Robin Meyer Origin and aspect of the converb in Classical Armenian

Abstract: Armenian is an Indo-European language, a family not strongly associated with the category of converbs. Nevertheless, Classical Armenian exhibits one such class of forms, aligning clearly with Haspelmath's (1995) definition of converbs as a "nonfinite verb form whose main function is to mark adverbial subordination" (1995: 3). Known in the grammar of Armenian as the perfect participle and marked by the morph *-eal*, this form has three functions: adnominal (= verbal adjective); adverbial (= converb); formation of the periphrastic perfect (with a copula). Converbial use is the most common in Classical Armenian, with an average incidence in fifth-century texts of about 52%.

This paper argues two points: first, that the dominant converbial use arose from reanalysis of adnominal and copredicative uses, but also under the contact influence of West Middle Iranian languages; second, that there is a difference in verbal aspect between the converb (perfective) and the derived perfect construction (stative-resultative). This difference underlines the necessity of not equating both uses of this verbal form, and the fact that the perfect must be a secondary derivation.

1 Introduction

In the grammatical tradition of many Indo-European languages and their reconstructed Proto-Indo-European ancestor, non-finite verbal forms tend to be categorised either as nominal or adjectival, yielding a variety of infinitives and gerunds on the nominal side, and participles or gerundives on the adjectival side. Not all of these categories occur in all daughter languages, and reconstructions may yield a coherent form, such as the verbal adjective marker *-*to*-, which may, however, take on different functions in the individual languages or disappear (almost) entirely; so, whereas the Latin reflex of *-*to*- yields the perfect passive participle, e.g. *datus* 'given' < **dh*₃-*tó-s*, the Greek formation with the same derivation, Gk. $\delta o \tau o \varsigma$ (to be given', does not have a perfective but a deontic meaning and is far less productive; in Classical Armenian this formation is almost entirely absent, save a few fossilised forms like *mard* 'human, man, mortal' < **mr*-*tó-s*. This variety of forms and developments raises the question whether the third category of possible deverbal derivatives, viz. deverbal adverbs or — in the broadest possible sense — converbs, exists as well in the Indo-European languages despite the lack of an explicit category in traditional grammar. Haspelmath and others before him have argued that this is indeed the case, citing for instance Latin *participia coniuncta* in agreement with the sentential subject or copredicates in English, French, or German as cases of converbs or converb-like uses.¹

This paper seeks to make the case for the existence of converbs in Classical Armenian, an Indo-European language arguably occupying its own branch in the family and first attested in the fifth century CE. It is argued that the form traditionally referred to as the past or perfect participle in *-eal* is used converbially in addition to its adnominal and periphrastic use in the analytic perfect construction. While morphologically identical, it is shown that the aspectual value in converbial use differs from that in the perfect periphrasis: the former is exclusively perfective whereas the later denotes a resulting state. These claims are discussed and illustrated on the basis of a corpus of fifth-century autochthonous, i.e. non-translated, historiographical texts.²

After a brief summary of the non-finite verb forms in Classical Armenian, their etymologies, and the adnominal use of the *-eal* form in Section 2, the other non-converbial use of the participle, i.e. the periphrastic perfect, will be discussed in Section 3. The commonalities and differences between periphrastic and converbial use are outlined in Section 4, and the latter is compared to cross-linguistically established types in Section 5. The conclusions offered in Section 6 summarise the findings of this paper and propose a diachronic pathway, from adnominal via converbial to periphrastic use of the *-eal* form.

2 Etymology and adnominal use

Classical Armenian possesses five different types of deverbal adjective formations which show different degrees of frequency and productivity. Two of these adjectives are formed on the basis of the infinitive (in *-el, -al*, or *-ul*): a deontic form in

¹ See also Viti (this volume).

² The corpus contains five texts totalling just over 200'000 words and just under 7'000 participial forms; the texts are: *The Epic Histories (Buzandaran Patmut'iwnk'*) attributed to P'awstos Buzandac'i (P'B); *The Life of Maštoc' (Vark' Maštoc'i*) by Koriwn (Kor.); *The History of Armenia (Patmut'iwn Hayoc'*) attributed to Agat'angelos (Ag.); *The History of Armenia (Patmut'iwn Hayoc'*) by Lazar P'arpec'i (ŁP'); and *Concerning Vardan and the Armenian War (Vasn Vardanay ew Hayoc' paterazmi*) by Elišē (El.).

-oc', e.g. sirem 'to love' \rightarrow sireloc' 'to be loved', lsem 'to hear, listen' \rightarrow lseloc' 'to be heard', which tend to be passive-intransitive;³ and a potential form in -*i*, e.g. sirem \rightarrow sireli 'lovely, loveable', zarmanam 'to admire, wonder' \rightarrow zarmanali 'wonderful, admirable'.⁴ These formations are reasonably common and productive without, however, being so central in Classical Armenian that they form part of the core paradigm.⁵ By contrast, two other formations occur only with a restricted number of lexemes in the classical language but have become productive in later stages of Armenian:⁶ largely nominalised habitual adjectives based on the aorist stem with the suffix -awł or -oł, e.g. cnanim (AOR cnay) 'to give birth' \rightarrow cnawłk' 'giving birth; parents', pahem (AOR pahec'i) 'to keep, fast' \rightarrow pahoł 'fasting'; and agentive forms in -un for middle verbs, e.g. t'rč'im 'to fly' \rightarrow t'rč'un 'flying; bird', xawsem 'to speak' \rightarrow xawsun 'speaking; rational'.⁷

