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The Greek-Anatolian area in the 2nd millennium B.C.: between language contact, Indo-European inheritance and typologically natural tendencies

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Abstract

In this project, we investigated the shared linguistic features in the Greek-Anatolian area in the second millennium B.C., with the aim of disentangling language contact phenomena from socioculturally-dependent traits, inherited aspects and properties that appear to have a strong crosslinguistic validity. Here, we report the results of a study of some true and false morphosyntactic isoglosses: specifically, the function and distribution of Hittite modal particle *man* and Greek av; the use of verbal prefixes and particles in Greek and Hittite; the typology of absolute genitive constructions in Greek and Hittite.

KEYWORDS: historical linguistics, language contact, morphosyntax, Indo-European languages, Hittite, Greek.

Is the Greek-Anatolian area in the 2nd millennium B.C. a 'linguistic area'?

In the present paper, we report the results of an on-going study of the Greek-Anatolian area in the 2nd millenniunm B.C. The main question that we address here is whether this area may be considered a 'linguistic area', in Aikhenvald's terms: «a linguistic area (or *Sprachbund*) is generally taken to be a geographically delimited region including languages from at least two language families, or different subgroups of the same family, sharing traits, or combinations thereof, most of which are not found in languages from these families or subgroups spoken outside the area [...] The stronger linguistic areas are those whose shared traits can be shown to be diffused – and cannot be ascribed to a common ancestor, to chance or to universals» (Aikhenvald, 2006: 11-12; see also Campbell, Kaufmann and Smith-Stark, 1986; Emeneau, 1956; Sherzer, 1973).

The cross-linguistic approach adopted by Aikhenvald (2006), Aikhenvald and Dixon (2006) and (2001) – among others – refers to the basic assumptions about the traditional *Sprachbund* and remarks the need for

distinguishing between culture areas and linguistic areas: addressing the correlations between these two kinds of area, in fact, provides a fundamental ground for studying the interaction between areal features and socioculturally-dependent traits. It is well known that sharing cultural features does not necessarily entail the creation of a *Sprachbund*, whereas diffused shared linguistic features allow to suppose mutual cultural influences.

Relevant dimensions to the study of contact phenomena, whose interaction constitutes the leading theme of this study are:

- areally diffused features, as they are fundamental to the definition of a linguistic area;
- sociocultural parameters, as languages also reflect the sociolinguistic history of their speakers;
- language structure, which plays an important role in the study of inherited traits and typological tendencies, and, therefore, is fundamental to assess the nature of shared features. Moreover, besides sociocultural dimensions, the structure of languages are determinant of the linguistic outcome of language contact: typologically different linguistic structures, in fact, tend to change in different ways.

In conclusion, for each category, in order to address the question of how diffusible it is, we need to know its expression (that is, formal encoding), function and status within the language.

2. The Greek-Anatolian isoglosses: state of the art

The Greek-Anatolian area has received much attention in historical and comparative linguistics, as the geographical contiguity between Greek and Anatolian likely provided «ample opportunity for intense local language and cultural contact» (Watkins, 2001)¹. For instance, the verbal ending in final nasal (vs. sibilant) for the first-person plural belongs only to Ionic Greek and Hittite (- $\mu\epsilon\nu$ and -*men(i)/wen(i)*, respectively, vs. Latin -*mus*, Doric Greek - $\mu\epsilon\varsigma$); the Homeric Greek middle ending - $\mu\epsilon\sigma\theta\alpha$ for the first-person plural of verbs shows the sequence - $\sigma\theta$ -, perfectly paralleling Hittite -*wasta*,

¹ In the present paper, we specifically focus on the relationships between Greek and Hittite. However, it is worth also mentioning the contacts between Greek and Luwian and the Luwian influence on Aegean language and culture, on which see MELCHERT (2003) and MOUTON *et al.* (2013), among others.

and the fact that the Greek ending appears only in Homeric language (based on Ionic Greek) makes the correspondence even more significant for areality²; in Hittite, the dual number disappeared and, significantly, among the Greek dialects, the same happened only in Ionic, Eolian and the Doric varieties spoken in the Aegean Islands, which are geographical closer to Anatolia; the opening formula of the solemn undertaking including the invocation of the Gods of sky and weather appears identical in Homeric poems and Hittite, to provide only a few examples of contact phenomena (Kronasser, 1955; Nenci, 1961; Lazzeroni, 1967). However, previous studies almost exclusively focused on inflectional morphology, lexicon and, to a lesser extent, phonetics and phonology.

