Sahasram Ati Srajas

Indo-Iranian and Indo-European Studies
in Honor of

Stephanie W. Jamison
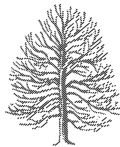
edited by

Dieter Gunkel
Joshua T. Katz
Brent Vine
Michael Weiss

Table of Contents

S A H A S R A M A T I S R A J A S

Table of Contents

The Case of the Agent in Anatolian
and Proto-Indo-European

H. CRAIG MELCHERT

It is a pleasure and an honor to join in this well-deserved tribute to Stephanie Jamison, a friend and colleague of long standing. I offer her as a modest token of respect and esteem the following reexamination of a topic that much interested both of us at the start of our respective careers more than three decades ago.

Our honorand argued cogently in two articles of 1979 that contrary to previous claims the ordinary case of the agent with the passive in Vedic and surely in Proto-Indo-European was the instrumental. Unfortunately, her findings have generally been ignored or wrongly rejected. Among recent handbooks that include discussion of morphosyntax Tichy (2000:65) does not acknowledge agency as a function of the PIE instrumental, nor does Matthias Fritz apud Meier-Brügger 2010:404–5. A happy exception is Fortson (2010:113), who lists it alongside means and accompaniment. Explicit responses to Jamison's claims have mostly been highly skeptical (Luraghi 1986:52–3) or negative (Strunk 1991:85–6). Hettrich (1990:103) does cautiously attribute to Proto-Indo-European the use of the instrumental to mark agency, but only as one of five cases employed in that function (see also Hettrich 2014:117). Since none of the works cited treat the Hittite evidence in a remotely satisfactory manner, while making some quite dubious assumptions regarding the expression of agency elsewhere, it seems useful to reexamine the topic.

1 The expression of agency with the passive in Hittite

Both Hettrich (1990:79–80) and Strunk (1991:84) properly call into question the argument by Starke (1977:101–4) against the use of the instrumental to mark the agent in Old Hittite on the grounds that agency was expressed by a circumlocution 'in the hand of X'. First of all, Strunk (1991:86–7) correctly refutes Starke's claim (1977:104–5) that the instrumental is not used in Old Hittite to mark accompaniment with animate referents, citing the use of the instrumental *pangarit* in the Anitta text KBo 3.22 Ro 5 (OH/OS)[1] to mean 'with mass(ed) troops' (see for the full argumentation Melchert

---

[1] I use the standard sigla OH, MH, and NH to refer to compositions from Old, Middle, and New Hittite and OS, MS, and NS to indicate the date of manuscripts from the respective periods.

1977:164–5). For reasons given below, the comitative use of the instrumental in the NS copies of the Laws §190 (KBo 6.26 iii 29 and KUB 29.34 iv 11) must also reflect genuine Old Hittite usage: *takku꞊ššan* GIDIM-*it tiezi / akkantit tianzi* "If he has/they have intercourse with a dead person..."[2]

As per Hettrich (1990:80), the absence thus far of examples of the instrumental of agent in Old Hittite manuscripts may easily be due to chance. Nevertheless, as we have seen, Strunk (1991:86) still concludes that the instrumental of agent (with animate referents) is an innovation of New Hittite. Luraghi (1986:52–3, n. 8) severely criticizes Jamison for ignoring the relative chronology of the Hittite texts.

It is in fact Luraghi and Strunk who egregiously ignore the relative chronology of the use of the instrumental and the ablative to mark agency in Hittite. As I demonstrated in my dissertation of 1977, the ablative progressively replaces the instrumental *in all functions* (means, accompaniment, and agency) beginning already in the Late Middle Hittite period. Not only are instances of the instrumental in genuine New Hittite compositions reduced almost entirely to a few set expressions (see Melchert 1977:371–5), but already in Late Middle Hittite *copies* of older compositions we find hypercorrect use of the instrumental in ablatival function, that is, to mark separation, a function that never genuinely existed at any stage of Hittite (Melchert 1977:423).