The fifth and most common verbal adjective in Classical Armenian is usually referred to as the past or perfect participle in *-eal* and can be formed for every verb, e.g. *sirem* \rightarrow *sireal* 'loved', *tam* \rightarrow *tueal* 'given', *asem* \rightarrow *asac*'*eal* 'said'. Like the infinitive, this adjective is formed with the suffix *-lo-; traditionally, it is taken to be derived from the aorist stem,⁸ but there are a number of exceptions to this rule and other explanations have been proposed.⁹ The verbal adjective's diathesis is originally passive-intransitive, as witnessed by its adnominal use: in fifth-century autochthonous literature, both adjectival and nominalised *-eal*-forms occur almost

³ There are, however, also active uses of these forms, in particular in future meaning. Cp. Mt. 24:6, *lseloc' ēk' paterazmuns et hambaws paterzmac'* – 'And ye shall hear of wars and rumours of wars', where *paterazmuns* and *hambaws* are direct objects in the accusative of the transitive periphrastic construction.

⁴ Both of these forms are generally taken to be derived from the adjectival suffix *-*lo*- and a further component, *-*sko*- for the deontic and *-*iyo/ā*- for the potential forms (Schmitt 2007: 85; Godel 1975: 129).

⁵ Cf. Meillet (1936: 127–30); Kölligan & Kim (fthc: Section 3.3.2) on these forms.

⁶ For the so-called subject participle in *-ol*, cf. Dum-Tragut (2009: 210–12); for the present participle in *-um*, Dum-Tragut (2009: 212–13). For a more general, if by now dated overview of the morphology and use of participles in Modern Eastern Armenian, cf. Abrahamyan (1953).

⁷ The adjectives in *-awl*, derive derive from thematised agentive formations *-*tel-o*- > *-*tlo*-, perhaps parallel to those in Proto-Slavic *-tel^{*}b-(Godel 1975: 37; Jǎhukyan 1998: s.v.); by contrast, those in *-ol*, reflect an athematic version of the *-*lo*- suffix according to Meillet (1932; 1936: 129–30). The adjectives in *-un*, in turn, go back to a formation in *-*o*-*mh*₁*no*- > *-*o*-*mno*- > *-*ono*, related thus to the middle participles in Greek (Meillet 1928; 1936: 48; Godel 1975: 66; Jǎhukyan 1998: s.v.).

⁸ Cf. Meillet (1936: 129); Klingenschmitt (1982: 55). An earlier suggestion by Mariès (1930: 170) for a derivation from an *s*-aorist stem has long been rejected (Karstien 1956: 223).

⁹ For arguments in favour of the derivation of *-*lo*- participles from a passive-intransitive *-*iye/o*- stem, cf. Meyer (2014: 391–94; 2023: Appendix).

exclusively in non-transitive contexts,¹⁰ so that *sireal mard* can only mean 'the (be-) loved man' but not *'the man who loved'; from a comparative perspective, this is entirely in keeping with other paradigmatic uses of the *-*lo*- formans in other Indo-European languages.¹¹ While they can inflect as *o*-stems (GEN -*eloy*), such inflected forms are not commonly found due to the limited application of nominal case and number agreement in Classical Armenian;¹² some common forms have been lexicalised as nouns, e.g. *arak'em* 'to send' \rightarrow *arak'eal* 'emissary; apostle'.

As regards aspectual value, these participial forms are consistently perfective, denoting a completed action. Examples (1–3) illustrate this in context.¹³

- (1) sałmosk' ēin nocʻa mrmnjunk' ergoc' ew 3PL.GEN whisper.NOM.PL song.GEN.PL psalm.NOM.PL be.3pl.pst and ant'erc'uack' surb groc' katareal uraxut'iwnk' lesson.NOM.PL holy scripture.GEN.PL **complete.PTC** happiness.NOM.PL 'Their whispers of songs were psalms, and the lessons in holy scripture their supreme happiness.' (Eł. VI.22)
- (2) hasanēin i bac'eal ałbiwr=n gitut'ean=n arrive.3PL.PST to open.PTC spring.ACC.SG=DET knowledge.GEN.SG=DET Astucoy God.GEN.SG
 'They arrived at the opened spring of the knowledge of God.' (Kor. (I) XII.2)

¹⁰ In the whole corpus, only four instances of arguably transitive adnominal participles occur, all in the same author (El.); in these instances, the participle is always used predicatively, e.g. *erewesc'in katareal zhramann* '[so that] they may seem to have fulfilled (lit. having-fulfilled) the order'. Other grammatical interpretations are, of course, possible, but the small number of examples makes this exercise moot.

¹¹ In the two other languages in which *-*lo*- is paradigmatically productive, Slavic and Tokharian, its initial function is passive-intransitive, too; see n. 14 and the literature cited there.

