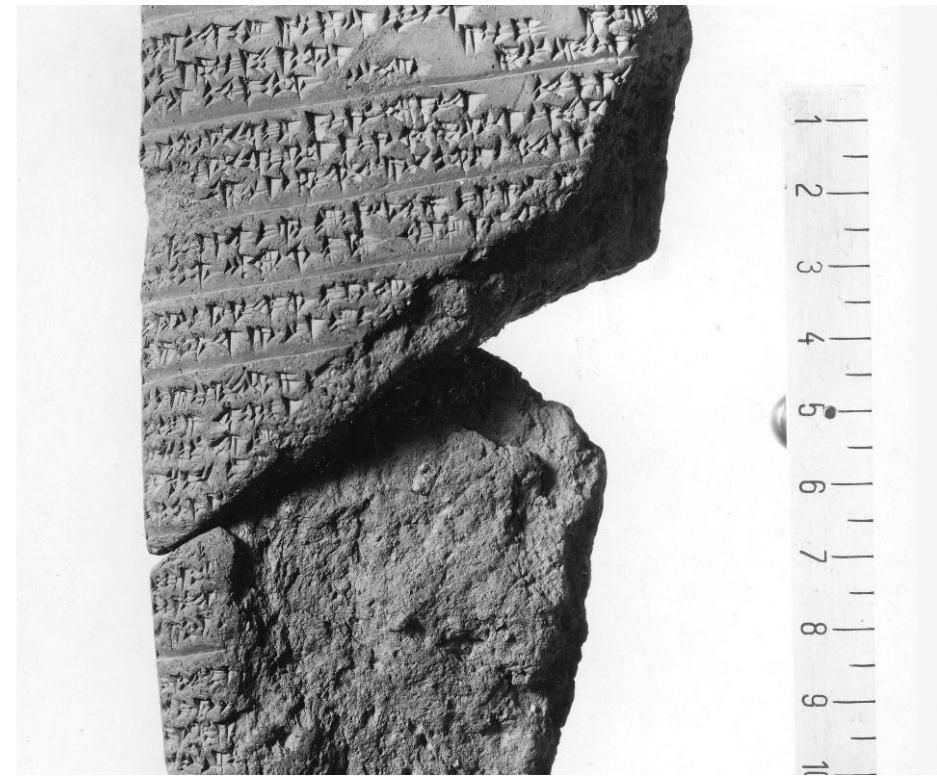


Figure 2: Anitta text (hethiter.net/:fotarch BoFN01408).

The Hittite language 4: Morphosyntax

Hittite is mostly...

- synthetic
 - suffixing
 - and shows relatively clear boundaries between nouns, verbs and adjectives
-
- **Nominal forms:**
 - **2 genera** (common, neuter)
 - **2 numbers** (singular, plural)
 - **8 cases** (vocative, nominative, accusative, genitive, allative, dative-locative, ablative, instrumental; with some syncretism)

Split-ergativity in Hittite?

Nominal declension in Old Hittite (Hoffner/Melchert 2008):

	SG (common)	PL (common)	SG (neuter)	PL (neuter)
Nominative*	-š, -Ø	-eš	-Ø, -n	-Ø, -a
Accusative*	-n, -an	-uš	-Ø, -n	-Ø, -a
Ergative	-	-	-anza	-anteš

Split-ergativity in Hittite?

- Synopsis of subject alignment in Hittite (according to Hoffner/Melchert 2008):

	Old Hittite		New Hittite	
Subclass	Pronouns	Nouns	Pronouns	Nouns
SG (common)	ACCUSATIVE	ACCUSATIVE	ACCUSATIVE (NEUTRAL)	ACCUSATIVE
PL (common)	ACCUSATIVE	ACCUSATIVE	ACCUSATIVE/NEUTRAL	NEUTRAL
SG (neuter)	NEUTRAL	ERGATIVE	NEUTRAL	ERGATIVE
PL (neuter)	NEUTRAL	ERGATIVE	NEUTRAL	ERGATIVE

Split-ergativity in Hittite?