Therefore, when we find in the titulature of a decree of the New Hittite king Ḫattušili III (KBo 6.28 Ro 4–5) the expression *ŠA* LUGAL ᵁᴿᵁ*Kuššar* ᵈ*siúnit k[aneš-ša]ndaš* NUMUN-*aš* "descendant (lit. seed) of the King of Kuššar recognized (favored) by the god(s)," we must conclude that this usage is an archaism reflecting Old Hittite usage. It cannot possibly reflect an innovation, since a New Hittite expression could only stand in the productive ablative. The antiquity of the construction is confirmed by the full phonetic spelling of 'god' and the mention of the city of Kuššar, associated with the beginnings of the Hittite kingdom. The entire phrase 'of the King of Kuššar recognized by the god(s)' is surely borrowed from an old composition. Just like other uses of the instrumental in New Hittite compositions, *šiunit kaneššant-* is a fixed expression. Given this certain example, we may also take seriously the one in an NS copy of an Old Hittite text, the Hittite version of the *šar tamḫari* 'king of battle' narrative, KBo 22.6 i 24: ᴳᴵˢTUKUL.ḪI.A-*iš꞊wa꞊tta šiunit piyanteš* "Weapons (are) given to you by the god(s)" (cited by Hettrich 1990:78). I must stress, however, that this text as it comes down to us shows clear signs of conscious archaizing (see Rieken 2001). This example alone would thus not have probative value.

I must insist on the methodological principle that in judging whether a given feature is an archaism or an innovation one must not apply the relative chronology of the attestations in a blind and mechanical fashion.[3] It is not rare that a later manuscript

---

[2] Reading and interpretation thus with Hoffner 1997:150 and 225, contra Melchert 1977:247–8.

[3] As argued in Melchert 2013:161–2 n. 12, the MS copy KBo 39.8 of the Maštigga ritual is rife with innovations as well as errors and unreal usages, while the NS copies often preserve the more archaic usage of the archetype.

of an older composition nevertheless preserves genuine archaisms. While arguing for the extant Hitt. *šar tamḫari* as a clear case of conscious archaizing, Rieken (2001:579–80) correctly affirms that the text also contains much correct Old Hittite grammar. In deciding which features are genuine archaisms and which are not, one must treat each case separately *and in terms of whether a given usage can be motivated as an innovation*. Not only the evidence that the instrumental was a moribund category in New Hittite replaced in all uses by the ablative, but also the context and orthography of the example of the instrumental of agent in the decree of Ḫattušili III argue decisively that it must be an archaism reflecting a feature of Old Hittite grammar.

Luraghi (1986:52–3) bases her skepticism about reconstruction of the instrumental or any case as the marker of agency in Proto-Indo-European on the premise that such a reconstruction depends on reconstruction of a passive for the proto-language, which she regards as highly doubtful. However, use of the finite *middle* (mediopassive) in a passive sense is attested in all the oldest attested Indo-European languages, including Old Hittite (see Neu 1968:112). There seems little basis for doubting that this use of the middle is of PIE date. However, Jamison (1979a:201 and passim) emphasizes that three-fourths of the Vedic occurrences of the passive plus expressed agent involve past participles, and the majority of the remaining examples occur with present mediopassive participles. Hettrich (1990:80) correctly stresses that Hittite shows a similar preponderance of expressed agent with past participles and elsewhere (1990:60–1) points out that Latin and Tocharian share this feature. He correctly concludes that this matching peculiarity in distribution is unlikely to be due to chance and is surely inherited, probably *alongside* the more rarely realized possibility of expressed agent with the finite mediopassive.