In a series of studies, Lazzeroni (1960; 1964; 1966; 1969a; 1969b; 1989; 2006) investigated a set of lexical features shared by Greek and Anatolian, by focusing on the chronological and functional relationship between them, thus making crucial contributions to the Indo-European cultural reconstruction and the understanding of mechanisms for the formation of Indo-European lexicon. Especially significant is the resolution of the longdebated question of the semantic representation of Greek ὄρκος. Greek ὄρκος "pledge" was traditionally related to ἕρκος "enclosure, fence". However, Benveniste (1969) rejected this correspondence, as nothing in Greek ideas – he noted – allows to clarify the link between the representation of a pledge and the representation of an enclosure and, consequently, may speak in favor of a similar interpretation. Lazzeroni (1989) showed how Hittite documents provide a decisive answer to this question. In a series of letters, king Suppiluliuma II (13th century B.C.) asks his vassals to take a pledge/to make a vow: the formula says hinkanta arhas esdu "your edge is (which corresponds to an imperative in the Hittite text) your death". The representation of pledge as limit/boundary/edge of one's faith is shared only by Hittite and Greek. «Il passaggio da "recinzione" (ἕρκος) a "limite", "confine" (ὄρκος) è identico a quello documentato dall'ittita *arha-/irha-* e corrisponde a un comunissimo processo di differenziazione sinonimica» (Lazzeroni, 1989: 92)³. And this

² It is worth noting that the presence of the Hittite ending makes improbable that $-\mu\epsilon\sigma\theta\alpha$ was modelled on the 2nd person plural $-\sigma\theta\epsilon$ (cfr. RIX, 1976: 248, among others). The initial consonant of *-wasta* may indicate that the Hittite ending originated from an old dual ending (cfr. Sskr. middle 1st-person plural *-<u>mabi</u>*: middle 1st-person dual *-<u>wabi</u>*). However, this is irrelevant to the argument made here, which, instead, focuses on the correspondence between Homeric Greek $-\sigma\theta$ - and Hittite *-st*-. For a general overview of the Indo-European middle endings, see CLACKSON (2007: 143 ff.), among many others.

³ It is worth noting that Greek ὅρκος and Hittite arha-/irha- are not etymologically related: the rough breathing in ὅρκος probably indicates the presence of an initial s- (FRISK, 1960; CHANTRAINE,

isogloss is particularly important not only because in no other Indo-European languages but Greek and Hittite the pledge is represented as a boundary, but also because it involves the whole opening formula of the solemn undertaking (Nenci, 1961): only in the Greek-Anatolian area, the Gods of sky and weather are invoked as witnesses (Γ 280: ὑμεῖς μάρτυρες ἔστε). Similar formulae found in Latin and documented by Virgil are clear calques from Homeric Greek (*Aen.*, XII, 175 ff.; 195 ff.: Conington and Nettleship, 1963; Forbiger, 1875).

Also, classic works on lexical isoglosses are Gusmani (1968a; 1968b; 1969). More recently, specific contributions to the study of lexical and phraseological units have been made by García Ramón (2011; 2012) and Dardano (2012; 2013), who called for a case-by-case approach.

The evidence of a Greek-Anatolian cultural and linguistic area provided by lexical isoglosses, thus, parallels the sharing of phonological and morphological features. The following shared features are of particular interest and worthy of further investigation:

- a) r never appears in word initial position in Greek, Armenian and all Anatolian languages (including Hattian, which is not Indo-European): in Greek and Armenian r is excluded from the initial position through a vowel insertion⁴; the strategies of keeping r out of the word initial position in the other languages still remain unclear, but no words start with this sound without exception. Significantly, Armenian is contiguous to the Greek-Anatolian area;
- b) ti > -zi in Hittite and $-\sigma_i$ in the Greek dialects of the Circum-Aegean area, that is, Ionic-Attic, Lesbian, Mycenaean, Arcadian-Cypriot; Hittite *z* probably represents an affricate (Kronasser, 1955: 61; Melchert, 1994; Kimball, 1999; Kloekhorst, 2008) and in the Greek σ_i the sibilant outcome implies an affricate stage. It is hard to consider the areal congruity as due to chance;
- c) Greek, Hittite, Lithuanian and Tocharian has an allative case, but only

⁴ It is debated whether this vowel comes from an ancient laryngeal: see KEILER (1970), among others. For the sake of completeness, we may note that Greek initial *r*- ($\dot{\rho}$ -, with the rough breathing!) represents *hr- < sr- o vr*-. See also BEEKES (2014).

