

USQUE AD RADICES

*Indo-European studies in honour of
Birgit Anette Olsen*

Edited by

BJARNE SIMMELKJÆR SANDGAARD HANSEN · ADAM HYLLESTED
ANDERS RICHARDT JØRGENSEN · GUUS KROONEN
JENNY HELENA LARSSON · BENEDICTE NIELSEN WHITEHEAD
THOMAS OLANDER · TOBIAS MOSBÆK SØBORG

Museum Tusulanum Press

2017

Usque ad Radices: Indo-European Studies in Honour of Birgit Anette Olsen

© Museum Tusculanum Press and the authors 2017

Edited by Bjarne Simmelkjær Sandgaard Hansen, Adam Hyllested, Anders

Richardt Jørgensen, Guus Kroonen, Jenny Helena Larsson, Benedicte

Nielsen Whitehead, Thomas Olander & Tobias Mosbæk Søborg

Cover design by Thora Fisker

Printed in Denmark by Specialtrykkeriet Viborg

ISBN 978 87 635 4576 1

COPENHAGEN STUDIES IN INDO-EUROPEAN, VOL. 8

ISSN 1399 5308

Published with support from:

Department of Nordic Studies and Linguistics, University of Copenhagen

Museum Tusculanum Press

Dantes Plads 1

DK – 1556 Copenhagen V

www.mtp.dk

Contents

Preface	xiii
HENRIK VAGN AAGESEN	
Electronic dictionary and word analysis combined: Some practical aspects of Greenlandic, Finnish and Danish morphology	1
DOUGLAS Q. ADAMS	
Thorn-clusters in Tocharian	7
MIGUEL ÁNGEL ANDRÉS-TOLEDO	
Vedic, Avestan and Greek sunrise: The dawn of an Indo-European formula	15
DAVID W. ANTHONY & DORCAS R. BROWN	
Molecular archaeology and Indo-European linguistics: Impressions from new data	25
LUCIEN VAN BEEK	
Greek <i>βλάπτω</i> and further evidence for a Proto-Greek voicing rule <i>*-ŃT-</i> > <i>*-ŃD-</i>	55
LARS BRINK	
Unknown origin	73
ANTJE CASARETTO	
Encoding non-spatial relations: Vedic local particles and the conceptual transfer from space to time	87
JAMES CLACKSON	
Contamination and blending in Armenian etymology	99
PAUL S. COHEN	
PIE telic <i>s</i> -extensions and their diachronic implications	117

VARJA CVETKO-OREŠNIK & JANEZ OREŠNIK Natural syntax of the English imperative	135
HANNES A. FELLNER The Tocharian gerundives in ^B -lle ^A -l	149
JOSÉ LUIS GARCÍA RAMÓN <i>Anthroponymica Mycenaea</i> 10: The name <i>e-ti-ra-wo</i> / <i>Erti-lāwos</i> / (and <i>Λᾱ-έρτης</i>): <i>ἔρετο· ὠρμήθη</i> (Hsch.), Hom. <i>ὀρμήθησαν ἐπ' ἀνδράσιν</i> , and Hom. <i>ἔρχεσθαι μετὰ φύλα θεῶν</i> , Cret. MN <i>Ἐρπετίδαμος</i>	161
JOST GIPPERT Armeno-Albanica II: Exchanging doves	179
LAURA GRESTENBERGER On “ <i>i</i> -substantivizations” in Vedic compounds	193
BJARNE SIMMELKJÆR SANDGAARD HANSEN Alleged nursery words and hypocorisms among Germanic kinship terms	207
JÓN AXEL HARÐARSON The prehistory and development of Old Norse verbs of the type <i>þrøngva</i> / <i>þrængia</i> ‘to make narrow, press’	221
JAN HEEGÅRD & IDA E. MØRCH Kalasha dialects and a glimpse into the history of the Kalasha language	233
IRÉN HEGEDŰS The etymology of Prasun <i>atʰəg</i> ‘one; once, a (little)’	249
EUGEN HILL Zur Flexion von ›sein‹ im Westgermanischen: Die verschollene Entsprechung von altenglisch 3. Singular Präsens <i>bið</i> auf dem Festland	261
GEORGE HINGE Verzweifelte Versuche: Zur Herkunft des pindarischen <i>τόσσαί</i>	279

ADAM HYLLESTED	
Armenian <i>gočazm</i> ‘blue gemstone’ and the Iranian evil eye	293
BRITTA IRSLINGER	
The ‘sewing needle’ in Western Europe: Archaeological and linguistic data	307
JAY H. JASANOFF	
The Old Irish <i>f</i> -future	325
JAMES A. JOHNSON	
Sign of the times? Spoked wheels, social change, and signification in Proto-Indo-European materials and language	339
FOLKE JOSEPHSON	
Theoretical and comparative approaches to the functions of Hittite local particles: Interplay between local adverbs, local particles and verbs	351
AIGARS KALNIŅŠ	
Hittite <i>nt</i> -numerals and the collective guise of an individualising suffix	361
JARED S. KLEIN	
Two notes on Classical Armenian: 1. <i>erkin(k^č) ew erkir</i> ; 2. The 3rd pers. sg. (medio)passive imperfect in <i>-iwr</i>	377
ALWIN KLOEKHORST	
The Hittite genitive ending <i>-ān</i>	385
PETR KOCHAROV	
The etymology of Armenian <i>ant^černul</i> ‘to read’	401
DANIEL KÖLLIGAN	
Armenian <i>lkti</i> , <i>lknim</i> ‘(be) wild’	415
KRISTIAN KRISTIENSEN	
When language meets archaeology: From Proto-Indo-European to Proto-Germanic in northern Europe	427

