

1 **Morphosyntactic Alignment, Pattern Replication,**
2 **and the Classical Armenian Periphrastic Perfect***

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5 **1. Introduction**

6 The Classical Armenian periphrastic perfect and its unusual construction have
7 posed difficulties for historical linguists since their first detailed discussion in the
8 1903 edition of Meillet's *Esquisse d'une grammaire comparée de l'arménien*
9 *classique* (see the revised edition, Meillet 1936). While the communis opinio still
10 favors an explanation proffered by Benveniste (1952), which likens the Armenian
11 pattern to the Old Persian *taya manā ky tam* construction, this model cannot ac-
12 count for several problems in the Armenian data; a new model, informed by the
13 shortcomings of its predecessors and taking into account typological and compar-
14 ative data, is therefore necessary.

15 In this paper it will be argued that the most consistent analysis of the Arme-
16 nian perfect construction must interpret it as a synchronically tripartite alignment
17 pattern, resulting from extensive language contact with the Middle Iranian lan-
18 guages; typological irregularities and synchronically deviant patterns are manifes-
19 tations of alignment change under pressure from the non-perfect tenses.

20 After a brief exposition of the Armenian data and the issues associated with it
21 (§2), previous attempts at an explanation of the phenomenon will be summarized
22 and their weaknesses discussed (§3). The Armenian situation will then be com-
23 pared to that in Middle Iranian, especially Parthian, and their differences and
24 commonalities will be set out (§4). Finally, a new model will detail why a tripar-
25 tite analysis of the periphrastic perfect is synchronically and typologically appro-
26 priate (§5), how far Iranian influence is the likely origin of this pattern, and what
27 other expressions of such influence can be found in Classical Armenian (§6).

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1 2. The periphrastic perfect

2 The Classical Armenian periphrastic perfect is formed by means of a passive-
3 intransitive past participle in *-eal* < PIE **-lo-* and an optional form of the copula. ¹

4 In its intransitive and passive use, it conforms to the alignment pattern and con-
5 structions found throughout the Armenian verbal system: intransitive subjects (S)
6 are marked as nominative, as are direct objects promoted to subject status in pas-
7 sive constructions; optional agent phrases in the passive consist of the preposition
8 *i* and an ablative case form. Examples (1) and (2) will illustrate this pattern:

9 (1) ... *or* *ustek' ustek' ekeal haseal ēin*
10 REL.NOM.SG/PL² from-all-over come. PTCP arrive.PTCP be.3.PL.PST

11 *i t'ikuns* ...
12 in aid.ACC.PL

13 “... who had arrived from all over in aid ...” (Agat'angelos 21.1) ³

14 (2) ... *erkri ew mardkan, or i nmanē*
15 earth.GEN .SG and mankind. GEN .SG REL.NOM.SG/PL by 3 ABL.SG

16 *en stelceal.*
17 be.3.PL.PRS create.PTCP

18 “... of earth and mankind, which were created by him.” (Agat'angelos 52.4)

19 As expected of a nominative-accusative language, the copula agrees in num-
20 ber with the subject of the clause. This is decidedly not the case in transitive con-
21 structions of the periphrastic perfect, which in part exhibit different argument
22 marking and verb agreement from all other tenses: while in the non-perfect transi-
23 tive the agent of a transitive verb (A) is marked as nominative like S, the perfect
24 A receives genitive marking; the object (O) is marked consistently as accusative
25 throughout the system, often with a prefixed *nota accusativi z=* marking definite-
26 ness; the copula, where present, is invariably found in the third person singular

1 For a discussion of the formation and historical derivation of the Armenian past participle, see Meyer 2014. Jensen (1959:139) mentions that the copula is largely mandatory in the Armenian New Testament. It may occur in the present or imperfect, yielding a perfect and pluperfect respectively.

2 The Armenian relative pronoun *or* may refer to both singular and plural antecedents; cf. Jensen 1959:86.

3 All references to Armenian texts are based on Ekawean 2003.

1 (PRS *ē*, PST *ēr*), and does not agree with either A or O. These features occur in
2 (3):

3 (3) *?oč' z=gir=n z=ayn ic'ē*
4 NEG OBJ=writing.ACC.SG=DEF OBJ=DEM.ACC.SG be.3.SG.SBJV
5 *ənt'ēr c'eal jer*
6 read.PTCP 2.GEN.PL

7 “Should you not have read this writing?” (NT, Mk. 12:10)

8 While Classical Armenian contains other syntagmata in which an oblique case
9 marks agent-like functions, the periphrastic perfect is the only instance of non-
10 canonical subject-marking in a finite verb form.⁴

11 Further complications arise in the guise of deviant instances, where intransi-
12 tive forms show genitive subjects and transitive forms nominative subjects;⁵ con-
13 sider examples (4) and (5), respectively:

14 (4) *yaynžam matuc'eal ašakertac'=n nora,*
15 at-that-time approach.PTCP disciple.GEN.PL=DEF 3.GEN.SG
16 *asen c'=na*
17 say.3.PL.PRS to=3.ACC.SG

18 “At that time his disciples approached, and said to him ...” (NT, Mt. 15:12)

19 (5) *nok'a a'real tanein z=na*
20 3.NOM.PL seize.PTCP lead.3.PL.PST OBJ=3.ACC.SG

21 “Having seized him, they led him away.” (NT, Jn. 19:17)

22 As illustrated by (4), a genitive subject need not be reiterated in the nomina-
23 tive if it applies to subsequent non-perfect sentences;⁶ the same is true, *mutatis*
24 *mutandis*, for previously expressed nominative subjects, which may undergo el-
25 lipsis even in perfect transitive constructions; both cases are, it seems, of equal
26 subject status.

