

Reflexivity and the middle in Greek

Laura Grestenberger, Austrian Academy of Sciences
Laura.Grestenberger@univie.ac.at

Workshop on Reflexivity in Indo-European
Göttingen, March 29–30, 2022

1 Introduction: Reflexivity in IE

Some problems surrounding (the reconstruction of) reflexivity in (P)IE:

- Great variety of formal devices used in reflexive contexts in the different IE languages
- (implicit) assumption that PIE must have had one single original “reflexive construction”
- Lack of clarity as to how “reflexive”/“reflexivity” is/should be defined

At the same time, much progress has been made in the study of the function and reconstruction of middle morphology (e.g., Rix 1988; Jasanoff 2003; Villanueva Svensson 2003; Meiser 2009; Luraghi 2012; Cotticelli Kurras and Rizza 2013; 2016, 2018; Inglese 2020, 2021) and of the reflexive/anaphoric stem $*s(\underline{u})e-$ (e.g., Petit 1999, 2001, Puddu 2005, 2007, Viti 2009, Dunkel 2014)

- But still few (systematic) attempts at connecting these two (e.g., Cotticelli Kurras and Rizza 2013), and vastly different opinions on their original functions/distribution.

Today’s goals:

- Focus on (Homeric) Greek to argue that reflexivization strategies differ depending on 1) the argument structure of the reflexivized predicate, 2) the anaphoric/pronominal system of the language, and 3) the available voice-marking morphology of the language
- Resulting in different reflexivization strategies (focus on **reflexive predicates**, cf. Reinhart and Reuland 1993, specifically **direct reflexives** & **indirect reflexives**):
 1. **Reflexivization through middle/nonactive voice morphology alone** — for “body action verbs”/inherent reflexives
 2. (Middle morphology + a “weak” reflexive pronoun or particle — not attested in Greek)
 3. (Middle morphology + strong [reflexive] pronoun — maybe attested in Greek)
 4. (Active morphology + weak [reflexive] pronoun — not attested in Greek)
 5. **Active morphology + strong [reflexive] pronoun**
- **Questionnaire** (if there’s enough time) — which properties correlate with these constructions?
- **Reconstruction** (if there’s enough time): 1) must be reconstructed for PIE, but *only* for inherently reflexive, body action and body part NP construction verbs; *not* as a general strategy to form reflexives from transitive (2-place) predicates; 3) or 5) is likely the original way of forming reflexive predicate to transitive and ditransitive verbs.

2 Background

2.1 Uses of middle morphology

Canonical contexts of nonactive/“middle” morphology in Indo-European (& languages with a similar voice system, including languages with a Romance SE-type reflexive marker), Klaiman 1991, Kemmer 1993, Embick 1998, Kaufmann 2007, Alexiadou and Doron 2012, Luraghi 2012, Alexiadou et al. 2015, Schäfer 2017, Inglese 2021, Oikonomou and Alexiadou 2022, etc.):

- (1)
 - a. Anticausatives
 - b. **Reflexives**/reciprocals
 - c. Selfbenefactives/“**indirect reflexives**”
 - d. Dispositional/generic constructions
 - e. Passives (Mediopassives)

= **voice syncretism**: in “Greek-type languages”, “a Voice head is spelled out with non-active morphology [...] if it lacks a specifier.” (Alexiadou et al. 2015 based on Embick 1998, 2004; for Greek/IE cf. Grestenberger 2018, 2021).

→ nonactive morphology marks lack of an external argument, *but is not itself valency-reducing*

- (2) Spell-Out condition on non-active morphology (Alexiadou et al. 2015: 101–2)
Voice → **Voice[NonAct]/_ No DP specifier**

“For the morphological realization of Voice, the non-projection of the external argument as a specifier is a necessary and sufficient condition to yield a non-active form, independently of whether Voice has semantic impact or not.” (Alexiadou et al. 2015: 101–2) → “expletive Voice”

- active morphology = “elsewhere”

2.2 Typology of pronouns & pronominal clitics

2.2.1 Weak vs. strong pronouns

Cardinaletti and Starke (1999) distinguish three types of pronouns that differ w.r.t. to morphosyntactic, prosodic and semantic properties:

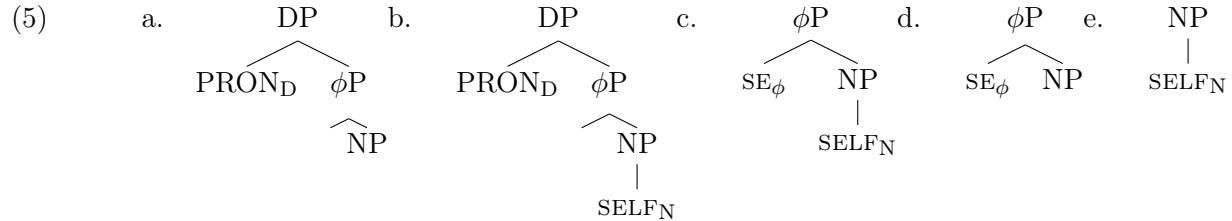
- (3) Cardinaletti and Starke 1999’s typology of structural deficiency
 - a. **strong pronouns**: strong, phrases (Slovak *jemu*, It. *lui* ...)
 - b. **weak pronouns**: deficient, phrases (Slovak *ono*, Olang-Tirolese *es* ...)
 - c. **clitic pronouns**: deficient, heads (Slovak *mu*, It. *lo* ...)
- (4)
 - a. Weak pronouns must occur in a case position at S(urface)-structure
 - b. Weak, but not clitic pronouns, bear lexical word stress
 - c. Strong, but not weak pronouns can be modified/coordinated

For reflexive pronouns, an additional criterion is whether or not they include Person and Number features, that is, whether they agree with an antecedent for all or some of the antecedent’s morphosyntactic features → all reflexively used pronouns in Ancient Greek are *strong* pronouns.