MARTIN JOACHIM KÜMMEL	
Even more traces of the accent in Armenian? The development of tenues after sonorants	439
SANDRA LUCAS	
Verbal complementation in Medieval Greek: A synthetic view of the relationship between the dying infinitive and its finite substitute	453
ROSEMARIE LÜHR	
Verbakzent und Informationsstruktur im Altindischen	467
ROBERT MAILHAMMER	
Subgrouping Indo-European: A fresh perspective	483
J. P. MALLORY	
Speculations on the Neolithic origins of the language families of Southwest Asia	503
HRACH MARTIROSYAN	
Some Armenian female personal names	517
H. CRAIG MELCHERT	
An allative case in Proto-Indo-European?	527
HANS FREDE NIELSEN	
From William the Conqueror to James I: Language and identity in England 1066–1625	541
BENEDICTE NIELSEN WHITEHEAD	
Composition and derivation: A review of some elementary concepts	551
ALEXANDER NIKOLAEV	
Luvian ^(síg) <i>šūrita</i> ‘balls of yarn’	567
ALAN J. NUSSBAUM	
The Latin “ <i>bonus</i> rule” and <i>benignus</i> ‘generous, kind’	575

NORBERT OETTINGER Gall. <i>Cernunnos</i> , lat. <i>cornū</i> ›Horn‹ und heth. <i>Tarhunna-</i> : Mit einer Bemerkung zu gr. <i>πᾶς</i> ›ganz‹	593
THOMAS OLANDER Drinking beer, smoking tobacco and reconstructing prehistory	605
EINAR ØSTMO Bronze Age heroes in rock art	619
MICHAËL PEYROT Slavic <i>onъ</i> , Lithuanian <i>anàs</i> and Tocharian A <i>anac</i> , <i>anäs</i>	633
GEORGES-JEAN PINAULT Tocharian <i>tsälp-</i> in Indo-European perspective	643
TIJMEN PRONK Curonian accentuation	659
PER METHNER RASMUSSEN Some notes on Caesar's <i>De Bello Gallico</i> liber II	671
PETER SCHRIJVER The first person singular of 'to know' in British Celtic and a detail of <i>a</i> -affection	679
STEFAN SCHUMACHER Old Albanian /u ngre/ 'he/she arose'	687
MATILDE SERANGELI Lyc. <i>Pēmudija</i> (N _{322.2}): Anatolian onomastics and IE word formation	695
O. B. SIMKIN The frontiers of Greek etymology	705
ROMAN SUKAČ Is having rhythm a prerequisite for being Slovak?	717

FINN THIESEN Pašto etymologies: Corrections and additions to <i>A new etymological vocabulary of Pashto</i>	731
THEO VENNEMANN GEN. NIERFELD Zum Namen der Cevennen	749
BRENT VINE Armenian <i>lsem</i> ‘to hear’	767
SEÁN D. VRIELAND How old are Germanic lambs? PGmc <i>*lambiz-</i> in Gothic and Gutnish	783
MICHAEL WEISS King: Some observations on an East–West archaism	793
PAUL WIDMER & SALVATORE SCARLATA Good to go: RV <i>suprayāṇá-</i>	801

An allative case in Proto-Indo-European?

H. Craig Melchert

University of California, Los Angeles

Since the reaffirmation by Laroche (1970) of an Old Hittite case in *-a* marking “place to which” there has been a running debate whether we should reconstruct a ninth “allative” or “directive” nominal case in the singular for PIE. This paper will not seek to give a definitive answer to this question, but I will show that the true facts of Hittite and Anatolian falsify many of the premises on which virtually all previous analyses were based.

Our honorand’s impressively broad interests include Indo-European morphosyntax. It is a pleasure and honor to offer her the following ruminations as a modest token of esteem and long friendship.

1 Introduction

Among the many merits of Emil Forrer was his demonstration (1928–29) of a case in *-a* in Old Hittite marking exclusively “place to which”. His correct analysis was for several decades widely but wrongly rejected: see the summary by Starke (1977: 25–7). However, Otten and Souček (1969: 62–3) rediscovered the facts, and Laroche (1970) reaffirmed Forrer’s findings in detail, as did Starke (1977: 28–45), who correctly stressed that the case in *-a* marked *goal*, not merely direction.