¹² Agreement marking is only obligatory for adjectives following their head noun; adjectives preceding their head tend to be unmarked, unless they are monosyllabic and receive case (but not number) marking; cf. Jensen (1959: 157–8); Kölligan & Kim (fthc: Section 3.3.1).

¹³ Glosses follow the Leipzig Glossing Rules with the following additions and exceptions: CONJ = conjunction; COPRED = copredicative; PN = proper noun. The Armenian texts follow the edition of the *Matenagirk' Hayoc'* (Yegavian 2003a,b); the translations are the author's.

(3) ard dimeac' gal surb=n Grigorios zi holv=det РТС rush.3sg.Aor go.INF PN COMP k'andesc'ē ew z=ayn ews zi takawin isk destroy.3sg.Aor.sbjv OBJ=DEM further also COMP more PTC tgēt mardik xar̈nakut'ean zohēin y=aysignorant mankind confusion.GEN.SG sacrifice.3PL_PST to=DEM bagins mnac'eals altar.LOC.PL remain.PTC.LOC.PL 'Then St. Gregory set out so that he might destroy this one, too, since ignorant

men still sacrificed to Chaos at these left over altars.' (Ag. CXIV.3)

The participles occur in different grammatical contexts (predicative NP in the nominative; goal of motion PP in the accusative; and locative PP) and show the variety of morphosyntactic agreement typical of NPs in Classical Armenian (no overt agreement in 1 and 2; overt LOC.PL marking in 3). The perfective aspect is transparent in all three examples; what is less clear without broader context is whether only a purely perfective reading is permissible, or whether resultative interpretations are also admissible or indeed dependent on the *aktionsart* of the verb. In examples (1–3), a resultative reading is arguably possible but not necessary; in nominalised forms, the same seems to apply: *arakeal* 'sent; apostle' is clearly perfective while *greal* 'written; writing' can be either. As will be discussed in more detail below, for comparative reasons¹⁴ and because of developments within the history of Armenian, it seems most plausible to assume, however, that these form were originally purely perfective.¹⁵ Although this use makes up only *c.* 15% of the fifth-century

¹⁴ Two other Indo-European languages make productive use of the *-lo- adjectives in their verbal system: Tokharian and the Slavic languages. In Tokharian forms in TA -l, TB -lle/-lye produce deontic (present stem) and potential (subjunctive stem) verbal adjectives (Thomas 1977; for different perspectives, cf. van Windekens 1976: 95, 123–5; Winter 1992: 152; Fellner 2017: 157); while they are not incompatible with a perfective aspectual reading, this is unlikely to be central to them. In the Slavic languages, by contrast, the *-lo- adjectives are integrated into the verbal paradigm as past participles, like in Armenian, a formation in -lo based on the aorist stem. These participles are used differently in the Slavic languages: described by some as resultative already in Proto-Slavic (Schenker 1993: 106), the situation in Old Church Slavonic is complicated, hinting at the possibility of both resultative and perfective interpretation (Plungian & Urmanchieva 2017), esp. since here the participle is only found in periphrasis with the copula; in modern Slavic languages, the aspect system has changed considerably, but most retain a *-lo- based tense or participle that can be used with perfective and imperfective verbs for different kinds of past-time reference. Diachronically, it therefore remains most plausible that in itself, the *-lo adjective of (pre-)Proto-Slavic was also "just" perfective and that any secondary (e.g. resultative) meaning arose as part of the grammaticalisation of the periphrasis with the copula. For a general overview, cf. Igartua (2014). 15 Cf. Meyer (2024).

corpus, it is most probably the oldest, most elementary function of this formation on the basis of which the others have developed.

3 The periphrastic perfect

In contrast to the simple adnominal use of the *-eal* participle, the periphrastic perfect is both synchronically and diachronically complex.¹⁶ Accounting for *c.* 30% of forms in the fifth-century corpus, the perfect is aspectually a present perfect or resultative;¹⁷ examples thereof are provided and discussed below. It is formed by means of the participial form and an initially optional but later obligatory copulative verb; intransitive verbs take nominative subjects, while transitive verbs take genitive agents and accusative direct objects.¹⁸ In the fifth century, the perfect therefore follows tripartite alignment.¹⁹ The copula, where present, agrees with the subject in number and person and can occur in all synthetic moods and tenses. Examples (4–6) illustrate this behaviour for intransitive verbs.

 (4) ar orov žamanakaw Arjiwł anun t'agaworeal Vrac' at REL.INS.SG time.INS.SG PN name reign.PTC Georgian.GEN.PL
 ..., at which time [someone by the] name of Arjiwł, was king of the Georgians.' (Kor. (I) XIX.5)

¹⁶ The perfect use of the participle has variably been explained as being an old *nomen actionis* (Meillet 1936: 129), a construction inspired by Caucasian ergative-absolutive alignment (Lohmann 1937), a type of *have*-perfect (Benveniste 1952), caused by prototypical agent-case assignment (Schmidt 1963), the result of analogical processes (Stempel 1983), or related to other adjectival formations (Weitenberg 1986); for a critical analysis and refutation of these, cf. Meyer (2022: 285–90; 2023: 83–100).