2.2.2 Pronominal structure

Déchaine and Wiltschko 2002, 2017, Reuland 2011: decompositional approach to pronominal structure.

- Functional structure correlates with distributional properties (argument, predicate, etc.) and morphosyntactic features (Person/Number)



- a. Engl., Gm., It. ... Gk., Skt., Hitt. etc. personal pronouns (*I, you, he/she/it ...*)
 b. Engl. *my-self, your-self*, etc., Greek *ἐγέ/ἐσ αὐτόν*, etc.
 c. Dutch *zichself*, Ved. *svá- tanú-* (?), Toch. A *ṣñi-āñcām*, Toch. B *ṣañ-añm*
 d. Fr. *se*, It. *si* ... Lat. *sē*, Hitt. *-z(a)*, Ved. *tanú-* (?), Toch. A *āñcām* (?)
 e. Engl. *one* ... Ved. *tanū-* (?), Toch. A *āñcām* (?)

(5a-b) \approx strong pronouns, (5c-d) \approx weak pronouns

2.2.3 Competition for insertion

Kiparsky 2002, 2012, Safir 2004: choice of reflexive form depends on the availability of pronominal forms in particular domains, i.e., is 1) form-dependent (which forms are available in any given language) and 2) domain-dependent.

- (6) Form to Interpretation Principle (FTIP, Safir 2004):
 If x c-commands y, and z is not the most dependent form available in position y with respect to x, then y cannot be directly dependent on x
- (7) Hierarchy of dependent forms (adapted from Safir 2004):
 SE-SELF \gg pronoun-SELF \gg SE \gg pronoun \gg R-expression

Cf. Petit 2001, Puddu 2005, 2007, Cotticelli Kurras and Rizza 2013 on the feature typology of reflexive markers in the older IE languages.

3 Reflexivization in Greek, I: middle endings (+ strong pronouns?)

3.1 Simple (itr.) inherent reflexives

3.1.1 In IE

Reflexivization through middle/non-active voice morphology only is possible for a restricted class of verbs (body action verbs, “inherent reflexives”) in the older IE languages, cp. Engl. *shower, shave* (without *-self*); the same holds for inherently reciprocal verbs (e.g., *fight, compete...*).

- Intransitive; some are *media tantum*

- (8) Hittite: Few cases, reflexives mostly take *-za* + act. (Hoffner & Melchert 2008, Inglese 2020)
- waššiyari* ‘clothes him-/herself’ (also + *za*)
 - warp^{-tta(ri)}* ‘washes him-/herself’ (+ *za*)
 - šuppiyahḫati* ‘cleaned himself’ (KBo III.16 III 11; also with *-za*)
- (9) Vedic
- śúmbhate* ‘adorns oneself’ (*śumbháti* ‘adorns, makes beautiful’)
 - pávate* ‘purifies him-/herself’ (*punáti* ‘purifies’)
 - nenikté* ‘washes him-/herself’ (e.g. RV 9.71.3d)
- (10) Latin:
- lavor* ‘wash myself’ (*lavō* ‘wash (sth.)’)
 - alor* ‘nourish myself’ (*alō* ‘nourish’)
 - induor* ‘dress (myself), put on (+acc)’ (*induō* ‘put on (+acc)’)
- (11) Tocharian B (Schmidt 1974, Malzahn 2010: 95, 102)
- lik^(ā)*- ‘wash (off)’: *lyikštār/likštār* ‘washes him-/herself’ (pres. VIII)
 - sānāp^ā*- ‘anoint’: *sonoptār* ‘anoints him-/herself’ (pres. I)
 - wäs-* ‘dress, put on clothes’: *yäskemtār* ‘they put on clothes’ (pres. IXa)