Hettrich (1990:61 n. 18) does note further, however, that whereas in Vedic the expressed agent with the past participle usually does not form a predicate (see Jamison 1979a:201–3), in Hittite most instances of expressed agent plus past participle *are* precisely predicatival in clauses with expressed or unexpressed copula. In the restricted but nevertheless fairly large corpus of assured New Hittite compositions the ratio is ten to one, and it can scarcely be accidental that the one attributive example (KBo 4.12 Ro 8–9) involves the expression *kanešša nt-* 'recognized, favored': ᵐ*Middannamūwaš-ma IŠTU ABI-YA kaneššanza* UN-*aš ēšta* "Middannamuwa was a person recognized/favored by my father." As we will see below, the distribution of expressed agent with the past participle in Hieroglyphic Luvian agrees rather with that in Vedic, showing almost entirely attributive instead of predicatival syntax. Since all of the Luvian attributive examples involve its functional equivalent of Hitt. *kanešša nt-*, it is *conceivable* that Anatolian inherited predominantly the attributive type, which was then extended as an innovation to predicatival use. I find it far likelier that the different ratios of attributive versus predicatival past participles with expressed agent reflect rather the very different textual genres in the respective corpora and must share with Hettrich (1990:61 n. 18) skepticism about the claim of Jamison (1979a:204) that the

preponderance of attributive examples in Vedic reflects "general linguistic considerations."[4] As per Hettrich, the more general preponderance of expressed agents with participles is an inherited feature from Proto-Indo-European. I will return to this point in my discussion of the overall issue of which case(s) Proto-Indo-European used to express the agent with the passive.

2 The expression of agency with the passive in Luvian

I know of no examples of expressed agent with a passive in the quite limited corpus of Cuneiform Luvian incantations embedded in rituals of Kizzuwatna attested in Ḫattuša (for their language as representing a koineized Luvian dialect of Kizzuwatna see Yakubovich 2010:Ch. 1, esp. 68–73). In Hieroglyphic Luvian texts of the period after the Hittite Empire I have identified eleven examples. Their absence in the few and imperfectly understood texts from the Hittite Empire period may easily be due to chance. Only one attestation is predicatival, while five are attributive and five others appositional to nouns, and it can hardly be accidental that nine of the last ten involve the Luvian verb *aza-*. This verb is usually translated as 'love', but as shown by Gérard (2004), the verb is used exclusively of an action taken by a god or the gods towards a human. Furthermore, the verb regularly takes as a determinative LITUUS, which otherwise qualifies verbs of vision and perception (also once OCULUS 'eye'). These facts refute all attempts to connect HLuv. *aza-* with Hitt. *aššiya-* 'be dear, beloved' (including my own in Melchert 1987:200). A *transitive* verb expressing divine favor and marked with a determinative that refers to sight shows that we are dealing with the same semantic development as in Hitt. *kaneš̄-* 'recognize, have regard for, favor'. Its etymology may be left for another occasion, but there can be no doubt that HLuv. DEUS-*na/ni-ti á-za-mi-* 'favored by the gods' is the direct functional match of Hitt. *šiunit kaneššant-*.[5]

In addition to eight examples of the generic 'favored by the gods' we also find one with named deities instead (KARKAMIŠ A15b §1; Hawkins 2000:130). It is unlikely to be accidental that the one attributive example with a participle other than *á-za-mi-* 'favored' occurs together with it in an expanded rhetorical figure (MARAŞ 1 §1h; Hawkins 2000:263): DEUS-*na-ti* (LITUUS)*á-za-mi-sà* CAPUT-*ta-ti* (LITUUS) *u-ni-mi-sa* FINES-*ha-ti* AUDIRE-*mi-sà* REX-*ti-sá* "the king favored by the gods, known by the people, famed (lit. heard of) abroad."

We do have one predicatival example comparable to the well-attested Hittite

---

[4] While a far more systematic study would be required to demonstrate the role of genre and style, I have a strong impression that both the Vedic hymns and the preponderantly self-promoting Hieroglyphic Luvian monumental inscriptions have a fondness for epithets, while most *extant* genres of Hittite texts do not. If this impression is correct, the frequent use of past participles as epithets would be motivated, since they allow more possibilities for further elaboration (including expressed agents!) than ordinary adjectives.