^{1968-1980;} BEEKES and VAN BEEK, 2010; KLOEKHORST, 2008). Therefore, Greek ὄρκος is likely to be interpreted as a semantic calque on Hittite a*rha-/irha-*. The lack of an etymological correspondence between the Greek word and the Hittite word is particularly significant for the study of the historical contacts in the Greek-Anatolian area: in fact, an etymological relationship between ὄρκος and a*rha-/irha* might testify to an inherithed feature.

in Homeric Greek and Mycenaean (where it is encoded by $-\delta\epsilon$) and in Hittite (where the allative or, rather, the "directive", in Starke's terms, Starke (1977), is encoded by *-a*; see also Rieken, 1999) it does not apply to animate entities: Greek οἴκονδε "home" vs. εἰς Ἀγαμέμνωνα "to Agamemnon" (Lazzeroni, 2006).

3. Real and false isoglosses in the Greek-Anatolian area: evidence from morphosyntax

In the present study, we started from the observation that not all shared features have the same weight (Campbell, Kaufmann and Smith-Stark, 1986; Aikhenvald and Dixon, 2006).

As regards lexical isoglosses, it is necessary to distinguish the words documented only in Greek and Hittite from the calques in one language on another. Only the latter can provide strong evidence on mutual cultural influences, whereas the Greek-Hittite lexicon may be only shared inheritance and, therefore, does not testify to a Greek-Anatolian cultural and linguistic area. The etymological relationship between Homeric Greek ἀπηδός "chaperon, attendant" and Hittite hapati-, for instance, is not significant. Sturtevant (1928: 164 ff.), Friedrich (1960: "Diener, Untertan") and Kronasser (1963: 307) interpreted Hittite hapati- as "servant", on the basis of Madd. 4. 20, whose proposed translation is "you will not have any other hapatin or land" (Götze, 1928). But, later researches showed that hapati- denotes a kind of land, "bewässertes Land, Kulturland" (Starke, 1990: 514 ff.; Friedrich, Kammenhuber and Hoffmann, 2007, III, 11: 219), and is derived from hapa- "river": the above-mentioned passage, therefore, should be translated "you will not have any other fertile land ("watered by rivers", "Flussland": Friedrich, Kammenhuber and Hoffmann, 2007, III, 11: 219) or mountain land"⁵.

The relationship between Greek oἶμος "way, course, passage" (*H. Merc.*, 451: oἶμος ἀοιδῆς "the way of poem") and Hittite *ishamāi*- "song, singing" might be important, especially because of its cultural background, but is still open to question. The Homeric word for "song, poem", i.e. oἴμη, was related to oἶμος first by Pagliaro (1961, [1953]: 34 ff.) and later by Frisk (1960): this

⁵ The fact that Hittite *hapati-* occurs only in one text is sufficient to question its relationship with the Greek lexeme.

connection is supported by the meaning "line", that developed into "track", "connection" between various cantos (oĭµη), and "way" (oīµoç) (Lazzeroni, 1967). Both oĭµη and oīµoç may show the psylotic outcome of the Indo-European root *sēj*- "to link", which may also provide the etymological base to Sanskrit *sāman*- (Mayrhofer, 1986-2001). Despite the arguments made in Kronasser (1963), it is unlikely that Hittite (*i)shamāi*- "song" derived from the same root. Kloekhorst (2008: 393-395) explicitly rejects this connection, and interprets (*i)shamāi*- as *shamāi*- < **sh*₂-*m*, **sh*₂-*m*, **séh*₂-*m*, **soh*₂-*m*: «the alleged Greek cognate, oīµoç 'song' [...] cannot reflect **sh*₂*om-o*- [...] and therefore this connection must be given up». The relationship between the Greek word and the Hittite word, then, may represent a case of semantic calque. However, Sanskrit *sāman*- may also indicate that the isogloss extended to a broader area relative to the Greek-Micro-Asiatic area and, therefore, undermine the correspondence between Greek and Hittite.

Particularly singnificant is, instead, the semantic representation of Greek $\delta\rho\kappa\sigma\varsigma$ "pledge", which developed into the meaning "oath" as a result of metonymy (see § 2).