3.1.2 In Greek

- (12) Verbs of grooming & body action (Allan 2003: 89); refl. use attested in Homer = **bold**; oppositional actives given where attested
- aleíphomai*** ‘anoint oneself’ (***aleíphō*** ‘anoint’)
 - apomússomai*, *apomúttomai* ‘blow one’s nose’ (***apomússō***, ***apomúttō*** ‘wipe’)
 - apopsáomai* ‘wipe onself, wipe one’s nose’ (*apopsáo* ‘wipe sth. off’)
 - déphomai* ‘masturbate’ Arist. (< ‘knead oneself’; *déphō* ‘knead’); but later act. + *heaiúton*
 - hénnumai*** ‘get dressed; dress (oneself)’ (***hénnumi*** ‘dress, clothe’)
 - zōnnumai*** ‘gird oneself’ (***zōnnumi***)
 - ?*keíromai* ‘cut off one’s hair’ (***keíro*** ‘cut’) — abs. use is post-Homeric
 - kosmoūmai* ‘adorn oneself’ (***kosméō*** ‘arrange’)
 - louómai*** (*loumai*) ‘wash myself, bathe’ (***louō*** ‘wash sth.’)
 - nízomai*** ‘wash one’s hands/feet’ (***nízō*** ‘wash, clean’)
 - ksuroūmai* ‘shave (oneself)’ (*ksuréō* ‘shave’)
- (13) autoì d’ hidrō pollòn **ap-e-níz-onto** thalássēi
 SELF.NOM.PL PTCL sweat.ACC much.ACC off-AUG-wash-IPF.MID.3PL sea.DAT
 es-bá-nt-es knémas te idè lóphon amphí te mēroús. autàr epeí
 in-go-PTCP-NOM.PL shin.ACC.PL and neck.ACC around and thigh.ACC.PL but when
 sphin kūma thalássēs hidrō pollòn **níp-s-en** apò
 them.DAT.PL wave.NOM sea.GEN sweat.ACC much.ACC wash-AOR-PST.3SG. from
 khrōtòs kai anépsukh-th-en phílon ētor, és rh’ asamínthous
 skin.GEN and refresh-AOR.PASS-PST.3PL dear.NOM heart.NOM into PTCL bath.ACC.PL
 bá-nt-es eü-ksést-as **lou-sa-nto.** tò dè
 go.AOR-PTCP-NOM.PL well-polished-ACC.PL bathe-AOR-PST.MID.3PL they.NOM.DU PTCL
loe-ssa-mén-ō kai **aleip-sa-mén-ō** líp’ elaiōi
 bathe-AOR-PTCP.MID-NOM.DU and anoint-AOR-PTCP.MID-NOM.DU richly oil.DAT

deípnōi ephizanētēn, ...
dinner.DAT sit-IPF.3DU

“But they themselves after entering the sea **washed off** much (of the) sweat from (their) shins, neck and around their thighs. And when the wave of the sea had washed much (of the) sweat from their skin and their hearts were refreshed, having gone into the polished bathtubs **they bathed**. And **having bathed and anointed themselves** richly with oil, they sat down for dinner...” (Hom. *Il.* 10.574–8)

(14) Others

- a. *gumnázomai* ‘exercise (oneself)’ (*gumnázō* (*heautón*) ‘train’ (oneself))
- b. ***entúnomai*** ‘prepare, adorn oneself’ (***entúnō*** ‘equip, prepare’; cf. selfbenefactive below)
- c. *knáomai* ‘scratch oneself’ (Plato+; ***knáoō*** ‘grate, scratch’) — cf. act. below
- d. *paraskeuázomai* ‘prepare oneself; get ready’ (also selfbenefact., cf. below; *paraskeuázō* ‘prepare’)
- e. *stephanóomai* ‘crown oneself’ (Soph., Eur.+; Hom. only resultative-stative pf. mid. ‘be crowned with’; *stephanóō*)

(15) óphra tákhista entúneai

so.that quickly get.ready.SUBJ.MID.2SG

“so that you may get ready most quickly” (*Od.* 6.31–2)

(16) stephanoũsthe kissōi

crown.PRS.IPV.MID.2PL ivy.DAT

“crown yourself with ivy!” (Eur. *Ba.* 106)

3.1.3 Reflexivization through middle alone?

- Nonact./mid. morphology by itself cannot reflexivize agentive, transitive verbs in languages like Modern Greek and Albanian
 - Except for “naturally reflexive” verbs (body action verbs, etc.)
 - (and setting aside “weak” reflexive pronouns/clitics such as Fr. *se*, It. *si*, etc., whose properties differ)
 - ... suggests that nonactive/“middle” morphology by itself is not valency-reducing

(17) Modern Greek reflexives: non-active morphology + reflexive prefix *afto-* ‘self’. If *afto-* is missing, the interpretation can only be passive (ex. from Embick 1998).

- a. *afto-katastrafo-me*
SELF-destroy-1SG.NACT
“I destroy myself”
- b. O Yanis katastraf-ik-e
the Yanis destroy-PAST.NACT-3SG
‘Yanis was destroyed/*destroyed himself’

This suggests that it is the *afto-*morpheme that introduces reflexivity in these predicates, not the nonact. morphology

- Confirmed by the ancient IE languages, where “middle” alone does not (usually) reflexivize:

- (18)
- a. Hitt. *karštari*, Toch. B *kärsnātär* ‘is/gets cut’, not *‘cuts him-/herself’ (< **kers*)
 - b. Gk. *θένεται* ‘is/gets killed’, not *‘kills him-/herself’ (< **g^{uh}en*)
 - c. Hitt. *damaštari*, Gk. *δάμναται* ‘is/gets tamed’, not *‘tames him-/herself’ (< **demh₂*)

- So why do we find non-active/“middle” morphology in *afto*-reflexives? → because it marks the absence of an external argument (≈ an agent)
 - This implies an “unaccusative analysis” of reflexives in Greek-type languages, as proposed by e.g., Grimshaw (1990), Pesetsky (1995), Embick 1998, Sportiche (1998), Rooryck and Vanden Wyngaerd (2011)...
 - Inherent reflexives = unaccusatives

... but then seemingly “inherent” middles like (19) are a problem — Allan (2003) classifies these as “other types of direct reflexive actions” (he includes *gumnázomai*, *déphomai*, *entúnomai*, *kalúptomai*, *knáomai*, *paraskeuázomai* and *stephanóomai* in this category — but see above).