[5] I should add that *aza-* is also well attested as a finite verb with deities as the subject and a human as the direct object (e.g. KARKAMIŠ A11a §7; Hawkins 2000:95), again like its Hittite counterpart *kaneš̄-*.

type (KARAHÖYÜK §16; Hawkins 2000:290): POCULUM.PES.*67(REGIO)-*wa/i-mu-tá-´* 3 URBS-MI-*ní-zi/a la/i/u-kar-ma*(URBS) FRONS?.*282-*pi-i(a)*(URBS) *zu(wa)-ma-ka*(URBS) DOMINUS-*na-ti* DARE-*mi-zi/a* "In the land POCULUM three cities, Lukarma, Hant…piya, and Zu(wa)maka, (are) given to me by the lord." In sum, the Hieroglyphic Luvian evidence confirms that the primary locus of the expressed agent with the passive in Anatolian was, as elsewhere, in syntagms with the past participle and with the instrumental marking the agent.

3 The expression of agency with the passive in Proto-Indo-European

The Hittite and Luvian evidence unequivocally supports the conclusion of Jamison (1979b:143) and Hettrich (1990:101) that the instrumental case had the role of marking the agent with the passive, primarily with verbal adjectives, in Proto-Indo-European.

Hettrich (1990:64–6 and 2014:114–17) makes a strong case for the use of the dative already in Proto-Indo-European for the agent in deontic contexts with a predicatival verbal noun or adjective, a construction attested in many older Indo-European languages, including Hittite: KUB 6.44 iv 23 (NH) [*t(uk=ma) kī ut*]*tar* ŠÀ-*ta šiyanna išḫiūll=a ēšd*[(*u*)] "Let this matter be for you to seal in (your) heart and an injunction." However, Hettrich's characterization of such constructions as "passive," including expressly already in Proto-Indo-European (1990:77), is questionable. As my translation of the Hittite and his own translations (1990:64–5) of examples from other languages show, there is no proof that the syntax of such sentences is passive. The mere fact that the patient appears in the nominative of the matrix clause in no way establishes passive syntax. There is much debate about whether Proto-Indo-European had true infinitives, but I know of no serious claim that the PIE infinitive was marked for diathesis (cf. Meier-Brügger 2010:317–8 and Keydana 2013:82 n. 8, with references). Keydana (2013:82 and passim) argues for a *syntactic* contrast of active and passive in the Vedic infinitive, but not all of his examples for the passive reading are probative. The best evidence for passive syntax of the Vedic infinitive is the occasional use of the instrumental instead of the dative to mark the agent with a predicatival deontic infinitive: RV 7.22.7c *tvám nṛ́bhir hávyo viśvádhāsi* "You are to be summoned by men everywhere" (cited by Hettrich 1990:69; see also RV 7.33.8 cited by Keydana 2013:159). However, Hettrich himself (1990:69 and 77) argues persuasively that the use of the instrumental in the deontic construction is an innovation of Indo-Iranian.[6] It is thus an entirely open question whether the dative marked the agent *with the passive* in Proto-Indo-European.

Hettrich (1990:101 and 2014:117) asserts that the ablative, genitive, and locative also

---

[6]The syntax of the Italic gerundive is also surely passive, but the formation is generally held to be an Italic innovation.

marked the agent with the passive in Proto-Indo-European. The degree of validity of this claim varies markedly for each of the three cases named.

The alleged use of the locative to mark agency will not detain us long. First of all, several of the Vedic examples cited by Hettrich (1990:97–8) likely do not involve passives at all: see the plausible alternative analyses of Jamison and Brereton (2014:273, 1121, and 1272) for RV 1.117.11, 8.45.27, and 9.45.4 respectively. More importantly, as Hettrich's own translations show, even in the genuine passive examples from Vedic, Greek, Latin, and Gothic, the locative expresses the locus of the action marked by the passive (predictably almost all of the genuine examples involve plurals and thus *groups*, which may easily be conceived as occupying spatial domains).[7] It is commonplace that participants in real-life situations may play several roles at once. It is always the prerogative of the speaker to choose which role he or she wishes to express explicitly in speech. If the composers of the passages cited chose a locative, then we must conclude that they wished to express the role of the participants as the locus of the action. These examples provide *no* evidence for the locative case as marking the agent with the passive. A confirmatory argument that the locative did not mark the agent with the passive in Proto-Indo-European or anywhere else comes from the fact that locatives with animate referents that do happen to occur in passive contexts predictably show no special association with past participles, which as both Jamison and Hettrich have shown was the original locus of the expressed agent.