¹⁷ Cf. Kölligan (2020); Lyonnet (1933); Meyer (2024); Ouzounian (2001); Semënova (2016).

¹⁸ In a small minority of instances, the inverse is found: genitive subjects with intransitive verbs, nominative agents with transitive verbs. This variation and an increase of the incidence of nominative agents in particular suggests that the construction was in the process of changing; cf. Meyer (2023: 137–151).

¹⁹ This was, in all likelihood, not the original state of affairs, since an ergative-absolutive alignment pattern seems a more plausible point of departure given the variation within the corpus and the diachronic trajectory, which by the eighth century sees a gradual ousting of tripartite alignment in favour of the nominative-accusative pattern found in the rest of the Armenian verbal system; cf. Meyer (2022: 290–94; 2023: 242–243).

- (5) ur žoveal ēin zawrk'=n Hayoc'
 where gather.PTC be.3PL.PST soldier.NOM.PL=DET Armenian.GEN.PL
 ..., where the soldiers of the Armenians had gathered.' (Eł. III.98)
- (6) avl duk' or ayžm y=erec'unc' ašxarhac' but 2PL.NOM REL.NOM now from=three.ABL country.ABL.PL ekeal=d ēk' tanuteark' sepuhk' ew come.ptc=det be.2pl.pres magnate.nom.pl and noble.nom.pl 'But you magnates and nobles, who have now come from three countries, ...' (ŁP' II.27.15)

In all three instances, the verb denotes a resulting state after a completed action ('being king' \leftarrow 'become king', perhaps originally 'having been crowned';²⁰ 'gathered' ~ 'be in place'; 'have come' ~ 'be present'). Apart from the aspectual similarities, however, these examples also illustrate the agreement pattern as well as the variations in copula use (absent in 4; past in 5; present in 6).

Examples (7–9) illustrate the same aspectual unity and constructional variation for transitive verbs.

- (7) ararič'=n, oroy z=erkins ew z=erkir
 creator.NOM.SG=DET REL.GEN.SG OBJ=heaven.ACC.PL and OBJ=earth.ACC.SG
 arareal ē
 make.PTC be.3SG.PRES
 '[You know your] creator, who has made the Heavens and the Earth. . .'
 (Ag. XX.30)
- (8) k'anzi t'epēt ew əst hambawoy because although even according-to reputation.GEN.SG *lueal* ēr noc'a z=anuans srboc'=n hear.PTC be.3SG.PST 3PL.GEN OBJ=name.ACC.PL holy.GEN.PL=DET 'For although they had heard the names of the saints according to their reputation ...' (ŁP' II.44.7)

²⁰ An interpretation of this particular use as simple narrative tense is equally possible.

(9) vasn oroy ew p'oyt' arareal mer patmeloy because REL.GEN.SG also haste make.PTC 1PL.GEN report.INF.GEN.SG '[The man . . .] for whose sake we have made haste to write our report' (Kor. (I) III.1)

As before with the intransitive verbs, here too the resultative nature of the perfect is evident ('has made': 'still exists'; 'have heard' \rightarrow 'are aware of'; 'made haste to write' \rightarrow 'text written'). Likewise, the transitive verbs too can use a present (7), past (8), or no (9) form of the copula. The key differences between the two diatheses are the use of genitive agents (*oroy* in 7; *noc*'a in 8; *mer* in 9) and the zero-agreement of the copula.

There is a clear diachronic trend as regards the occurrence or absence of the copula: in the chronologically earliest texts (Kor.), only 10% of perfects have copulas; at the end of the century (Eł.), more than 75% do. In combination with other factors, this suggests that the copular perfect is in the process of being grammaticalised in fifth-century Armenian.²¹ In view of the fact that the perfect and adnominal use account for less than half of the occurrences of the participle, two key questions arise, a synchronic and a diachronic one: first, how does the converbial use differ, especially from the perfect construction, particularly given the existence of the copula-less varieties? Second, how can adnominal, converbial, and perfect use be connected in terms of diachronic development, if at all?

4 Converbial use

In the corpus of fifth-century texts, converbs account for the majority of instances of the *-eal* participle (*c.* 52%). They share a number of features with the perfect construction, so for instance the fact that they can be used intransitively and transitively, and that the agent of transitive verbs is most commonly in the genitive. From a typological perspective, it is noteworthy that they can either share a subject or agent with the matrix verb or have a separate one. They do not have particular

²¹ On the grammaticalisation of the perfect, cf. Meyer (2024). Apart from the presence or absence of the copula, the other key diachronic development is the increasing rate of nominative agents with transitive verbs and the concomitant decrease of rate of genitive subjects with intransitive verbs; this points at the onset of alignment change, away from tripartite alignment and towards nominative-accusative alignment as found elsewhere in the Armenian verbal system; cf. Meyer (2023: 138–146).

semantic restrictions, but can be used in a variety of different contextual settings. This section will provide examples and brief discussions of these characteristics.

In its simplest form, the converb functions as a pure adverbial modifier, providing background information to the action denoted by the matrix verb as illustrated by examples (10–11).