- (19) Direct reflexives from agentive transitive verbs (?)
- apánkhomai* ‘hang, strangle oneself’ Hdt.+ (*apánkhō* ‘strangle’)
 - kóptomai* ‘beat oneself (in grief)’, Pl. (*kóptō* ‘beat, strike’)
 - (*apo*)*spháttomai* ‘slit one’s throat; kill oneself’ Xen. ((*apo*)*spháttō* ‘slit, cut’)
 - túptomai* ‘beat oneself; lament’ Hdt. (*túptō* ‘beat’)
- (20) *metà dè l’egousi hōs hē païs apénk-sa-to hupò ákheos*
 after PTCL say.3PL that the girl hang-AOR-MID.3SG from grief.GEN
 “They say that afterwards the girl hanged herself out of grief.” (Hdt. 2.131.2)
- (21) *túptontai mèn gàr dè metà tèn thusiēn pántes kai pāsai*
 beat.PRS.MID.3PL PTCL for PTCL after sacrifice.ACC all.M and all.F
 “For after the sacrifice, all the men and women beat themselves (= lament), ...” (Hdt. 2.61.1)
- (22) *énioi gàr (...) pro-apothnéiskousin hupò toũ φόβου, hoi mèn*
 some.NOM for before-die.3PL from ART.GEN fear.GEN ART.NOM.PL PTCL
rhíptoũntes heautoús, hoi d’ apankhómēnoi hoi
 throw.PCTP.NOM.PL self.ACC.PL ART.NOM.PL PTCL hang.PTCP.MID.NOM.PL ART.NOM.PL
 d’ *aposphattómēnoi: ...*
 PTCL slit.PTCP.MID.NOM.PL ...
 “Some (...) die in terror before their time - some by hurling themselves over a precipice, others by hanging themselves, others by cutting their own throats.” (Xen. *Cyr.* 3.1.25, cit. after Allan 2003: 91)

- Allan argues based on statistical data from the distribution of active vs. middle forms that these actions were conceptualized as equally/more naturally performed on oneself than on sbdy. else → essentially a subclass of inherent reflexives.

3.2 Body part reflexives

Middle-marked verb + body part reflexives/body action verb reflexives with an inalienably possessed direct object are analyzed here as a subclass of inherent/body action reflexives.

- (23) a. *kalúptomai* ‘cover oneself’/‘cover one’s x’ (head/shoulders/...) (*kalúptō* ‘cover’) — but also with *active* + acc. body part in Homer (Od.; see below)
- kóptomai* ‘beat one’s x’ (in grief) (*kóptō* ‘beat, strike’)
 - nízomai* ‘wash one’s hands/feet’ (*nízō* ‘wash, clean’)

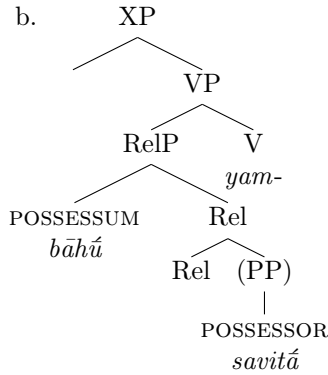
- (24) a. krēdmnōi d' ephúperthe **kálup-sa-to** dīa theáōn kalōi
 veil.DAT PTCL from.above cover-AOR-MID.3SG goddess beautiful.DAT
 nēgatéōi
 brand.new.DAT
 “The most noble goddess covered herself from the top with a veil, a beautiful, brand
 new one...” (*Il.* 14.184–5)
- b. hó dè idreíēi polémoio aspídi taureíēi **kekalumménos**
 he PTCL skill.DAT war.GEN shield.DAT of.bull.hide.DAT cover.PF.MID.PTCP.NOM
euréas ómous
 broad.ACC.PL shoulder.ACC.PL
 “But he with his skill of war, having covered his broad shoulders with his bull-hide
 shield, ...” (*Il.* 16.359)
- (25) óimōksen d' hò gērōn, **kephalèn** d' hó ge **kóp-sa-to**
 wail.AOR.3SG PTCL the old.NOM.M head.ACC PTCL he PTCL beat-AOR-MID.3SG
 khersin
 hand.DAT.PL
 “The old man let out a wail, and **he beat his head** with his hands.” (*Il.* 22.33)
- (26) Tēlémakhos ... **kheíras** **nip-sá-men-os** poliēs
 Telemachus hand.ACC.PL wash-AOR-PTCP.MID-NOM grey.GEN seawater.GEN
 halòs eúkhet' Athēnēi
 pray.IPF.MID.3SG Athena.DAT
 “Telemachus ..., **having washed his hands** with the grey seawater, prayed to Athena.”
 (*Od.* 2.261–2)

Compare:

- (27) Vedic, RV 6.71.1a–b (translation from Jamison and Brereton 2014):
 úd u syá deváḥ savitá hiraṇyáyā **bāhú** **ayams-ta**
 up PART this.NOM god.NOM Savitar.NOM golden.ACC.DU arms.ACC.DU direct-3SG.AOR.MID
 “Up has this god Savitar **raised his two golden arms**”
- (28) Tocharian B: THT 107 b4 (CEToM = Malzahn, Melanie et al. 2011–):
 nāṣṣa **lyyāsa** wrenta po laikāte
 swim.3SG.PRET.ACT limbs.OBL rags.OBL all wash.3PL.PRET.MID
 “He bathed and **washed all of his limbs** [and] rags.”