As to the ablative, contra Hettrich 1990:85–6 Hittite cannot be used to support the use of the ablative to mark agency with the passive in Proto-Indo-European. The problem is not the absence of the ablative of separation with animate referents. Whether or not there is an example in an Old Hittite manuscript (see Melchert 1977:158–9 on the crux KBo 3.22 Ro 11–2), there is no reason to doubt that such a usage was possible in Old Hittite. In a Middle Hittite manuscript of the Old Hittite composition KBo 21.22 Ro 25 we find *nu꞊wa kuēz* ᵈUTU-*az* "From which Sun-god (do you come)?" There is no justification for Starke's characterization of the text as "jüngere Sprache." There is just one example from a New Hittite composition, KBo 4.3 ii 58–9: [(*peran par*)]*ā꞊ya꞊zzi apūn* G[(E₆-*a*)]*n IŠTU* MUNUS-*TI* [(*tešḫaš*)] "He also abstained (lit. *-zzi tešḫaš* 'withheld himself') from a woman through that (whole) night before" (see Melchert 1977:348 and Güterbock and Hoffner 1997:303, with references).

However, for pragmatic reasons use of the ablative of separation with animate (especially human) referents would at all times have been exceedingly rare. That this very marginal usage is the source of the ablative of agent in New Hittite as claimed by Hettrich is inherently implausible. In any case, since all evidence in Hittite and Luvian for use of the ablative to mark the agent comes from grammars in which the ablative had taken over *all* uses of the instrumental, the principle of economy argues that we

---

[7]This also applies to the alleged examples in deontic contexts. See Jamison and Brereton 2014:402 and 406 on RV 2.2.3 and 2.4.1 respectively, contra Hettrich 1990:98.

should take that usage also as deriving from the instrumental.[8] This conclusion is confirmed by the fact that the ablative of agent in New Hittite shows the same strong association with past participles as the instrumental of agent (eleven instances versus only three with the finite passive), while the ablative of separation naturally shows no such correlation at any stage of Hittite.[9] Proof for the ablative of agent must come from elsewhere.

Hettrich (1990:84–92) finds purported evidence for such a use in multiple older Indo-European languages, but none of it is probative. First of all, one *cannot* infer an original use of the ablative *case* to mark the agent from such a use of *prepositions* meaning 'from' plus the ablative. By this reasoning one would derive the modern English use of 'by' to mark the agent with passives from an earlier locative of agent, but this use dating from the 15th century clearly developed from the already existing use to express means, an innovation attested from a much earlier date, not from the original locatival sense of the preposition. The constructions of Old Persian, Armenian, Baltic, Slavic, and Germanic involving various prepositions meaning 'from' are thus no evidence for a PIE ablative of agent. For Latin Hettrich (1990:84) cites an example of the bare ablative with the participle *prognātus* 'born' and refers the reader to Kühner and Stegmann 1966:375–6 for further "ablatives of agent." In reality, Kühner and Stegmann state unequivocally that the bare ablative with participles such as *(g)nātus*, *genitus*, *ortus*, etc. and finite forms of the verb *nāscī* 'be born' expresses *origin*, not agency, and that the agent with passive verbs is expressed only by *ab* plus the ablative, except in poetry and late prose. As already noted by Jamison (1979b:137) and conceded by Hettrich (1990:86–8), all Vedic examples of the ablative with the mediopassive forms of *jan-* 'give birth' can likewise express merely origin. His protest that an ablative of origin is not *incompatible* with an ablative of agency is beside the point: proof that the ablative marked agency can only come from examples where agency alone is a felicitous interpretation.