The aim of our project, then, was to disentangle language contact phenomena (as also affected by sociocultural factors) from inherited aspects and properties that appear to have a strong crosslinguistic validity and, therefore, can be considered typologically natural tendencies⁶.

We specifically focused on morphosyntax, as a systematic study of morphosyntactic isoglosses in the Greek-Anatolian area in the 2nd millennium B.C. is still lacking.

In the following paragraphs, we discuss the results of an investigation into some morphosyntactic features, whose distribution is strictly related to certain semantic components operating at the interface between concepts and grammar, such as modality, actionality and the logical structure of verbs (Dowty, 1979; Levin and Rappaport Hovav, 1995; Van Valin and La Polla, 1997; Palmer, 1986).

The leading question of this project was to distinguish between real isoglosses and false isoglosses⁷.

⁶ It is worth noting that similarities between languages may be also due to independent innovation (see Sapir's drift: SAPIR, 1921) and chance. The results of the present study, though, do not include such dimensions.

⁷ The results of the present study somehow parallel the results of an on-going study on shared lexical items, which aims at distinguishing real isoglosses from false isoglosses in the Greek-Anatolian lexicon (see BIANCONI, 2015). This is particularly significant, as different dimensions of language (spe-

3.1. The use of modal particles: an areal feature

The Hittite language has only two moods: indicative and imperative. There are no separate sets of verbal forms with the function of Greek and Latin subjunctive and optative markers. The non-factual and contrary-to-fact modalities (Palmer, 1986), instead, are expressed by the indicative to-gether with the particle *man*, which has to be distinguished from the temporal/conditional conjunction *mān* "when, if"⁸. Present/future potential is expressed with *man* and the present tense; past potential is expressed with *man* and the preterite tense; Contrary-to-fact conditions are expressed with *man* and the preterite tense (Hoffner and Melchert, 2008; Luraghi, 1997)⁹:

1)	iyami=		<u>man</u> =	pat ≠	wa	kuitki	(KU	JB 23.103 rev. 13)
		g-PRES nly could			РТС	something-1	мом/	ACC-NEUTR
2)				^m <i>huzz</i> Huzziy	<i>iyas</i> vas-nom	<i>kuenta</i> kill-3-sing-F	AST	<i>nu</i> Conn
	<i>uttar</i> thing-nom/acc-neutr			<i>wati</i> ome know	(<i>TE</i> iii 11; = Hoffmann, 1984) vn-3-sg-past-middle			

"Huzziya would have killed them, but the matter became known."

For further examples of *man* with modal values, see Luraghi (1997: 50) and Hoffner and Melchert (2008: 314 ff.).

Like Anatolian, Greek uses a particle to express modality. The epistemic use of the Greek particle av is, in fact, well-known: av together with the subjunctive or the preterite indicative or the optative expresses the non-factual and the counterfactual modalities (Schwyzer and Debrunner, 1950; Humbert, 1960; Beck, Malamud and Osadcha, 2012):

cifically, morphosyntax and lexicon) differently interact in defining the outcome of language contact, and the influence of sociocultural features, genetic inheritance and typological natural tendencies may differently apply to each of them.

⁹ In addition, for hypothetical actions deemed undesirable or unlikely to occur because of undesirable results expressed in the apodosis, Hittite uses *man* with a past tense in the protasis and a present or mixture of past and present in the apodosis. «The reason for the alternating tenses is unclear» (HOFFNER and MELCHERT, 2008: 316).

⁸ The modal particle *man* and the temporal conjunction *mān* are usually written differently: the modal particle appears as *ma-an* or *-ma-an*, in contrast to the temporal or conditional conjunction *ma-a-an*. Moreover, unlike the conjunction *mān*, *man* is not found in clauses beginning with *nu*, nor with *ta* or *šu* (HOFFNER and MELCHERT, 2008).

3)	ἐ <u>ὰν</u> ζητῆς καλως, εὐρήσεις	(Plat. <i>Gorg</i> . 503d)
	"If you search well, you will find it."	-

4) τὸ γὰρ ἔρυμα στρατοπέδω ουκ ἀν ετειχίσαντο (Thuc. I, 11, 1)
 "In fact they would not have built the wall for the camp."
 (but they actually built it)

The use of particles together with the indicative to express modality, a feature shared by Hittite and Greek only, among Indo-European languages, may, therefore, constitute a piece of evidence of the Greek-Anatolian *Sprachbund*: epistemic modality was not expressed through inflectional verb morphemes in Anatolian, but, instead, through a particle; the Greek language, which inherited the Indo-European moods, might have integrated the modal function of particles into its verb system as a consequence of its contact with Anatolian and, thus, expressed epistemic modality through the so-called 'multifunctional' particle äv, which also combined with the indicative.