The presence of such a case in Old Hittite (ostensibly an archaism that disappeared in later Hittite) has led some to posit a “directive” or “allative” case for Proto-Indo-European: Dunkel (1994) argues for an ending **-o*, while Ringe (forthcoming) reconstructs **-eh₂* (see further below).¹ The response of Indo-European handbooks to this proposal has been mixed. For example,

¹ I am indebted to Don Ringe for sharing with me in advance of publication the revised version of Chapter 2 of his 2006 handbook, where (p. 41) reconstruction of an allative for PIE is already implied.

Szemerényi (1996: 159–60 with note 2) gives the idea a full hearing, but some of the references he cites deny such a case for PIE, and he himself does not include it in his list of case endings. Tichy (2000: 64–7) does not mention it. Meier-Brügger (2000: 251) describes its status as “nicht eindeutig”. Fortson is also ambivalent, characterizing its existence in PIE as possible (2010: 113 and 117) or probable (2010: 172), stressing that the evidence comes almost entirely from Anatolian.

The coexistence of a full-fledged case in Hittite (and putatively Proto-Anatolian) and merely isolated comparanda elsewhere presents a common dilemma for comparative reconstruction. By what criteria do we decide in such an instance whether: (1) Old Hittite preserves the PIE situation, reflected elsewhere only in scattered remnants; or (2) Hittite (respectively Anatolian) took a local particle of limited distribution and developed it into a fully productive nominal case ending? I will not attempt to answer this difficult question here, but hope to contribute to a solution by pointing out facts of Hittite and other Anatolian languages that have either been ignored or misunderstood in nearly all previous discussions of the topic.

2 Hittite evidence for *-a* marking “place to which”

2.1 The Old Hittite nominal case in *-a*

First, it is paramount to recognize with Starke (1977) that the Old Hittite *-a* case does not mark direction, but rather goal, for which reason he himself labeled it “Terminativ”. Out of fifty examples that he cites, all but two (14 and 19, 1977: 32) unequivocally express *attainment* of a goal. With nouns referring to inanimates, direction towards is regularly expressed with the ablative (see Melchert 1977: 151–7 and *passim*, following Götze). Second, as Starke (following Laroche) stresses, use of the *-a* case is limited to nouns with inanimate semantic referents. Third, with such nouns it competes in Old Hittite not only with the accusative (see Otten and Souček 1969: 62 with note 7), but also (*contra* Starke 1977: 46–66) with the locative.² Fourth, as per Hoffner and Melchert (2008: 263), the *-a* case is used only with verbs expressing

2 His attempt to deny this fact leads to absurd interpretations. It is clear that in his example (77) GUD.ḪI.A A.ŠĀ-*ni pānzi* means ‘cattle go (in)to a field’ and in (81) *pahḫueni...peššiezzi* means ‘throws into a fire’ (see Hoffner 1997: 84 and 53). More such examples could be cited.

non-local movement, such as ‘go/come’, ‘send’, ‘release’, not with ‘put’, ‘pour’ and so forth.

2.2 Hittite local adverbs ending in *-a*

We owe to Starke (1977: 127–200) the demonstration that Old Hittite shows two functionally opposing sets of local adverbs. One set expresses primarily direction: *anda* ‘into’, *āppa* ‘back’, *katta* ‘down’, *parā* ‘forth, out, forward’, *šarā* ‘up’. The other marks primarily location: *andan* ‘in(side)’, *āppan* ‘behind’, *kattan* ‘below, under’, *pēran* ‘in front, before’, *šēr* ‘above’. Starke’s insightful analysis brings much clarity and order to the synchronic status of the local adverbs in Old Hittite. However, some aspects of his synchronic interpretation and many of his and others’ diachronic presuppositions are highly problematic.

First of all, Starke (1977: 134 and *passim*) wrongly assumes that the ending *-a* of the first set of adverbs is the same as the nominal case ending *-a* and labels the adverbs “terminativisch”. This claim is clearly false in purely functional terms. As he has shown, the nominal case in *-a* expresses a goal, mostly an attained goal. However, the adverbs in *-a* mark merely direction. They naturally can co-occur with an allative or dative–locative noun that expresses a goal, but mostly they do not. In both instances the local adverb indicates only the direction of motion, *not* attainment of a goal. For the latter, it is actually the second set of local adverbs that is used, as in English and other modern languages. Compare Old Hittite *nu āppa tienzi* ‘they step back’ (KBo 17.11+ i 6) with LÚ.MEŠ *MEŠEDI-an āppan tienzi* ‘they step behind the body-guard men’ (ibid. i 3–4).

Second, there is clear evidence that the local adverbs in *-a* do not (or did not) always express direction. As an independent local adverb, *parā* already in Old Hittite means only ‘forth, out, forward’, but in the fixed expression *parā hand(ant)atar* ‘(divine) providence’ (lit. ‘preordination’) *parā* clearly has a locative (temporal) sense ‘before’, as it does also in the expression *duwān parā* ‘long before’, and the pleonastic *pēran parā* ‘previously’ and *pēran parā UD.KAM-an* ‘the day before’, where the synchronically unexpected locative sense of *parā* has been renewed by the innovative locative adverb *pēran* (see Melchert 2008 with refs.). In the Edict of Telipinu, we also find *āppa(=ma)* meaning ‘thereafter’ (see Hoffmann 1984: 14–5).³

3 This Old Hittite text is attested only in later copies, but there is no basis for supposing that this usage is an innovation.