The only remaining evidence for the ablative marking agency is the occasional use of the ablative of the first-person plural pronoun in Vedic *asmát* beside instrumental *asmā́bhis* in passive constructions. Hettrich (1990:89) properly sets aside the examples from deontic contexts, since as discussed above these are clearly secondary, replacing the original dative. He stresses that we are then left with ten examples of the ablative versus only two of the instrumental. However, two of the alleged ablatival examples are with the verb *jan-*, which as already indicated mark origin, not agency. As per Jamison and Brereton (2014:867), the only alleged case with the first-person singular

---

[8]It is true that Melchert and Oettinger (2009) derive both the Old Hittite instrumental ending *-(i)t* and the ablative-instrumental *-adi* of Luvian from original PIE ablatival endings, but these had already *prehistorically* totally replaced instrumental PIE *$-h_1$ in the same fashion that in Middle and New Hittite the ending *-(a)z(zi)* < *-(o)ti* in turn replaced the Old Hittite instrumental. Their ultimate derivation offers no support for attributing their use to mark the agent with passives directly to an ablative marking separation.

[9]For occurrences of the New Hittite ablative of agent see Melchert 1977:367. A survey of ablatives of separation in OH/OS finds that all 30 examples with full context occur with finite verbs.

ablative *mát* (RV 6.67.2) may likewise express origin: "this inspired thought from me."[10] In two instances the ablative *asmát* is most naturally understood as expressing separation: in RV 6.74.3 with the verb 'release' and in 7.34.1 with the verb 'go forth' (Jamison and Brereton 2014:875 and 926 respectively). Finally, in RV 5.33.1 the ablative may express cause: 'because of us' (Jamison and Brereton 2014:698). In sum, we actually have only four instances where the ablative *asmát* is most naturally taken as expressing the agent, against two of instrumental *asmābhis* (if we restrict ourselves to the older Family Books, we are left with precisely one of each: ablative in RV 4.41.1 and instrumental in RV 3.62.7). A grand total of only six occurrences makes it quite impossible to determine whether those with the ablative represent an archaism or a marginal innovation. I therefore regard this data as a far too slender basis on which to posit the use of the ablative to mark agency in Proto-Indo-European.[11]

The genitive of agent is attested in Indo-Iranian, Greek, Tocharian, and Lithuanian. In Tocharian the genitive expressing agent is almost exclusively limited to use with past participles and gerundives (with the latter replacing the lost dative): see Krause and Thomas 1960:82–3 and Carling 2000:10. The same is true of the perlative (Krause and Thomas 1960:85 and Carling 2000:13), which for reasons given above may be taken to reflect the similar distribution of the PIE instrumental that it replaced. In Lithuanian, where the genitive is the regular case of the agent, the passive is formed periphrastically with participles, which may also be taken as reflecting an inherited use of the genitive to mark the agent in the context of passive verbal adjectives (Hettrich 1990:95). The Greek compound διόσδοτος 'god-given' (also as a personal name) and the Old Persian "*manā krtam*" construction are cited as further evidence for an inherited genitive of agency with passive verbal adjectives (see most recently Lühr 2004:8).

Jamison (1979b:133–43) argues that the patterning of the evidence in the oldest Indo-Iranian and Greek points rather to the genitive of agent as a parallel and independent innovation in each language. Her cogent arguments against the *primacy* of the genitive of agent with past participles in favor of the instrumental do not, however, preclude that such a use of the genitive goes back to Proto-Indo-European. Hettrich (1990:85 and passim) correctly insists that more than one case can compete in a given function: it is quite clear that the genitive and the perlative both mark the agent synchronically in Tocharian. Nor does the fact that the genitive of agent is not attested in the very oldest Greek and Indo-Iranian texts prove *per se* that it is an innovation. As stressed above regarding the instrumental of agent in Hittite, the key

---

[10] For a different analysis of *mát* as expressing agency suppletively for the instrumental see Lühr 2004:13.