Analysis: body part = “inalienable spatiotemporal stage of its possessor-antecedent” (Rooryck and Vanden Wyngaerd 2011: 189); body part reflexives are unaccusatives with an Rel(ational)P containing both the possessum (= the body part NP) & the possessor (= surface subj.), cf. Grestenberger (2015).

- (29) a. savitá ... **bāhú ayamsta** ...
 “Savitar raised his arms”



3.3 Indirect reflexives/selfbenefactives

(30) Examples:

- a. *aínumai* ‘take, seize’
- b. *árnumai* ‘acquire’
- c. *dékhomai* ‘receive, accept’
- d. *entúnomai* ‘prepare sth. for oneself’ (*entúnō* ‘equip, prepare’)
- e. *ktáomai* ‘acquire’
- f. *kosmoũmai* ‘adorn sth. for oneself’ (*kosméō* ‘arrange’)
- g. *paraskeuázomai* ‘prepare for oneself’ (also dir.refl.; *paraskeuázō* ‘prepare’)
- h. *poiéomai* ‘do sth. for oneself’ (*poiéō* ‘do, make’)
- i. *phéromai* ‘carry sth. off for oneself; win’ (*phéro* ‘bring, carry’)
- j. *ōnéomai* (aor. 3sg. *(e)príato*) ‘buy’

(31) *phíloi* d’ amph’ autòn hetaĩroi essuménōs epénonto kài
 dear.NOM.PL PTCL around self.ACC comrade.NOM.PL busily toil.IPF.MID.3PL and
entúnonto ariston
 prepare.IPF.MID.3PL breakfast.ACC
 “And around him his dear comrades were busily working and **preparing breakfast for themselves.**” (*Il.* 24.123–4)

(32) *méga mèn kléos autēi poiēit’*
 great.ACC PTCL fame.ACC self.DAT do.PRS.MID.3SG
 “She brings great fame to herself” (*Od.* 2.125–6)

(33) *aí k’ apokēdēsante pherómetha kheĩron áethlon*
 if be.careless.PTCP.NOM.DU.M bring.SUBJ.MID.1PL inferior.ACC.N prize.ACC.N
 “if (because of you two) being careless **we shall win an inferior prize.**” (*Il.* 23.413)

(34) *epì Thrāikēs strateían para-skeuazó-men-os*
 for Thrace.GEN campaign.ACC PRVB-prepare-PTC.MID-NOM
 “(he was) preparing an army for Thrace.” (*Thuc.* 4.70.1)

4 Reflexivization in Greek, II: active endings + strong pronouns

4.1 Active + pers. pronoun

Active morphology + case-marked pronoun that agrees in person & number. Homer uses personal pronouns in reflexive and AcI/ECM contexts for 1st & 2nd person, (35a-c), (Bolling 1947, Schwyzer

1939-71, Petit 2001, Viti 2009, etc.) and 3rd person in non-direct reflexive (non-coargument) contexts, (35d), (Viti 2009, Kiparsky 2012).

- Mostly with active morphology (but cf. (35a))

- (35) a. hò dè dakrúsas épos ēúda: zōgreīt', autàr
 he PTCL cry.AOR.PTCP.NOM.SG word.ACC speak.IPF.3SG capture.alive.IPV.2PL then
 egòn **emè lūsomai**
 I me.ACC release.FUT.MID.1SG
 “And crying he uttered the words: ‘Take me alive, and I will release (= ransom) myself!’” (*Il.* 10.378)
- b. **emè** phēmi polù propherésteron eīnai
 me.ACC declare.PRS.1SG much more.excellent.ACC be.PRS.INF
 “I declare myself to be the best” (*Od.* 8.221)
- c. epei oud' **emè** néidá g' hoútōs **élpomai** en Salamīni
 since NEG me.ACC witless.ACC PTCL thus hope.MID.1SG in Salamis.DAT
 genésthai te traphémen te
 be.born.INF.MID and be.raised.INF and
 “Since I don't expect/think myself to have been born and raised a fool in Salamis.” (*Il.* 7.198-9)
- d. amphì **hé** papténas
 around him.ACC glancing.AOR.PTCP.NOM.SG
 “glancing around himself” (*Il.* 4.497; 15.574)

- **Hittite**: besides *-z(a)*, Hittite also uses the dative personal pronouns in the plural in indirect and direct reflexive contexts (Boley 1993, Hoffner and Melchert 2008, cf. Old English), (36).
- So this may be an inherited strategy for (at least 1st & 2nd person reflexives)
 - ... though the more common view is that Hittite & Greek innovated w.r.t. original person-indifferent **s(e)ue-* (Schwyzer 1939-71, Petit 1999, 2001, Dunkel 2014, etc.)