Third, contrary to the unfortunate tendency to project the grammar of Old Hittite back to Proto-Anatolian, there is clear evidence that the Old Hittite system of local adverbs is in part a specifically pre-Hittite creation. As I have shown (2009a: 335–6), the Hittite *hi*-verb *āppai*, *āppianzi* ‘be finished; go back, retreat’ is formed directly on a preform of the adverb *āppa* ‘back’, but the inflection in *-i-* shows that it was formed when the adverb was **āppi* < (*h*₁)*ópi*, as attested in Luvian and in Lycian *epi*.⁴ Its shape in Hittite was “adjusted” to match the other directional adverbs in *-a*. It is also very doubtful that the latter all contain the same ending. While Hittite *p(a)rā* with its double sense of ‘before’ and ‘forward’ surely continues **pró* (thus with Dunkel 2014: 2.636 et al.), Hittite *katta* and CLuvian *zanta* ‘down’ are likely cognate with Greek *κατά* < PIE **k̑mta* (*contra* Dunkel 2014.2: 45 and 419).⁵ There is good evidence that – unlike all the other local adverbs – Hittite *š(a)rā* and *šēr* and their Anatolian cognates reflect an old root noun: see Melchert 2009b: 615–7 and compare Rieken 1999: 67–8. This means that the final *-ā* of *š(a)rā* likely shows the nominal allative case ending, which as we will see below (4.2) cannot be the ending of the inherited local adverbs.

2.3 Hittite pronominal adverbs ending in *-a*

From the deictic stems *ka/i-* ‘this’ and *apa-* ‘that’ Hittite attests the adverbs *kā* ‘here; hither’ and *apiya* ‘there; thither’.⁶ In formal terms these resemble the directional adverbs and the nominal allative case in *-a*, and it is unsurprising that several scholars have assumed that the allative meaning is older (see further below). However, it should be pointed out that at least within the context of Hittite the locative sense must also be relatively old. The evidence consists in the expressions *kā UD-at* ‘on this day’ (KUB 43.63 Ro 6 etc.) for usual *kēdani UD.KAM-ti* and *apiya UD-at* ‘on that day’ for usual *apēdani UD.KAM-ti* (KBo 17.11 i 14 etc.). The latter example is in an Old Hittite manuscript, and all instances must be archaisms, since they show the archaic endless locative *šiwat* for ‘day’. These fixed expressions must have

4 Pace Dunkel (2014: 2.244 and *passim*), Anatolian **ópi* and related forms belong exclusively with **épi* ‘upon’ and have nothing to do with **ápo* ‘away’.

5 For the need to reconstruct specifically a PIE “palatal” **k̑* in this adverb see Melchert 2012: 211.

6 For a demonstration that Hittite has a three-way synchronic deictic contrast between *ka-* ‘this, *hic*’ (near the speaker), *apa-* ‘that, *iste*’ (near the addressee), and *aši, uni, eni* ‘that, *ille*’ (distal) see Goedegebuure 2002–3 and *in extenso* 2014.

been formed when *kā* and *apiya* still functioned as the locative case forms of the demonstratives. We also have the predicted matching form of the interrogative stem in the Old Hittite myth of the disappearance of the Sun-god (VBot 58 iv 11), as seen by Kellerman (1987: 113 and 135, note 2): [*tar*]n_{az}=m_{iš}=a *kuwā* ‘But where is my ritual share?’⁷ In formal terms this is the missing Hittite cognate of Latin *quō* ‘whither?’ cited by Laroche (1970: 47), but the contextual sense is locative. It is important to stress that with motion verbs *kā* and *apiya* indicate attainment of a goal, not direction, for which one uses OH *kēt* (KBo 17.43 i 10) and later the ablatives *kēz* and *apēz* (e.g. KUB 7.41 iv 22–3). See likewise to the distal deictic *etez* ‘in that direction’ (KBo 5.8 iii 18–19).

3 Other Anatolian evidence for a nominal case in *-a*

One form of the infinitive in Hittite is in *-anna*, which clearly in origin is merely the allative case of verbal abstracts in *-ātar*. It is therefore widely and surely correctly assumed that Palaic and Luvian infinitives in *-una* and Lycian infinitives in *-ne* and *-na* are likewise reflexes of the allative case of verbal nouns in *-war/-un-*.⁸ While infinitives can be based on locatives, the high frequency of the use of infinitives with motion verbs in Hittite and elsewhere does argue that they originate from allatives. Note, however, that this only argues that an allative function of nominal *-a* is already Common Anatolian, not that it is the *exclusive* function of the case ending.