[11] Hettrich's analysis of the ablative use with the first-person pronoun as an archaism (1990:90–1) depends on his claim that use of the instrumental to mark agency began at the lower inanimate end of the agency hierarchy and did not reach the highest animate position, the first person. However, this account of the origin of the instrumental of agency is itself less than assured. For an alternative analysis see Lühr 2004: 14–5.

question is whether its appearance when it *is* first found can be plausibly motivated as an innovation or not.

Answering this question very much depends on just how the genitive of agent came about, a thorny question that I cannot adequately address here. I must share the doubts of Hettrich (1990:70–1) that the occurrence of multiple cases to express the *patient* of certain active verbs can explain the use of the genitive to express the *agent* of the passive of the same verbs (contra Jamison 1979b:134–5). Nor does this account seem plausible for the genitive of agent with the passive of verbs of speaking. However, Jamison makes a good case for the genitive of agent with past participles arising from syntactic reanalysis of a phrase like RV 10.155.4c *hatā́ índrasya śátravaḥ* "Indra's smashed rivals" as "rivals smashed by Indra," based on association with the clearly agentive *hatā́ índreṇa* 'smashed by Indra' (RV 10.108.4d). Compare the similar arguments of Cardona (1970, esp. 8–9) for both Indic and Iranian. Examples such as Eng. *God's anointed = the one anointed by God* raise the possibility that Greek διόσδοτος is in origin '(the/a) god's given one'. The modest extension in late Vedic of the genitive of agent from participles to finite verbs may merely imitate the similar expansion of the instrumental of agent on a larger scale. I personally cannot judge whether the required reanalysis is trivial enough to have occurred independently in multiple traditions.

4   Conclusion

The instrumental was certainly used to express the agent with the passive in Proto-Indo-European, primarily with passive verbal adjectives, a particular correlation still robustly attested in Vedic, Hittite, and Luvian (and likely also in Tocharian with the perlative). Since passive function of the mediopassive is also of PIE date, we may also suppose that the instrumental was used in the rare instances where the agent was expressed with a finite mediopassive. In deontic constructions the dative marked the agent, but whether such clauses had passive syntax in Proto-Indo-European is an open question. There is no compelling evidence for use of either the locative or the ablative to indicate the agent with a passive in Proto-Indo-European. Whether the genitive of agent existed in Proto-Indo-European or not depends on the plausibility of its appearance in Indo-Iranian, Greek, Tocharian, and Lithuanian being due to parallel and independent innovations.

References

Cardona, George. 1970. "The Indo-Iranian construction *mana* (*mama*) *kṛtam*." *Language* 46:1–12.

Carling, Gerd. 2000. *Die Funktionen der lokalen Kasus im Tocharischen*. Berlin: Mouton de Gruyter.

Fortson, Benjamin W. IV. 2010. *Indo-European Language and Culture: An Introduction*. 2nd ed. Malden: Wiley-Blackwell.

Gérard, Raphaël. 2004. "Louvite hiéroglyphique *aza-* 'aimer'." In *Mélanges offerts au Professeur René Lebrun*, ed. Michel Mazoyer and Olivier Casabonne, vol. 1, 305–23. Paris: L'Harmattan.

Güterbock, Hans G., and Harry A. Hoffner, Jr. 1997. *The Hittite Dictionary of the Oriental Institute of the University of Chicago*. Vol. P, fasc. 3. Chicago: The Oriental Institute of the University of Chicago.

Hawkins, J. David. 2000. *Corpus of Hieroglyphic Luwian Inscriptions*. Vol. 1: *Inscriptions of the Iron Age*. Berlin: Mouton de Gruyter.

Hettrich, Heinrich. 1990. *Der Agens in passivischen Sätzen altindogermanischer Sprachen*. Göttingen: Vandenhoeck & Ruprecht.

——. 2014. "Zum Agens in passivischen Sätzen des Ṛgveda." In *Na-wa/i-VIR.ZI/A MAGNUS.SCRIBA: Festschrift für Helmut Nowicki zum 70. Geburtstag*, ed. Annick Payne and Cyril Brosch, 113–8. Wiesbaden: Harrassowitz.