- (36) a. Ḫatt. iii 4 (Hoffner and Melchert 2008: 358):
 nu=**naš** DUMU.NITA.MEŠ DUMU.MUNUS.MEŠ **iya-wen**
 PART=us.DAT sons daughters make-1PL.PRET.ACT
 “and we begat for ourselves sons (and) daughters”
- b. KUB 16.16 i 28:
warpanzi=ma=wa=**šmaš** $\bar{U}L$
 wash.3PL.PRES.ACT=but=QUOT=them.DAT not
 “but they do not wash themselves”

Bound variable reading:

- (37) toì d' hōs idon ophthalmoīsi pántes anéiksan, **káleón** té
 they PTCL as see.AOR.3PL eye.DAT.PL all.NOM spring.up.AOR.3PL call.IPF.3PL and
 min **eis hē hékastos**
 her.ACC to him.ACC each.NOM
 “And as they (the winds) beheld her with their eyes they all sprang up and **they called her each to himself.**” (*Il.* 23.202–3)

- 3rd person coargument reflexives obligatorily take *autón* ‘self’ already in Homer: **heé/hé autón, heé/hé autén**, etc., (38a-b)
- ... or just *autón, autén* without the 3rd person pronoun, (38c).
- This construction takes *active* morphology and is generalized in post-Homeric Greek

4.2 Act. + body part reflexive

Often *act.* instead of the expected middle morphology already in Homer — semantic variation or beginning renewal of canonical reflexivization strategy for body part reflexives?

- (38) a. ***aískhúnō*** + body part ‘bring shame on, disgrace’,
 b. ***kalúptō*** ‘cover’, (39).
 c. ***knáoō*** ‘scratch, scrape’ + body part (acc.), (40)
- (39) kharién d’ éískhūne prósōpon
 beautiful.ACC *ptcl* shame.IPF.3SG face.ACC
 “he disgraced his beautiful face”
- (40) pollákis gār **knōn** ho híppos epì tēi phátnēi **tèn kephalén**
 often for scrape.PTCP the horse on the.DAT manger.DAT the.ACC head.ACC
 “For often the horse (will be) scraping its head against the manger, ...” (Xen., *Peri hipp.* 5)
- (41) kálpu-s-e dè kalà prósōpa
 cover-AOR-3SG PTCL handsome.ACC face.ACC
 “he covered his handsome face” (*Od.* 8.85)

Contrast (41) with:

- (42) hó dè idreíēi polémoio aspídi taureíēi **kekalumménos**
 he PTCL skill.DAT war.GEN shield.DAT of.bull.hide.DAT cover.PF.MID.PTCP.NOM
euréas ómous
 broad.ACC.PL shoulder.ACC.PL
 “But he with his skill of war, having covered his broad shoulders with his bull-hide shield,
 ...” (*Il.* 16.359)

And:

- (43) a. eū **entúnasan** hē **autén**
 well adorn.AOR.PTCP.ACT.ACC.F 3SG.PRON.ACC self.ACC.F
 “Having well adorned herself” (*Il.* 14.162)
 b. óphra tákhista **entúneai**
 so.that quickly get.ready.SUBJ.MID.2SG
 “so that you may get ready most quickly” (*Od.* 6.31–2)

4.3 Post-Homeric: active + complex refl.

- (44) With inherent reflexives
- apomússō heaúton* ‘blow one’s nose’ (Epict.); *rhîna* ‘one’s nose’
 - gumnázō heaúton* ‘train, exercise oneself’ (Xen.)
 - déphō heaúton* ‘knead oneself, masturbate’ (Eubol.)

Already in Homer?

- (45) hòs hē porphurēi nephēlēi **pukásasa** hē **autèn**
 thus she purple.DAT cloud.DAT cover.PTCP.ACT.NOM.F her.ACC self.ACC.F
 dúset' Akhaiōn éthnos
 enter.AOR.MID.3SG Achaeans.GEN.PL host.ACC
 “Thus **having covered herself** in a purple cloud she entered among the host of the Achaeans.” (*Il.* 17.551)
- (46) mé pōs deísantes apollékseian hetaĩroi eiresiēs entòs
 NEG how be.afraid.PTCP.NOM.PL cease.AOR.OPT.3PL comrade.NOM.PL rowing.GEN inside
 dē **pukázoien sphéas autoús**
 PTCL cover.OPT.3PL them.ACC self.ACC.PL
 “So that my comrades would not somehow out of fear cease the rowing, but **hide themselves** inside.” (*Od.* 12.224–5)
- But (45)–(46) probably belong to the group in (47); direct/coargument reflexives (w. *autón* obligatory for 3rd person co-argument refl. in Homer):
- (47) a. **epotrúnō** ‘stir up, excite’
 b. *spháttō, spházō heaúton* (Thuc.) ‘kill oneself’; *epikataspházō heaúton* (Hdt.) ‘kill oneself upon/over’
 c. **phuláttō, phulássō** ‘guard, protect’
 d. *pukázō* ‘cover closely, protect’
- (48) **heè** d’ **autón** **epotrúnei** makhésasthai
 3SG.PRON.ACC PART self.ACC.M urge.3SG.PRES.ACT fight.PRES.INF.MID
 “He stirs himself up to fight” (*Il.* 20.171)
- (49) all’ étōi epì vuktì **phuláksomen** **heméas autoús,** prōi d’
 but surely at night.DAT guard.FUT.ACT.1PL us.ACC self.ACC.PL.M morning.ADV PTCL
 hupēōioi sùn teúkhesi thōrēkhthéntes nēusìn épì
 early.NOM.PL with armour.DAT wear.armour.AOR.PASS.PTCP.NOM.PL ship.DAT.PL at
 glaphuréisìn egeíromen oksùn Árēa.
 hollow.DAT.PL arouse.SUBJ.1PL sharp.ACC Ares.ACC
 “But surely tonight we will **guard ourselves**, and early at dawn clad in our armour let us arouse sharp battle at the hollow ships.” (*Il.* 8.529–31)
- (50) epi-kataspházei tōi túmbōi heōtón
 over-slay.3SG ART.DAT grave.DAT self.ACC
 “he killed himself over the grave.” (Hdt. 1.45.3)