While the very limited attestation of Palaic precludes a definitive statement, all extant evidence justifies the conclusion of Carruba (1970: 42) that the ending *-i* in Palaic consistently marks the dative, while *-a* is consistently

7 The word had previously been read as *ma-wa-a*, which makes no sense in terms of Hittite morphology. Kellerman’s assumption of an emendation may not be necessary: in the autograph the first sign looks at least as much like the <ku> of *ku-iš* line 12 as it does the two other instances of <ma> in line 11. For the reading and sense see also Mazoyer 2003: 189. The manuscript is a New Hittite copy, but the composition is clearly Old Hittite.

8 Contra Melchert (1992: 46–7 with n. 15) and still Dunkel (2014: 1.158) the Lycian infinitives are not cognate with Hittite *-anna*. It is now clear that abstracts in *ātar/-ann-* are a specifically Hittite innovation. Since the preform of the Palaic–Luvian–Lycian infinitive was not **-wenV*, but **-unV*, my objections of 1992 are not compelling. Lycian syncope of the *-u-* in a medial syllable is entirely compatible with Lycian sound laws.

locative in function, never expressing a goal (see Carruba's index for the contexts of ^{URU}*Lihzīna*, *ulānna*, *ḫalpūta*, *tašūra*, and *kuwalima* vs. datives such as *karti* 'to the heart').⁹ On the other hand, the distribution of the Luvian dative–locative singular endings *-a* and *-i* argues that they are isofunctional and that their appearance is formally determined (see Yakubovich 2015: section 6.2). That the *-a* ending is derived from the allative ending is thus unlikely. A particularly strong counter-indication is the fact that the Luvian *a*-ending occurs freely with nouns with animate semantic referents such as *nimuwiza*- 'child' and *hamsukalla*- 'great-grandson'. Our limited knowledge of Lycian Auslautsgesetze makes it impossible to determine whether locatives like *xupa* 'in the tomb' or *tere* 'in the district' are cognate with Hittite and Palaic case forms in *-a*. Derivation from locatives in **-āi* and **-ōi* cannot be excluded.

4 Implications for reconstruction of an allative in PIE

4.1 Functional aspects

Brixhe (1979: 66–7, note 9) criticizes Starke's use of the label "Terminativ" on the grounds that the Old Hittite *-a* case marks "mouvement vers" and not "aboutissement à". Dunkel (1994: 34) argues that in PIE the "directive" marked merely the "aim or direction of a movement", while the accusative indicated "attainment of the goal and entering it", and the locative expressed not only "attainment of the goal", but also the "permanent" quality of the ensuing "state of rest". The fact that the *-a* case in Old Hittite marks a goal (usually an attained goal) is ruinous for the claims of both Brixhe and Dunkel. As already suggested by Otten and Souček (1969: 62), there is no demonstrable difference in the function of the accusative and allative in Hittite to express goal: they both typically indicate attainment of the goal, but need not. For that matter, there is also no discernible difference in sense when the dative–locative is used with non-local motion verbs (see footnote 2 above). It is the use of the term "directive" that should be abandoned. Since the accusative also regularly indicates attainment of the goal, "accusative of direction/Rich-

9 It should be noted that the context of *ḫalpūta*, *tašūra*, and *kuwalima* is that of ritual offerings (see Carruba 1970: 19), so the Palaic locative does not seem to be restricted to non-local movement.

tungsakkusativ” should also be avoided (thus with Dunkel 1994: 34). One should speak rather of an “accusative of goal”.

The lack of a functional difference does not mean that the use of the three cases in Old Hittite is identical. It is clear that such use of the accusative is recessive: the summary by Zeilfelder (2001: 25–39) is inaccurate in some details, but her final conclusion that it is an inheritance is correct. Since such a use of the accusative is assured for PIE by evidence of other languages, its recessive status in Old Hittite is to be interpreted as an archaism (*contra* Laroche 1970: 65 and Brixhe 1979: 69–70), which has by attested Hittite been almost entirely replaced by the allative in *-a*, whose fully productive use with inanimate referents suggests that it is an innovation, either of Hittite or Anatolian. That the allative was already in Old Hittite in competition with the dative–locative and was eventually replaced by it shows merely another instance of the typologically trivial development by which the locative comes to indicate place to which as well as place where.¹⁰ The Old Hittite allative is another example of a “failed” linguistic innovation.

Just when the innovation took place is not easy to determine. The Palaic locative in *-a* and the match between its infinitive in *-una* and those in Luwian and Lycian suggest that a nominal case in *-a* is a Common Anatolian feature. But was its function exclusively allative? In weighing the limited Palaic evidence, we must concede that we do not know whether the case in *-a* was used to express a goal with motion verbs as well as location. We have seen that the locative use of *kā* and *apiya* in Hittite must be relatively old, but we cannot prove that their ending is the same as that of the nominal case (4.2 below). The fact that their other use typically expresses attainment of a goal, not merely direction, suggests that it is, but the argument can hardly be regarded as compelling. In considering the issue of the allative function of the Anatolian nominal case in *-a* and indeed its very status as a full nominal case, one should weigh the possibility of the allative case as an areal feature, as suggested by Lazzeroni (2006).¹¹ The author correctly points out (2006: 108) that the Greek allative in accusative plus *-δε* is limited to nouns with

¹⁰ The use of the locative to express a goal is likely already PIE, but there is no basis for Dunkel’s claim of a special sense of “permanence” distinguishing it from the accusative of goal.