- (10) *ard eleal tesanēr surb=n Grigorios zi* ... CONJ **arrive.CVB** see.3sg.PST holy=DET PN.NOM.SG COMP 'There, upon arrival, Saint Gregory saw that ...' (Ag. CIV.8)
- or
 anuaneal
 koč'i
 Awšakan

 REL.NOM.SG
 name.cvb
 call.3sg.Pass
 PN

 '[...], who was called Awšakan by name.' (ŁP' I.19.1)

In both instances, the converb refers to the same subject as the matrix verb; in (10), it occurs in the active voice ('having arrived'), whereas in (11) it is in the passive ('having been named'). The latter example also illustrates the potential for fixed expressions arising from combinations of converb and matrix verb, as the collocation *anuaneal* + form of *koč*^e*m* is very common.²² In the case of transitive converbs, it is at times difficult to determine with any certainty whether a direct object should be taken to belong only to the converb, is shared between converb and matrix verb, or is governed only by the matrix verb. Examples (12) demonstrates this problem.

(12) jerbakal arareal, aceal yandiman araji
prisoner make.cvb lead.cvb towards in-front-of
kayser=n kac'uc'anēr
emperor.GEN.SG=DET stand.3sG.CAUS.PST
'[He] took the prisoner, led [him] to and made [him] stand before the Emperor.'
(Ag. IV.20)

Here, *jerbakal* 'prisoner' is either the direct object or predicative noun of *arareal*, of *kac'uc'anēr* or both;²³ on the whole, however, the sense is not usually affected in any meaningful way by either interpretation. Example (12) equally shows that, as is common cross-linguistically, multiple converbs can occur in sequence and without

²² The occurrence of two verbs meaning 'to call' suggests that *anuaneal* might serve a disambiguating function here: the individual is not only called by any name, but by his given name.23 Given that Classical Armenian permits both subject and object elision, a reading as a predicative noun ('[He] took [him] prisoner') is entirely possible.

overt subjects, agents or at times even objects to boot. Given the indifference of the converb as to diathesis, this combination of factors can lead to complications in the unambiguous decoding of sentences.

So far, the exemplified converbs have shared the subject or agent of the matrix verb. This, however, need not be the case, since converbs can have independent subjects/agents, as examples (13–15) show.

- (13) ew ankeal zawrawork'=n i sur t'šnameac'=n and fall.cvb soldier.NOM.PL=DET into sword enemy.GEN.PL=DET meraw k'aj=n Mamikonean Vasak die.3SG.AOR valiant=DET PN PN 'And as the soldiers engaged the enemies in battle (lit. fell on the swords of the enemies), the valiant Vasak Mamikonean died.' (ŁP' III.69.20)
- amenayn xawsec'eal Mamikonenin Vahanay, (14) *ew* z = aysand OBJ=DEM OBJ=ALL say.cvb PN.GEN.SG PN.GEN.SG. sirov lsēr z=amenayn Nixor OBI=all love.ins.sg hear.3sg.pst PN.NOM.SG 'And when Vahan Mamikonean had said all this, Nixor (had) heard it all with joy.' (ŁP' III.94.1)
- (15) mart eleal kruec'an and mels=n
 war.NOM.SG happen.cvB struggle.3PL.AOR with sin.LOC.PL=DET karewors
 powerful.LOC.PL
 'When war had broken out, they struggled with the gravest sins.' (El. VII.93)

In (13), two intransitive verbs with different subjects occur (*ankeal* with *zaw-rawork'n*; *meraw* with *Mamikonean Vasak*); similarly, in (14), two transitive verbs show different agents (*xawsec'eal* with genitive *Mamikonenin Vahanay*; *lsēr* with nominative *Nixor*). A difference or change in subject or agent need not be overtly marked, however, as (15) shows, where the 3PL agent of the matrix clause is only evident from verbal morphology.

In view of the similarities in form of converbial and copula-less perfect use, the question arises whether these two are, in fact, separate categories, or whether they could be one and the same. The simple converbs in (10–12) are clearly adverbial and, in sharing subject, agent, and/or object with the matrix verb cannot reasonably be thought of as syntactically independent. For the more complex cases in (13–15), however, this is less evident. For the present purpose, the differentiation criterion has been set at the syntactic level: occurrences of the *-eal* participle that

are not adnominal are counted as converbs if there is no overt coordination, subordination, or clausal complementation by means of conjunctions, subjunctions, *vel sim.* Conversely, that means that non-adnominal participial forms have been counted as matrix verbs only if they occur in overtly subordinated or coordinated clauses, or if they are the sole verb in a sentence.²⁴

Based on this distinction, two further characteristics of converbial use emerge. One is pragmatic in nature and in keeping with the function of converbs cross-linguistically: in Classical Armenian, too, converbial use is limited to background information.²⁵ More importantly for the purpose of diachrony, the participial forms used as converbs exhibit only perfective aspect, but cannot usually be read as resultative.