3.2. The use of verbal prefixes and particles: a non-areal feature

In Hittite, the basic meaning of simple verbs may be modified by the addition of various prefixes¹⁰. The range of possible changes in the verb meaning produced by preverbs is quite wide, which makes the use of preverbs difficult to explain. In particular, a unifying principle that accounts for their function still has to be defined (Hoffner and Melchert, 2008: 296-297).

Here we propose that verbal prefixation may constitute a strategy to modify the actionality of Hittite verbs by increasing the degree of their telicity. Also, the relationship between preverbs and transitivity appears to be related to the valency-increasing mechanisms consequent to the telicization of verbs that lack a direct internal argument: delimiting preverbs require a direct internal argument that measures out the event denoted by the verb (Tenny, 1994). The analysis of the combinations of different preverbs with the same verb, across distinct verbs, supports this hypothesis:

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¹⁰ Except for *u*- "here" and *pe*- "there" (the only two truly inseparable preverbs), verbal prefixes are freely separable from the verb. They may occur immediately preceding the verb, separated from the verb by one element (e.g., negation or indefinite pronoun), fronted to clause-initial position (HOFFNER and MELCHERT, 2008).

- 5) *nai-* "to turn, to go" vs. *anda nai-* "to enwrap"
- 6) *huet-* "to draw, to pull, to move along" vs.

anda huet- "to curtail" *appa huet-* "to unlock, to draw out" (middle: "to recede") *arha huet-* "to withdraw, to distort" *para huet-* "to pull shut, to single out, to promote"

7) *piddai-* "to run"

vs. *kattan arḥa piddai-* "to escape" *arḥa piddai-* "to run off" (Puhvel, 1984; Hoffner and Melchert, 2008)

If this is held true, then, Hittite verbal prefixation parallels Greek verbal prefixation in its semantic function and morphosyntactic evidence, as Greek preverbs encode telicity and determine transitivity when the verb does not have an argument that can measure out the denoted event (Romagno, 2004; 2008):

- πίνω "to drink" vs. ἐκπίνω "to drink until the end"
- φροντίζω "to think", "to meditate"
 vs.
 ἐκφροντίζω "to find", "to reach through reflection"
- 10) χορεύω "to dance"

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vs.
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ἀναχορεύω "to start dancing, to celebrate (someone) with a dance"

However, this principle underlying the function and distribution of Hittite and Greek preverbs also operates in other ancient Indo-European languages, such as Latin and Sanskrit, which did not establish any areal relationship with Hittite and Greek altogether:

Latin 11) *molior* "to prepare" vs. *emolior* "to accomplish" 12) dormio "to sleep" vs. obdormio "to fall asleep"
13) laboro "to strive for"

vs. *elaboro* "to achieve (with effort)" (Romagno, 2003; 2008)

Sanskrit

14) gā "to sing"
 vs.
 prá gā "to start singing"

15) daḥ "to burn" vs. sáṃ daḥ "to consume by fire" (Danesi, 2010)

Therefore, the use of verbal prefixation at the interface between morphosyntax and semantics does not appear to be an areal feature, but, rather, an inherited feature or even a typologically natural tendency, as similar phenomena have been found in both Indo-European (besides the well-known case of Bulgarian, see also English pairs like use vs. use up, hunt vs. hunt down, etc.; German brennen "to burn" vs. verbrennen "to burn down, to destroy by fire", *ausbrennen* "to burn out"; *schlagen* "to hit" vs. *erschlagen* "to kill", etc.) and non Indo-European languages from America, New Guinea, Australia: the strategies of increasing/decreasing valency often represent an epiphenomenon of mechanisms for increasing/decreasing the degree of telicity of verbs through the presence vs. absence of affixes and particles (Cotticelli Kurras, 2014; Næss, 2007; Slabakova, 2001; Dixon and Aikhenvald, 2000; Brinton, 1988). Significantly, besides verbal prefixation, a somehow related mechanism is also found in Hittite depending upon the lexical use of the particle -za, as shown in Table 1 (see also: Puhvel, 1984; Hoffner, 1973; Boley, 1993; Hoffner and Melchert, 2008; Cotticelli Kurras and Rizza, 2011; 2013).