¹¹ I am indebted to Michele Bianconi for bringing this article to my attention.

inanimate referents, just like the Anatolian case in *a*.¹² One may add that Hurrian also has an allative (singular *-da* and plural *-šta*).

The functional difference between the Old Hittite nominal case in *-a*, which expresses attainment of goal, and the local adverbs in *-a* (whose ending reflects multiple sources) tends to argue against their being derived from the same source. However, we have already cited (2.2, end) evidence that *š(a)rā* ‘up’ with directional sense is in fact the old allative of a root noun. A more certain example of such a development is the post-Old Hittite creation of the preverb *arḫa* ‘away’ (which for natural reasons rarely occurs with a goal) from the original allative ‘to the boundary’ of a root noun attested in the secondary *a*-stem noun *arḫa-/irḫa-* ‘boundary’ (thus Puhvel 1984: 135 with refs.). One may, of course, argue that it was the pre-Hittite merger of **-ō* and **-ā* that permitted the shift in function of *šarā* and *arḫa* once they were separated from their nominal paradigm. Nevertheless, this possibility of “cross-over” inevitably weakens the functional argument against a shared prehistoric source for the nominal case ending and that of at least some of the directional adverbs. We must seek possible confirmation or refutation in their formal expression, to which we now turn.

4.2 Formal aspects

Determining the PIE preform of the Anatolian case ending in *-a* and choosing the correct comparanda in other languages are made difficult by the multiple ambiguity of the Palaic and Hittite reflex. The vowels **-ō* and **-ā* merge in most environments in these two languages. Furthermore, unaccented long vowels are shortened already in Proto-Anatolian (Melchert 1994: 46, after Eichner), while accented **ō* and **ā* are lengthened in open syllables in Hittite, Luvian and Palaic (Melchert 1994: 146–8 with refs.). This means that the final unaccented short *-a* of the allative/locative may reflect short **ō* or **ā*, long **ō* or **ā*, or more than one of these. The same is true for the accented long *-ā* variant in Hittite (*taknā* ‘(in)to the earth’). PIE long **ō* is itself ambiguous, since it can result from a contraction of **o+o* (thematic dat. sg.

12 Lazzeroni’s suggestion (following van Windekens) that the Tocharian A allative ending *-ac* is from PIE **-ode* and cognate with the Greek is contradicted by currently accepted Tocharian sound laws, but this merely strengthens the case that the Greek and Anatolian may be a shared areal feature. Mauro Giorgieri kindly informs me (p.c.) that the Hurrian allative is not limited to inanimate referents: note *šen(a)=iffu=da* ‘to my brother’ beside *šelli=da* ‘to the house’.

* $\bar{o}i < *o-oi$) or of * $o+e$ (thematic anim. nom. pl. * $\bar{o}s < *o-es$), or from * oH . If * oH represents specifically * oh_2 , we might expect to find some traces of *a*-vocalism continuing * $-(e)h_2$.

The evidence of the Lycian infinitives, which appear as both *-ne* and *-na* (e.g. *ttāne/ttāna* ‘to place’), is decisive. Unlike Hittite and Palaic, Lycian merges * o with * e instead of * a (Melchert 1992 and Rasmussen 1992, affirmed in Hajnal 1995: 90–99). As seen by Hajnal (1995: 98), the variant *-na* continues the genuine athematic ending * eh_2 expected in an *r/n*-stem, while *-ne* has been reshaped after the matching thematic ending * $o-h_2$. A preform * eh_2 for the case ending is also supported by Greek *χαμαί* ‘to/on the earth’ and Greek infinitives in *-αι*: see Hajnal 1992 and also Pinault 2011: 157–61. Dunkel’s account (1992: 27–8) of *χαμαί* in terms of a progressive assimilation is egregiously ad hoc and does not explain the infinitive ending *-αι*. Likewise, that Lycian infinitives in *-na* continue a PIE adverbial ending * $-a$ while those in *-ne* are reflexes of a separate adverbial ending * $-o$ (Dunkel 2014: 1.113 *ϵ* 158) is not remotely credible. We are asked to believe that Lycian, alone among Anatolian and Indo-European languages, for some reason created infinitives in * $-a$ next to those in * $-o$.