The situation is complicated by a small number of marginal occurrences which, from a syntactic point of view should be classed as instances of the perfect, but both from a pragmatic and aspectual perspective align more closely with a converbial reading.²⁶ Example (16) illustrates this type of clause.

zc'erek **nsteal** inč' vardapetac' (16) *zc*'*ayg* ew əst ew by-night and by-day **sit.PTC** INDF teacher.GEN.PL and in *ibrew z*=vordahełeł nmanut'ean ampoc'=n anirewac' likeness.dat.sg cloud.gen.sg like OBJ=overflowing rain.GEN.PL sastkut'iwn *z*=*vardapetut*'*iwn*=*n* i veray hosēin intensity.ACC.SG OBJ=teaching.ACC.SG=DET on-top pour.3PL.PST 'Day and night, teachers sat [there] and poured over [them] the abundance [that is] their teaching like some torrential rain from the clouds.' (P'B III.13)

In this example, the use of the participle *nsteal* 'sat down' would, *prima facie*, be evaluated as a matrix verb, since it is co-ordinated with the inflected past-tense verb *hosēin* 'they poured'. While a resultative reading of the participle is possible ('sat down' \rightarrow 'were seated'), both pragmatically and contextually, a perfective reading seems more plausible: the act of sitting is clearly a secondary action and as such would be expressed by the converb; furthermore, the adverbial phrase *zc'ayg ew zc'erek* 'day and night', which scopes over the whole sentence, combined with the habitual/iterative function of the past tense verb *hosēin* suggests that the sense

²⁴ For the present purpose, a "sentence" is defined as a the sense unit delimited by a full or half stop in the edited text.

²⁵ Unless emphasised by dislocation *vel sim*. in languages where this is possible, converbial action is by default background information to the foreground information or action supplied by the matrix verb; cf. König (1995: 85–91).

²⁶ Owing to the difficulties in categorising these sentences, no definite number can be given; however, no more than about a dozen of sentences present with such challenges of interpretation.

is closer to "they sat down and kept pouring (repeatedly) . . ." than to "they were seated and kept pouring (continuously)". If this reading is accepted, this sentence represents a use of the converb, a construction otherwise subordinate to the verb, in overt coordination with a matrix verb. Such occurrences fall into the category of structures termed para-hypotaxis, in which otherwise subordinate constructions (like converbs) are additionally co-ordinated with their superordinate element, here the matrix clause.²⁷ The existence of this kind of structure, albeit marginal, raises the question whether the boundaries between converbial and perfect use of the participle are as clear-cut as the distinctions set out above suggest. Particularly in view of the fact that the perfect itself had not yet fully grammaticalised at the beginning of the fifth century, approaching these two uses as a continuum seems more appropriate.

That being said, when contrasting the prototypical cases of converbial and perfect use of the participle, one commonality and three differences are noteworthy. They behave alike in terms of government, that is in exhibiting tripartite morphosyntactic alignment; they differ, however, as regards pragmatics (background vs foreground), aspect (perfective vs resultative), and syntax (dependent vs independent).

Before attempting an explanation of the historical connections between the different uses, it is necessary and instructive to evaluate the characteristics of Classical Armenian converbs against cross-linguistic data, both to verify that the category "converb" is an appropriate label and to investigate what diachronic and synchronic correlates are typically associated with this kind of converb, if any, and whether they are present here, too.

5 Typological evaluation

While other perspectives and definitions exist,²⁸ for the sake of space and simplicity, the Armenian converb will be set against the criteria outlined in Haspelmath (1995), that is: its status as a paradigmatic verb form, non-finiteness, adverbial function, syntactical subordination.

The paradigmatic status of the participle (and thus the converb) is not in question, as has been outlined in Section 2 above; what is noteworthy, however,

²⁷ Cf. Sorrento (1929) for the original idea; for more recent discussion in other languages, cf. Rebuschi (2001); Bertinetto & Ciucci (2012); Edzard (2022); Ross (this volume).

²⁸ Cf., e.g., Nedjalkov & Nedjalkov (1987); Nedjalkov (1995) in the same volume as Haspelmath; von der Auwera (1998).

is the morphological identity of participle and converb. This, however, is not typologically uncommon (and particularly not in the Indo-European family), as the -nt forms in French or *-ing* forms in English have a similar dual purpose. As regards non-finiteness, morphosyntactic agreement is not marked with any argument in person, number,²⁹ or case, nor are the Armenian forms marked for mood or tense. Yet, as has been laid out above, they do contain aspectual information; as Haspelmath discusses, however, finiteness is not necessarily a binary variable and a number of languages with prominent converb constructions possess aspectually marked forms.³⁰ The third criterion, adverbial function, has been laid out in detail in Section 4 above; while the participial form can also fulfil adnominal functions, these are separate from its adverbial ones and clearly distinguishable. The verbal noun, by contrast, is formally different (form in *-el* rather than *-eal*), even if historically related. Finally, the syntactic status of the converb construction is similarly clear in that it is not explicitly co-ordinated or subordinated by an overt marker, nor has such a marker been grammaticalised in the form of the converb itself. The status of the Armenian -eal form as a converb is therefore definitionally secured within the terms of Haspelmath.

This leaves the question to what extent the Armenian converb behaves like similar forms in other languages, and whether observations about these other converbs also hold true for Armenian. With reference once more to Haspelmath, the following features warrant discussion in the case of Armenian: subject reference, degree of subordination, occurrence of copredicative participles, grammaticalisation of the converb. Some of these features are of particular interest since they provide cross-linguistic comparanda which may help identify the diachronic connections between adnominal, adverbial, and periphrastic perfect use.