4.4 Long-distance & logophoric use

Long-distance bound variable reading:

- (51) ptōkhōn d' ouk án tis_i kaleoi trúksonta
beggar.ACC PTCL NEG MOD.PTCL anybody.NOM call.OPT.3SG wear.out.FUT.PTCP.ACC.M
hè autón_i
him.ACC self.ACC.M
“Nobody_i would invite a beggar to take advantage of them_i.” (*Od.* 17.387)

Logophoric (cf. Kiparsky 2012):

- (52) [Kroĩsos_i] élege (...) hós te autōi pánta apobebékoι
Croesus.NOM say.IPF.3SG that EMPH self.DAT all.N.PL turn.out.PF.OPT.3SG
téi per ekeĩnos_j [ho Sólōn] eĩpe, oudén ti mállon es
in.this.way DEM.PRON.NOM.SG (Solon) say.AOR.3SG NEG INDEF.N more to him(self)
heōútōn_i légōn è ouk es hápan tò anthrópinon
speak.PTCP.NOM than to all DEF.N humanity.N
“[Croesus_i] said (...) that everything had turned out for him_i as he_j [Solon] had said,
speaking_j no more of him(self)_i [Croesus] than of every human being.” (*Hdt.* 1.86.6, zit.
after Kiparsky 2012)

5 Discussion & conclusion

- Two core strategies for marking reflexive predicates (+ “emphatic” variants)
 - Middle morphology: inherent/body part reflexives, indirect reflexives (+ emph. personal pronoun/*autón*)
 - Active morphology + strong/complex reflexive (*heautón* etc.): direct/coargument reflexives (emph.: + *autós*, *auté* + *heaut-*, cf. Doric *autosautoũ* etc.)
- Reconstruction of middle-marked inherently reflexive, body action, and body part NP verbs (section 3) for PIE seems straightforward
- For reflexives from canonically transitive verbs, two (three?) strategies are attested:
 - a. middle morphology + weak reflexive: Vedic, Tocharian
 - b. active morphology + strong reflexive: Hittite (?), Greek, Latin
 - c. active morphology + weak reflexive: clearly secondary in Vedic, but may be old in Hittite
- → suggests that (b) may have been the older strategy for reflexivizing canonically transitive agentive verbs, and that these reflexives had an external argument & the pronoun/SE-element was a case-marked internal argument
- Either way, there is no reason to assume that pragmatic “strengthening” of middle morphology in reflexives took place: if (b) is reconstructed, because there was no middle morphology; if (a) is reconstructed, because middle morphology is independently justified by the body part NP construction.