The compelling evidence that the source of the Anatolian nominal case ending is PIE * eh_2 eliminates its derivation from an ending * \bar{o} with an originally very broad local sense (Schmid 1973: 298–301 and Brixhe 1979: 71–6), from an adverbial directive ending * o and thematic * $\bar{o} < *o-o$ (Dunkel 1992: 30–35 and 2014: 1.154–9), or from an instrumental * oh_1 (García Ramón 1997: 139 with due caution). The Anatolian nominal case ending cannot, on both functional and formal grounds, be equated with endings of the PIE local adverbs. The status of the ending of the Hittite adverbs belonging to the demonstrative and interrogative stems (*kā*, *apiya*, *kuwā*) remains an open question. They may contain the thematic form of the nominal ending (* oh_2), but I currently see no way to exclude derivation from an instrumental * oh_1 (for which see cautiously García Ramón 1992: 140).

5 Conclusion

A correct appreciation of the Anatolian facts allows some conclusions regarding the nominal case ending in *-a*. Contrary to a widespread misapprehension, the Old Hittite nominal ending *-a* expresses a goal, in most cases attainment of a goal, *not* direction towards. In this function it is in direct

competition with the much rarer accusative (surely inherited in this use) and in limited fashion with the dative–locative. Evidence from the other Anatolian languages suggests that *-a* was a nominal case in Proto-Anatolian, but could have locative as well as allative function. On both functional and formal grounds, this ending must be derived from a PIE preform **-eh₂* and has no prehistoric connection with any endings of the local adverbs.

Several important questions remain open. Hittite demonstrative adverbs with allative and locative sense may reflect the thematic form **-oh₂* of the nominal ending or a use of the thematic instrumental ending **-oh₁*. I tend to believe with Hajnal (1992: 219 with n. 54) that the exclusively allative sense of the Old Hittite nominal ending *-a* results from a narrowing and that the integration of the morpheme **-eh₂* into the nominal paradigm is an innovation of Proto-Anatolian. However, neither of these claims can yet be proven, and I must leave these issues unresolved, pending a far more thorough study of *all* the PIE cases that express spatial relationships.

References

- Beekes, Robert, Alexander Lubotsky & Jos Weitenberg (eds.), *Rekonstruktion und relative Chronologie: Akten der VIII. Fachtagung der Indogermanischen Gesellschaft, Leiden, 31. August – 4. September 1987*. Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck.
- Brixhe, Clause. 1979. Le directif du vieux-hittite et son ascendance indo-européenne. In *Florilegium Anatolicum: Mélanges offerts à Emmanuel Laroche*, 65–77. Paris: de Boccard.
- Carruba, Onofrio. 1970. *Das Palaische: Texte, Grammatik, Lexikon* (Studien zu den Boğazköy-Texten 10). Wiesbaden: Harrassowitz.
- Dunkel, George E. 1994. The IE directive. In George E. Dunkel et al. (eds.), *Früh-, Mittel-, Spätindogermanisch: Akten der IX. Fachtagung der Indogermanischen Gesellschaft von 5. bis 9. Oktober 1992 in Zürich*, 17–36. Wiesbaden: Reichert.
- Dunkel, George E. 2014. *Lexikon der indogermanischen Partikeln und Pronominalstämme*. Heidelberg: Winter.
- Forrer, Emil. 1928–29. Ein siebenter Kasus im Alt-Kanisischen. In *Altorientalische Studien Bruno Meissner zum 60. Geburtstag gewidmet von Freunden, Kollegen und Schülern* (Mitteilungen der Altorientalischen Gesellschaft, Band 4, Heft 1–2), 30–35. Leipzig: Harrassowitz.

- Fortson, Benjamin W., IV. 2010. *Indo-European language and culture: An introduction*. Second ed. (Blackwell Textbooks in Linguistics 19). Malden (MA) & Oxford: Wiley-Blackwell.
- García Ramón, José Luis. 1997. Adverbios de dirección y instrumental indoeuropeo. In Emilio Crespo & José Luis García Ramón (eds.), *Berthold Delbrück y la sintaxis indoeuropea hoy: Actas del Coloquio de la Indogermanische Gesellschaft Madrid, 21–24 septiembre de 1994*, 113–41. Madrid & Wiesbaden: Ediciones de la UAM & Reichert.
- Goedegebuure, Petra. 2002–3. The Hittite 3rd person/distal demonstrative *asi* (*uni, eni* etc.). *Die Sprache* 43(1). 1–32.
- Goedegebuure, Petra. 2014. *The Hittite demonstratives: Studies in deixis, topics and focus* (Studien zu den Boğazköy-Texten 55). Wiesbaden: Harrassowitz.
- Hajnal, Ivo. 1992. Griechisch *χαυαί* – ein Problem der Rekonstruktion? In Beekes, Lubotsky & Weitenberg 1992, 207–20.
- Hajnal, Ivo. 1995. *Der lykische Vokalismus*. Graz: Leykam.
- Hoffmann, Inge. 1984. *Der Erlaß Telipinus* (Texte der Hethiter Heft 11). Heidelberg: Winter.
- Hoffner, Harry A., Jr. 1997. *The laws of the Hittites: A critical edition*. Leiden, New York & Köln: Brill.
- Hoffner, Harry A., Jr. & H. Craig Melchert. 2008. *A grammar of the Hittite language*. Part 1. Reference grammar (Languages of the Ancient Near East 1). Winona Lake (IN): Eisenbrauns.
- Kellerman, Galina. 1987. La déesse Ḫannaḫanna: son image et sa place dans les mythes anatoliens. *Hethitica* 7. 109–47.
- Laroche, Emmanuel. 1970. Études de linguistique anatolienne: 9. le directif. *Revue hittite et asianique* 28. 22–49.
- Lazzeroni, Romano. 2006. La codifica dell'allativo in greco e in ittita. Contributo allo studio dell'area linguistica circumegea. *Archivio Glottologico Italiano* 91. 106–111.
- Mazoyer, Michel. 2003. *Télipinu, le dieu au maréage* (Collection KUBABA Série Antiquité 2). Paris: l'Harmattan.
- Meier-Brügger, Michael. 2000. *Indogermanische Sprachwissenschaft*. 7., völlig neubearbeitete Auflage unter Mitarbeit von Matthias Fritz & Manfred Mayrhofer. Berlin & New York: de Gruyter.
- Melchert, H. Craig. 1977. *Ablative and instrumental in Hittite*. Cambridge (MA): Harvard dissertation.