As stated above, the converb in Classical Armenian can share the subject of the matrix verb implicitly (no repetition or anaphora is required) or have a separate subject. The case of the subject depends on the valency of the verb and shows the same alignment pattern as the perfect tense;³¹ this differentiation, however, is not shared by the synthetic tenses (PRES, PST, AOR), which only take nominative subjects. As has been argued elsewhere, it is likely that this marking difference arose in

²⁹ For exceptions to this rule, see (18) and the discussion below.

³⁰ Turkish, for instance, possesses a number of different converbs with a variety of functions, such as *-erek* for a single act or continued action contemporaneous to the main action, *-ince* for actions just prior to the main action, or *-ip* for actions coextensive with that of the matrix verb; cf. Lewis (2001: 174–192). For a typological perspective on the different semantics of converbs, cf. Nedjalkov (1995: 106–110).

³¹ There are, however, instances of different patterns already in the earliest classical texts; cf. Kölligan (2020: 353); Meyer (2023: 138–146, 153–157).

the grammaticalisation process of the converb and is linked to contact with West Middle Iranian;³² an origin in the possessive function of the genitive can, however, be ruled out.³³ Functionally, the converb therefore falls into Haspelmath's category of free-subject converbs and also aligns with Nedyalkov's varying-subject converbs, making it a fairly typical exponent of the category.

As regards subordination, Haspelmath lists a number of sufficient criteria which clearly indicate that a converbial structure is subordinate: interruption of the matrix clause; variable position in the matrix clause; possibility of pronominal cataphora and control; semantic restrictiveness and focusability; and possibility of extraction. Of these five criteria, Armenian demonstrably fulfils only one, the interruption of the matrix clause, which has arguably been illustrated already in (12) and (16), although in both cases different analyses have been offered as well. Example (17) is more clear-cut.

(17) t'agawor=n ew naxarark'=n [...] ekeal i king.NOM.SG=DET and noble.NOM.PL=DET come.cvb to cunr ijeal araji srboyn Grigori descend.cvb before holy.gen.sg pn.gen.sg knee.Acc.sg [...] xndrēin ew asēin beg.3PL.PST and say.3PL.PST 'The king and the nobles [. . .] upon arrival fell on their knees before St. Gregory [...], began begging and said ...' (Ag. XX.40)

Here, the subject of the matrix clause (*t'agaworn ew naxarark'n*) is separated by the converbial clause (*ekeal*... *Grigori*) from the matrix verb, rendering the clause discontinuous. While a different interpretation, namely that the subjects belong to the converbial clause and are retained in the matrix clause by zero-anaphora, is possible, there is no particular reason to prefer this reading given that converbs frequently occur with zero subjects. The other subordination criteria are either not testable or do not occur in the corpus; this does not necessarily entail, of course, that they could not be implemented, but only that the attested texts and perhaps

³² The tripartite alignment of the Classical Armenian is, at least in part, modelled on the ergative-absolutive pattern in West Middle Iranian; it is not an exact copy, but an adaptation of this pattern to the requirements and faculties of Armenian. The key commonalities are the lack of a 3sG copula in West Middle Iranian, initially copied in Armenian and only secondarily replaced by a zero-agreement form (Meyer 2024); and the use of a genitive in Armenian to reflect parallel forms in Iranian, which have genitive-like functions and are historically derived from genitives although this category is no longer productive in West Middle Iranian (Meyer 2022: 290–94).

³³ Cf. already Deeters (1927: 80); also cf. Meyer (2022: 285–287).

text types do not show evidence of them. Yet, as all of these are sufficient criteria, the above is enough to illustrate the subordinate nature of converbial clauses.

Haspelmath also discusses two further structures that have a bearing on the diachrony of or relationship with converbs. The first is copredication, that is the use of adjectives, most relevantly participles, in adverbial function. The key difference between copredicative participles and converbs is the formers' retention of agreement with their subject. Limited vestiges of such agreement behaviour can be seen in Classical Armenian in the occasional retention of the nominal plural marker $-k^{c}$ with plural subjects, as (18) demonstrates.

yajoleal-k'hasanēiny=Ayrayrateanašxarh=nsucceed.CVB-PLarrive.3PL.PSTto=PN.GENland.ACC.SG=DET'Having succeeded, they arrived in the land of Ayrayrat.' (P'B III.12)

Such occurrences, which do not appear to be systematic and occur in all texts of the fifth century irrespective of age, suggest that the converbial use, where there is no agreement with the subject any more, may have developed from this copredicative use. These copredicatives, in turn, may have developed from (ad-)nominal uses of the participle. Taking the above example, the development of a nominal (*yajołealk*' 'the successful [ones]') or adnominal (*yajołealk*' [*ark*'] 'successful [men]') analysis to a copredicative ('[the men / ones] having been successful') is intuitively comprehensible. The weakly developed nominal agreement system could further have promoted this and the subsequent development. Similar structures are attested in German (19) and French (20).