Hoffner, Harry A., Jr. 1997. *The Laws of the Hittites: A Critical Edition*. Leiden: Brill.

Jamison, Stephanie W. 1979a. "Remarks on the expression of agency with the passive in Vedic and Indo-European." *Zeitschrift für Vergleichende Sprachforschung* 93:196–219.

——. 1979b. "The case of the agent in Indo-European." *Die Sprache* 25:129–43.

Jamison, Stephanie W., and Joel P. Brereton. 2014. *The Rigveda: The Earliest Religious Poetry of India*. New York: Oxford University Press.

Keydana, Götz. 2013. *Infinitive im Ṛgveda: Formen, Funktion, Diachronie*. Leiden: Brill.

Krause, Wolfgang, and Werner Thomas. 1960. *Tocharisches Elementarbuch*. Vol. 1: *Grammatik*. Heidelberg: Winter.

Kühner, Raphael, and Carl Stegmann. 1966. *Ausführliche Grammatik der lateinischen Sprache*. Part 2: *Satzlehre*, vol. 1. Hannover: Hahn.

Lühr, Rosemarie. 2004. "Thematische Rollen und Kasus: Zu Agens und Patiens beim Passiv im Altindischen." *Linguistische Arbeitsberichte* 81:1–30.

Luraghi, Silvia. 1986. "On the distribution of the instrumental and agentive markers for human and non-human agents of passive verbs in some Indo-European languages." *Indogermanische Forschungen* 91:48–66.

Meier-Brügger, Michael. 2010. *Indogermanische Sprachwissenschaft*. 9th ed. Berlin: Mouton de Gruyter.

Melchert, H. Craig. 1977. "Ablative and instrumental in Hittite." Ph.D. diss., Harvard University. http://linguistics.ucla.edu/people/Melchert/melchertdissertation.pdf.

——. 1987. "PIE velars in Luvian." In *Studies in Memory of Warren Cowgill (1929–1985)*, ed. Calvert Watkins, 182–204. Berlin: de Gruyter.

——. 2013. "Luvian language in 'Luvian' rituals in Hattuša." In *Beyond Hatti: A*

Tribute to Gary Beckman, ed. Billie Jean Collins and Piotr Michalowski, 159–72. Atlanta: Lockwood.

Melchert, H. Craig, and Norbert Oettinger. 2009. "Ablativ und Instrumental im Hethitischen und Indogermanischen: Ein Beitrag zur relativen Chronologie." *Incontri Linguistici* 32:53–73.

Neu, Erich. 1968. *Das hethitische Mediopassiv und seine indogermanischen Grundlagen*. Wiesbaden: Harrassowitz.

Rieken, Elisabeth. 2001. "Der hethitische *šar-tamḫāri*-Text: Archaisch oder archaisierend?" In *Akten des IV. Internationalen Kongresses für Hethitologie, Würzburg, 4.–8. Oktober 1999*, ed. Gernot Wilhelm, 576–85. Wiesbaden: Harrassowitz.

Starke, Frank. 1977. *Die Funktionen der dimensionalen Kasus und Adverbien im Althethitischen*. Wiesbaden: Harrassowitz.

Strunk, Klaus. 1991. "Syntaktische Bemerkungen zum hethitischen und indogermanischen Instrumental." In *Istoričeskaja lingvistika i tipologija*, ed. Ju. S. Stepanov et al., 81–91. Moscow: Nauka. [Reprinted in *Kleine Schriften*, ed. Heinrich Hettrich et al., 2.849–60. Innsbruck: Institut für Sprachen und Literaturen der Universiät Innsbruck, 2005.]

Tichy, Eva. 2000. *Indogermanistisches Grundwissen für Studierende sprachwissenschaftlicher Disziplinen*. Bremen: Hempen.

Yakubovich, Ilya. 2010. *Sociolinguistics of the Luvian Language*. Leiden: Brill.