- Melchert, H. Craig 1992. Relative chronology and Anatolian: The vowel system. In Beekes, Lubotsky & Weitenberg 1992, 41–53.
- Melchert, H. Craig. 1994. *Anatolian historical phonology* (Leiden Studies in Indo-European 3). Amsterdam & Atlanta (GA): Rodopi.
- Melchert, H. Craig. 2008. Hittite *duwān* (*parā*). In Claire Bowers, Bethwyn Evans & Luisa Miceli (eds.), *Morphology and language history in honour of Harold Koch*, 201–9. Amsterdam & Philadelphia (PA): Benjamins.
- Melchert, H. Craig. 2009a. Hittite *ḫi*-verbs from adverbs. In Rosemarie Lühr & Sabine Ziegler (eds.), *Protolanguage and prehistory: Akten der XII. Fachtagung der Indogermanischen Gesellschaft, Krakau, 11. bis 15. Oktober 2004*, 335–9. Wiesbaden: Reichert.
- Melchert, H. Craig. 2009b. Local adverbs in Hittite: Synchrony and diachrony. *Language and Linguistics Compass* 3(2). 607–20.
- Melchert, H. Craig. 2012. Luvo-Lycian dorsals revisited. In Roman Sukač & Ondřej Šefčík (eds.), *The sound of Indo-European 2: Papers on Indo-European phonetics, phonemics and morphophonemics*, 206–18. Munich: Lincom Europa.
- Otten, Heinrich & Vladimír Souček. 1969. *Ein althethitisches Ritual für das Königspaar* (Studien zu den Boğazköy-Texten 8). Wiesbaden: Harrassowitz.
- Pinault, Georges-Jean. 2011. L'origine déictique du genre féminin en indo-européen. *Bulletin de la Société de linguistique de Paris* 106.129–82.
- Puhvel, Jaan. 1984. *Hittite etymological dictionary*. Vol. 1. Words beginning with A. Vol. 2. Words beginning with E and I. Berlin, New York & Amsterdam: Mouton.
- Rasmussen, Jens. 1992. The distribution of *e* and *a* in Lycian. In Beekes, Lubotsky & Weitenberg 1992, 227–33.
- Rieken, Elisabeth. 1999. *Untersuchungen zur nominalen Stambildung des Hethitischen* (Studien zu den Boğazköy-Texten 44). Wiesbaden: Harrassowitz.
- Ringe, Donald A. 2006. *From Proto-Indo-European to Proto-Germanic* (A Linguistic History of English. Vol. 1). Oxford & New York: Oxford University Press.
- Ringe, Donald A. forthcoming. *From Proto-Indo-European to Proto-Germanic* (A Linguistic History of English. Vol. 1). Second rev. ed. Oxford & New York: Oxford University Press.

- Schmid, Wolfgang P. 1973. Sprachwissenschaftliche Bemerkungen zum hethitischen “Direktiv”. In Erich Neu & Christel Rüsster (eds.), *Festschrift Heinrich Otten*, 291–301. Wiesbaden: Reichert.
- Starke, Frank. 1977. *Die Funktionen der dimensionalen Kasus und Adverbien im Althethitischen* (Studien zu den Boğazköy-Texten 23). Wiesbaden: Harrassowitz.
- Szemerényi, Oswald. 1996. *Introduction to Indo-European linguistics*. Oxford: Clarendon Press.
- Tichy, Eva. 2000. *Indogermanisches Grundwissen*. Bremen: Hempen.
- Yakubovich, Ilya. 2015. *The Luwian language*. Oxford handbooks online. November 2015. Available at: <http://web-corpora.net/LuwianCorpus/library/Luw-grammar.pdf> (consulted 5/10/2016).
- Zeilfelder, Susanne. 2001. *Archaismus und Ausgliederung: Studien zur sprachlichen Stellung des Hethitischen*. Heidelberg: Winter.