References

- Alexiadou, A., E. Anagnostopoulou, and F. Schäfer. 2015. *External arguments in transitivity alternations: a layering approach*. Oxford University Press.
- Alexiadou, Artemis, and Edit Doron. 2012. The syntactic construction of two non-active voices: Passive and middle. *Journal of Linguistics* 48:1–34.
- Allan, Rutger J. 2003. *The Middle Voice in Ancient Greek*. Amsterdam: Gieben.
- Boley, Jacqueline. 1993. *The Hittite particle -z/-za*. Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck.
- Bolling, George Melville. 1947. Personal pronouns in reflexive situations in the Iliad. *Language* 23(1):23–33.
- Cardinaletti, Anna, and Michael Starke. 1999. The typology of structural deficiency: A case study of the three classes of pronouns. In *Clitics in the languages of Europe*, ed. H. van Riemsdijk, 145–233. Berlin: Mouton de Gruyter.
- CEToM = Malzahn, Melanie et al. 2011–. A Comprehensive Edition of Tocharian Manuscripts. URL <http://www.univie.ac.at/tocharian/>.
- Cotticelli Kurras, Paola, and Alfredo Rizza. 2013. Reconstructing Proto-Indo-European categories: the reflexive and the middle in Hittite and in the proto-language. *Journal of Historical Linguistics* 3/1:7–27.
- Déchaine, Rose-Marie, and Martina Wiltschko. 2002. Decomposing pronouns. *Linguistic Inquiry* 33/3:409–42.
- Déchaine, Rose-Marie, and Martina Wiltschko. 2017. A formal typology of reflexives. *Studia Linguistica* 72/1–2:60–106.
- Dunkel, George E. 2014. *Lexikon der indogermanischen Partikeln und Pronominalstämme*, Band 2: *Lexikon*. Heidelberg: Winter.
- Embick, David. 1998. Voice systems and the syntax/morphology interface. In *Papers from the Penn/MIT Roundtable on Argument Structure and Aspect, May 1997 (MITWPL)*, ed. H. Harley.
- Embick, David. 2004. Unaccusative syntax and verbal alternations. In *The unaccusativity puzzle*, 137–58. Oxford University Press.
- Grestenberger, Laura. 2015. From inalienable possession to reflexivity: the development of Vedic *tanū-* ‘body’. *Harvard Working Papers in Linguistics* 30:25–44.
- Grestenberger, Laura. 2016. Reconstructing Proto-Indo-European deponents. *Indo-European Linguistics* 4:98–149.
- Grestenberger, Laura. 2018. Deponency in finite and nonfinite contexts. *Language* 94:487–526.
- Grestenberger, Laura. 2021. Two types of passive? Voice morphology and “low passives” in Vedic Sanskrit and Ancient Greek. In *Passives Cross-Linguistically: Theoretical and Experimental Approaches*, ed. Kleantes K. Grohmann, Akemi Matsuya, and Eva-Maria Remberger, 210–245. Leiden: Brill.
- Grimshaw, Jane. 1990. *Argument structure*. MIT Press.
- Hoffner, Harry A. Jr., and H. Craig Melchert. 2008. *A grammar of the Hittite language. Part I: Reference grammar*. Winona Lake, Ind.: Eisenbrauns.
- Inglese, Guglielmo. 2020. *The Hittite middle voice: Synchrony, diachrony, typology*. Leiden: Brill.
- Inglese, Guglielmo. 2021. Towards a typology of middle voice systems. *Linguistic Typology* 2021. <https://doi.org/10.1515/lingty-2020-0131>.
- Jamison, Stephanie W., and Joel P. Brereton. 2014. *The Rigveda: The Earliest Religious Poetry of India, vol. I-III*. OUP.
- Jasanoff, Jay. 2003. *Hittite and the Indo-European verb*. Oxford University Press.
- Kaufmann, Ingrid. 2007. Middle voice. *Lingua* 117:1677–1714.
- Kemmer, Suzanne. 1993. *The middle voice*. Amsterdam: John Benjamins.
- Kiparsky, Paul. 2002. Disjoint reference and the typology of pronouns. In *More than words*, ed. Ingrid Kaufmann and Barbara Stiebels, *Studia Grammatica* 53, 179–226. Berlin: Akademie Verlag.
- Kiparsky, Paul. 2012. Greek anaphora in cross-linguistic perspective. *Journal of Greek Linguistics* 12/1:84–117.
- Klaiman, M. H. 1991. *Grammatical voice*. Cambridge University Press.
- Luraghi, Silvia. 2012. Basic valency orientation and the middle voice in Hittite. *Studies in Language* 36/1:1–32.
- Malzahn, Melanie. 2010. *The Tocharian Verbal System*. Berlin/New York: De Gruyter.
- Meiser, Gerhard. 2009. Zur Typologie des urindogermanischen Mediums. In *Protolanguage and prehistory. Akten der XII. Fachtagung der Indogermanischen Gesellschaft, vom 11. bis 15. Oktober 2004 in Krakau*, ed. R. Lühr and S. Ziegler, 318–334. Wiesbaden: Reichert.
- Oikonomou, Despina, and Artemis Alexiadou. 2022. Voice syncretism crosslinguistically: The view from Minimalism. *Philosophies* 7/19. <https://doi.org/10.3390/philosophies7010019>.
- Pesetsky, David. 1995. *Zero syntax. Experiencers and cascades*. MIT Press.
- Petit, Daniel. 1999. **Sue- en grec ancien: la famille du pronom réfléchi. Linguistique grecque et comparaison indo-européenne*. Louvain: Peeters.
- Petit, Daniel. 2001. Linguistique comparative et variation typologique: le cas du réfléchi dans les langues indo-européennes. *Indogermanische Forschungen* 106:16–29.
- Puddu, Nicoletta. 2005. *Riflessivi e intensificatori: greco, latino e le altre lingue indoeuropee*. Pisa: ETS.

- Puddu, Nicoletta. 2007. Typology and historical linguistics: some remarks on reflexives in ancient IE languages. In *New challenges in typology : Broadening the horizons and redefining the foundations*, 249–68. Mouton de Gruyter.
- Reinhart, Tanya, and Eric Reuland. 1993. Reflexivity. *Linguistic Inquiry* 24/4:657–720.
- Reuland, Eric. 2011. *Anaphora and language design*. Cambridge, MA: MIT Press.
- Rix, Helmuth. 1988. The Proto-Indo-European middle: content, forms, and origin. *MSS* 49:101–19.
- Rooryck, Johan, and Guido Vanden Wyngaerd. 2011. *Dissolving binding theory*. Oxford University Press.
- Safir, Ken. 2004. *The syntax of anaphora*. Oxford University Press.
- Schäfer, Florian. 2017. Romance and Greek medio-passives and the typology of Voice. In *The verbal domain*, ed. R. D’Alessandro, I. Franco, and Á. Gallego, 129–52. Oxford University Press.
- Schmidt, Klaus T. 1974. *Die Gebrauchsweisen des Mediums im Tocharischen*. Univ. Göttingen.
- Schwyzer, Eduard. 1939-71. *Griechische Grammatik*. Munich: Beck.
- Sportiche, Dominique. 1998. *Partitions and atoms of clause structure: Subjects, agreement, Case, and clitics*. New York: Routledge.
- Villanueva Svensson, Miguel. 2003. La categoría de voz en el sistema verbal indoeuropeo. Doctoral Dissertation, Universidad Complutense de Madrid.
- Viti, Carlotta. 2009. Anaphorische und reflexive Strukturen im Altgriechischen und Lateinischen. *Indogermanische Forschungen* 114:143–72.