Prior opinions of researchers

Hoffner/Melchert (2008: 72-73): „[...] when a neuter noun appears as the subject of a transitive verb, it takes an **ergative case** ending: -anza in the singular (rarely written -az [...] or -anteš in the plural.“

Rieken (2015: 42-44) states that functionally we in fact deal with an **ergative pattern**, but due to the derivational properties (genus-switch, polyfunctionality) **refuses to call it an ergative case**.

Other authors (Josephson 2004; Neu 1989; Oettinger 2001 and Zeifelder 2001) claim that **individualizing and/or anthropomorphizing** is the main function of the morpheme in question.

Split-ergativity in Hittite?

The morpheme -ant-

(23)	<i>ma-a-an-an</i>	<i>pa-ah-hu-en-an-za</i>	<i>ar-ha</i>	<i>wa-ar-nu-zi</i>
	<i>man=an</i>	<i>pahuen-anza</i>	<i>arha</i>	<i>warnuzi</i>
	OPT=3SG.ACC	Fire.OBL-ERG.SG	away	burn.PRES.3SG
'I wish fire would burn it up' (KBo 32.14 ii 6-7 [Neu 1988:101])				

Split-ergativity in Hittite?

The morpheme -ant-

- the pronunciation probably is /ants/, only written -anza due to cuneiform script (syllabic)
- most scholars interpret:
 - ERG.SG: <-anza> = /-ant-s/
 - ERG.PL: <antes> = /-ant-es/

Hoffner/Melchert 2008	SG (common)	PL (common)
Nominative (Old Hittite)	-š, -∅	-eš

→ ERG = *-ant-* + common gender NOM

Fits together: The alleged ergative case has a **gender-switching effect** (neuter > common)

Split-ergativity in Hittite?

The problem: polyfunctionality and interpretability of *-ant-*

Participles (2)

- (2) [wa-]al-ha-an-za e-es-du
walh-ant-s es-du
hit-PTCPL-NOM be-IMP.3SG
,Be it smashed!‘ (Bo 2533, I, 24-25)

denominal/deajectival
adjectives (3)

- (3) tessumis natanza
tessumi-s **natant-s**
mug-NOM of.reed-NOM
,mug of reed‘ (*natti* ,reed‘; cf. Tischler 2001)

Rare ablative allomorph (4)

- (4) ^{GIS}lut-ta-an-za
^{GIS}**lutta-ants**
Window-ABL
,from the window‘
(Hoffner/Melchert 2008)

Split-ergativity in Hittite?

The problem: polyfunctionality and interpretability of *-ant-*

2 unexplained contexts (maybe ergative extension)

neuter words with
-ant- + other case suffix
(5)

- (5) [(*kā*)]šata=šmaš=kan *utniy-and-an* *laluš* *dāhhun*
just.now=2PL.OBL=PTCL land-**ant?**-GEN.PL tongue.ACC.PL take.1SG.PST
'I have just taken the slanders of the inhabitants from you.' (Hoffner/Melchert 2008: 258)

some common gender nouns with *-ant-* (6)

- (6) ... ^{LU}**sankunniy-anza** **BAL-ahhun**
... priest-**ERG.SG?** offer.drink.to.the.gods-1.SG.PRT
,... (and) the priest offers drinks to the god(s).' (KUB I 1, 18-20)

Split-ergativity in Hittite?

The really important question

- Is **S = O ≠ A?**
- That is:
 - (i) Is *-anza/-antes* only used in A-position (and not in S- or P-function)?
 - (ii) Is *-anza/-antes* consistently used in A-position?
- Both can be answered easily: **YES** with only very few fringe cases (‘become’)
- (Even if the *-ant-* marker appears in other functions, another case marker is added; worst case is: *-ant-* + ACC, resulting in a marginal tripartite alignment pattern)

→ In short: There is **inflectional (split-)ergativity in Hittite**

Split-ergativity in Hittite?

Cognitive & Sociolinguistic factors

- **Cognitive:** Animacy hierarchy (Dixon 1994: 85):

1st person – 2nd person –DEM/ 3rd person – proper nouns – common nouns (**human** – **animate** – **inanimate**)

- ergative more probable to the right
- main function: marking the unexpected A-function use

- **Sociolinguistic:** Areal feature (Dixon 1994: 3):

The near-by languages Hattic (Anatolia), Hurro-Urartian (northern Mesopotamia), Sumerian (southern Mesopotamia) and Elamic (southern Mesopotamia) all show ergativity to varying degrees.