- (19) ... weil ich. Gefahr einer entronnen. because 1sg.nom ART.INDF.DAT.SG danger.DAT.SG escape.copred mich nicht zwecklos in eine andere begeben 1sg.acc neg purposeless in ART.INDF.ACC.SG other.ACC.SG move.INF konnte can.1sg.pst ... because I, having just escaped one danger, could not put myself in another without reason.' (J. W. v. Goethe, *Italienische Reise*, 13. Mai 1787)
- (20) nous demeurâmes immobiles, surpris par un 1PL.NOM remain.1PL.PST immobile.PL surprise.COPRED by ART.INDF inexplicable phénomène inexplicable phenomenon 'We remained immobile, surprised by an inexplicable phenomenon.' (Guy de Maupassant, La peur)

Another cross-linguistic factor is the potential of converbs to feed into periphrastic constructions. That this is relevant in the case of Classical Armenian has been outlined in Section 3 above. Citing the examples of Japanese, dialectal Russian, and Avar anterior/perfective converbs,³⁴ Haspelmath as well as Nedjalkov show that these tend to produce resultative constructions, that is to say exactly the aspect associated with the Armenian perfect. Developmentally, these must in all likelihood be understood as a combination of stative auxiliary verb ('to be [in a certain position/state]') and perfective converb, which provides a resulting-state analysis.

Typological and cross-linguistic data can evidently help to give a clearer picture of the "typicalness" of the Armenian converb as well as indications concerning its likely diachronic development. While the corpus data did not allow for all the types and categories treated in Haspelmath to be discussed, it emerges beyond reasonable doubt that the Armenian participle in *-eal* does indeed have canonically converbial function and that, in view of its frequency in the corpus and Nedjalkov's principle of 'primacy of use', this is its principal function. In all the categories discussed, the Armenian converb demonstrates cross-linguistically typical behaviour and, as will be discussed in the next section, a reasonably neat diachrony with well-established parallels in other comparable languages.

6 Conclusions: the diachrony of the Armenian converb

It remains, then, to relate to one another the three primary uses of the Armenian verbal adjective in *-eal*, the functions of which have been discussed and contrasted here. The picture that emerges from the various behaviours of the adnominal (= participle), adverbial (= converb), and periphrastic (= perfect tense) use of this form, taken together with what is know about comparable forms in other Indo-European languages, cross-linguistic data, and typological insights is fairly clear.

As might be expected, the *-eal* form must initially only have been adjectival; in this adnominal use, it agreed with its head NP according to the general rules of Armenian grammar. This function aligns most closely with the reconstructed **-lo*adjective and has parallels in other Indo-European languages. From this adnominal use developed the copredicative use, traces of which are still found unsystematically in fifth-century Armenian. Here, the participle shows agreement in number

³⁴ Haspelmath (1995: 43–45); also cf. Nedjalkov (1988) for examples of converb-based resultative constructions in a variety of languages.

with the subject, but essentially functions adverbially. Similar developments in Indo-European languages have been mentioned above, supporting this proposal.

Over the course of time, subject-agreement is abandoned and the copredicate turns into a converb. Across the fifth century, this is the most common use of this form, suggesting that the grammaticalisation process had concluded already. As the examples in Sections 2 and 4 have illustrated, these initial functions of the participle retain its original, perfective aspect. The case-marking of intransitive subjects and transitive agents as nominative and genitive respectively must also have developed at this stage. It is, however, unclear whether this happened as part of the initial grammaticalisation process, that is when adjective/copredicate were reanalysed as converb, or whether it was a secondary process related to the grammaticalisation of the converb as a matrix verb without copula.

This development from a converb to a periphrastic construction, in particular one that follows tripartite alignment and secondarily creates a copula with zero agreement, was strongly influenced by contact with the Middle Iranian languages, Parthian in particular. It is likely on the model of the Middle Iranian past tense construction, which uses an old participial form and no copula in the most common form (3sG) on which the reanalysis of the Armenian converb as a full matrix verb is based.

The further development of a quasi-obligatory copula towards the end of the fifth century and thus the creation of the periphrastic perfect proper is an independent change in Armenian. As the examples in Section 3 have shown, this construction is aspectually resultative; this change in aspect is cross-linguistically well-documented as part of the creation of analytical tenses.

Returning to the purpose of this paper, it is clear on the basis of what has been shown and discussed above that Classical Armenian does indeed have a well-established category "converb", albeit with only one form, and that this converb is morphologically identical and historically intrinsically related to the past participle as well as the periphrastic perfect. From a cross-linguistic perspective, the converb behaves typically in being (mostly) non-finite and free and varying as regards subject choice. Diachronically, too, it has undergone changes similar to those in other languages with comparable forms. The only unusual quality, its morphosyntactic relationship to its subject or agent, can be explained as the result of contact-based developments.

In addition to the primary goal just discussed, it has also become evident that looking at well-known forms through a new definitional or functional lens – here that of the category "converb", which historically is not found in the diachronic and comparative grammar of Indo-European languages – and with the help of cross-linguistic comparisons and typological information, new insights both into the synchrony and diachrony of different languages can be gleaned. A move away from traditional, latinate grammar and linguistic description and analysis is therefore clearly imperative, and a re-evaluation of complex grammatical categories (such as the Armenian participle) not only warranted but necessary across all languages with such an established, classical grammatical tradition.

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