VERB	WITHOUT -za	WITH -za
ēš-	"to sit, to remain seated"	"to take a sit, to sit down"
kiš-	"to occur, to happen"	"to become (something)"
mald-	"to recite, to speak"	"to make a vow"
šak-	"to be aware of, to know"	"to recognize, to realize, to become aware of"
tarh-	"to have the upper hand, to be able"	"to conquer (someone)"

Table 1. *Lexical distribution of the particle -za*.

3.3. The typology of absolute participial constructions: an open question?

Hittite has absolute participial constructions in genitive case, frequently including verbs of change in body posture in combination with the sign for "king" (Hoffner and Melchert, 2008; Holland, 1986):

16) LUGAL-wa-aš GUB-aš e-ku-zi (KBo XIX 163 III 31) king-gen.sg stand-gen.sg-part-pres drink-3-sg-pres "Standing, the king drinks." Ù 17) [TUŠ-aš] DEN.ZU sit-gen.sg-part-pres Moongod-acc.sg conn ^DKu-za-ni-šu-un e-ku-zi Kuzanišu-acc.sg drink-3-sg-pres [TUŠ-aš^D] Hu-ul-la-an e-ku-zi sit-gen.sg-part-pres Hulla-acc.sg drink-3-sg-pres ^DTe-li-pí-nu-un TUŠ-aš e-ku-zi (KBo XX 33 Vs. 17-18) Telipinu-acc.sg drink-3-sg-pres sit-gen.sg-part-pres "Sitting, he drinks the Moongod and Kuzanišu; sitting, he drinks Hulla; sitting, he drinks Telipinu."

Carruba (1966) interpreted these constructions as examples of «Genitivus absolutus». However, a difficulty is posed by the coreferentiality of the subject of the participle with the subject of the main verb (but see Keydana, 1997: 40; Maiocco, 2005: 127 ff.)¹¹ and, in fact, Neu (1984) speaks of suspended genitive («freischwebenden Genitivus»). Moreover, even if

¹¹ For a detailed discussion of the debated relationship between unmarked absolute participial constructions, coreferential absolute participial constructions and conjunct participles, see MAIOCCO (2005: 167 ff.).

we might consider these constructions as cases of Hittite absolute genitive, nonetheless we have to observe that absolute participial constructions in the genitive case are not found only in Greek and Anatolian, but are also present in Late Latin (Maiocco, 2005: 42 ff.) and Sanskrit¹². As regards the latter, these constructions do not appear in the Veda, but in the Brahmana, not in verses, then, but in prose. Therefore, we might suppose that the distribution of these constructions in Indian is related to the interaction between diachronic and diastratic dimensions (Lazzeroni, 2007), whereas it represents a generalized feature in Greek and Hittite – if the interpretation of the Anatolian absolute genitive is correct – and, thus, provides possible evidence on the Greek-Anatolian *Sprachbund*¹³.

4. Conclusions

To summarize and conclude, the results of this study show that:

- there is morphosyntactic evidence of the Greek-Anatolian Sprachbund in the 2nd millennium B.C., besides the traditionally investigated isoglosses involving inflectional morphology, phonology and lexicon; new research is needed to fully understand the role of morphosyntactic isoglosses in defining the complex relationship between Greek and Anatolian areas: in particular, features at the interface between morphosyntax and semantics (see §3) merit further investigation;
- there is a need for carefully disentangling areal features from inherited features and typologically natural tendencies, in order to assess the Greek-Anatolian 'linguistic area'.

¹³ The distribution of absolute genitive constructions in relation to the semantic typology of verb classes still has to be fully investigated in both Greek and Hittite. The analysis of Hittite corpus conducted in this project revealed a preference for change in body posture verbs. A further and possibly exhaustive study of the distribution of absolute genitive constructions among different actional verb classes and situational types is the objective of an on-going project and will be reported in a forthcoming paper.

¹² Genitive absolute participial constructions in Armenian have been interpreted as produced by calque on Greek (MAIOCCO, 2005). We want to thank an anonymous reviewer for suggesting the possible parallelism between the Hittite endings *-ntas/-ndas* and the Latin gerund, which is worthy of further investigations.

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