Possible origins of Hittite split-ergativity

2 competing hypotheses

- **ergative from ablative** (Garrett 1990)
- **ergative from derivational marker**, i.e. participle or gender-changing derivational marker (Oettinger 2001, Dardano 2010)

Possible origins of Hittite split-ergativity

Ergative from ablative?

- **Similar** to Hittite ablative: -az /-ats/, -za /-ts/ (Garrett 1990: 266)
- Partial **Syncretism**: “There is a rare ablative ending -anza” (Hoffner/Melchert 2008: 77)
- Proto-Anatolian ablative-instrumental: *-ati, *-anti (Garrett 1990: 266)
- **Possible cognate** to putative ergatives in 2 other Anatolian languages:
 - a) Hittite: -ants (*ti > *tsi > ts; e.g. *lutta-ants* ‘window’)
 - b) Luwian: -antis (e.g. *parn-antis* ,house’)
 - c) Lykian: -ῆti (*an > ē; e.g. *tes-ῆti* ,oath’)

Possible origins of Hittite split-ergativity

Ergative from ablative?

- Reinterpretation of instrument to agent in transitive clauses with 3rd person zero-subject (compare part 2: Possible origins of ergativity)
 - Subsequent reanalysis of *-ants* as *-ant-s*
 - *-ant-* + common gender nominative *-s* (sg) and *-es* (pl) can be seen from pl. *ant-es*
- reason for gender-switching property

Possible origins of Hittite split-ergativity

Ergative from derivational marker?

„[...] this formation is sometimes referred to as 'animatizing', to reflect the widespread view that it is characterized by a derivational suffix whose function is to transfer A-function neuter nouns to the common or 'animate' gender.“

(Garrett 1990: 266)

- Denominal adjectiviser (cf. Garrett 1990: 288):
 - *utne* 'land' + *-ants* > *utniyanza* (/utniy-ant-s/)
 - meaning (i): 'the one of the land' > 'inhabitant'
 - meaning (ii): 'the one of the land' > 'the land (itself)' > 'the land (anthropomorphized)' > 'the land (as an agent)'
- Gender-switching property from animated semantics

Possible origins of Hittite split-ergativity

Ergative from derivational marker?

Anthropomorphising is not crucial, but might have been a bridging context:

(24)	<i>pár-ku-nu-ud-du</i>	<i>šu-up-pí-iš</i>	<i>A-an-za</i>	<i>HUL-lu-un</i>	<i>EME-an [...]</i>
	<i>parkunu-du</i>	<i>suppi-s</i>	<i>weten-ants</i>	<i>idalu-n</i>	<i>lala-n [...]</i>
	Cleanse-IMP.3SG	holy-NOM	Water-ERG	evil-ACC	tongue-ACC
,The holy water shall cleanse the evil tongue [...].’ (Dardano 2010: 179)					

→ Would explain the yet unexplained *-ant-* extension

Conclusion

- Clear distribution: even despite the confusing polyfunctionality of *-ant-* it is clear that **neuter nouns require the endings –anz(a) or –antes in A function** (→ split-ergativity affirmed)
- Makes sense functionally (**distinctiveness, markedness**) and geographically (**areal feature**: Hattic, Hurro-Urartian, Sumerian)
- Derivational or inflectional: **ergative in Hittite is clearly inflectional**, since there is a grammatical rule triggered by **syntactic environment** and causes **no notable semantic differences** (gender-switch & allegedly metaphorical animacy are not required for)
- Exact **origin is unclear**, but **ablative-instrumental > ergative** is probable

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Research history & etymology

- Etymology: ergative from Ancient Greek *ἔργον* ‘achievement, work’

Research history & etymology

- Etymology: ~~ergative from Ancient Greek ἔργον ‘achievement, work’~~

Actual etymology: Latin preposition *ergā* ‘right against, next to’

Research history & etymology

- Etymology: ~~ergative from Ancient Greek ἔργον ‘achievement, work’~~

Actual etymology: Latin preposition *ergā* ‘right against, next to’

- First used (in the modern sense): Pater Wilhelm Schmidt (1902)

→ ergative case as the case of the subject in a transitive clause

(Earlier use meaning ‘comitative’ in the late 19th century)