4 The other prominent non-nominative subject occurs in infinitival constructions, where a dative may serve as S or A; see Vanséveren 1997.

5 More data is available in Vogt 1937:48–59; the patterns illustrated below are shown to be in the minority by a wide margin.

6 The genitive phrase is therefore presumably to be understood as an actual subject, unlike, e.g., the agentive prepositional phrase in passive constructions.

1 Clauses with such elided subjects may indeed have contributed to the emer-
 2 gence of instances like (5), in which the past participle of a transitive verb ap-
 3 pears to be active in voice; while this pattern is exceptional in fifth-century
 4 Armenian, already by the eighth century and certainly by the Middle Armenian
 5 period (from c. 1100 CE), the nominative has ousted genitive agents in the per-
 6 fect completely (cf. Vogt 1937:63–4; Weitenberg 1986:14–5).⁷

7 A model seeking to explain provenance, synchronic distribution, and dia-
 8 chronic development of the periphrastic perfect therefore needs to account for at
 9 least the following: 1) genitive agent phrases in transitive clauses; 2) optional, but
 10 invariant 3. SG copula in transitive clauses; 3) occurrence of pattern inversions.

11 **3. Previous approaches**

12 Several different attempts at explaining the Classical Armenian periphrastic per-
 13 fect have been made over the course of the twentieth century. For reasons of
 14 space, not all can be addressed here in detail, for which reason a summary of key
 15 ideas and short critical discussion will have to suffice.

16 The earliest proposal (Meillet 1936:128–9) suggests that the participle origi-
 17 nally was a *nomen actionis* and interprets the genitive subject as a *genitivus auc-*
 18 *toris*; clauses like *nora bereal ē* “he carried [something]” thus derive from “there
 19 is his carrying.” This analysis does not account for the different construction of
 20 intransitive and passive perfects, however, for which consequently a different
 21 morphological analysis of the participle would be necessary (cf. Deeters 1927:80;
 22 Benveniste 1952:58); the occurrence of accusative objects, as opposed to, e.g., a
 23 *genitivus obiectivus*, remains unexplained as well.

24 This same issue occurs even in the most widely accepted theory concerning
 25 the perfect, which postulates a possessive analysis along the same lines as the Old
 26 Persian *taya manā ky tam* construction (Benveniste 1952);⁸ since both Old Persian
 27 and Classical Armenian mark the possessor as genitive, the perfect is explained
 28 as analogical to the possessive along the lines of *nora handerj ē* “he has clothes”
 29 ≈ *nora bereal ē* “he has carried [something].” Accusative object marking in this
 30 construction is seen as either due to the transitive nature of the syntagma (Ben-

7 A further, impersonal construction of the perfect without expressed subject but accusative object is mentioned in Weitenberg 1986:12; the majority of instances of this pattern are, however, the result of subject ellipsis.

8 The validity of this analysis for the Old Persian is disputed; for different approaches, see Cardona 1970; Haig 2008; Karimi 2012.

1 veniste 1952:60) or as a development resulting from the fact that the participle
 2 was “primär unempfindlich gegen eine Diathesenunterscheidung” (Schmidt
 3 1962:231),⁹ neither of which arguments are convincing or offer more detailed
 4 suggestions concerning their development. Similarly, the occurrence of inverse
 5 patterns (genitive agents in the intransitive perfect) is only laconically explained
 6 as “préférée parce qu’elle faisait mieux ressortir le rapport d’antériorité” (Ben-
 7 veniste 1959:63), and thus remains unaccounted for.

8 Agent-like genitives are, of course, not restricted to Armenian, but occur also
 9 in other Indo-European languages such as Vedic, often accompanying passive
 10 verbal adjectives. Differences in usage and sparse early attestation suggest, how-
 11 ever, that these genitives were not specifically agentive but rather only denoted
 12 appurtenance (cf. Jamison 1979:133–7; Hettrich 1990:94, 97); genitives are ac-
 13 cordingly not prototypical agents, but have developed in this function *einzel Spra-*
 14 *chlich*. Armenian further differs from Vedic and Tokharian¹⁰ in that the genitive
 15 is not an optional agent in a passive construction, but—unless elided—a core ar-
 16 gument of the clause; since no confusion of the active agentive genitive and the
 17 passive agent prepositional phrase is attested, they are unlikely ever to have been
 18 in competition.

19 It is for this reason also that yet another approach, offered by Stempel, must
 20 be deemed unsuccessful, since the existence of a prototypical genitive agent
 21 in the Indo-European mother language is presumed (1983:84–7). The argument
 22 further suggests that the original genitive agent was ousted by the prepositional
 23 agent phrase *i* + ablative that occurs in all other tenses; the former genitive agent
 24 was then reinterpreted as the agent of a previously non-existent active form and
 25 the logical object marked as accusative to reflect this shift. Even if the premise
 26 of a genitive agent inherited from Proto-Indo-European were accepted, this

9 Schmidt, somewhat inconsistently, goes on to suggest that the active usage of the participle was, in fact, secondary (1962:232–3); for arguments in favor of an originally intransitive-passive participle, see Meyer 2014.

10 Tokharian has verbal adjectives derived from PIE **-to-* (the specifics of their derivation are debated; see Thomas 1977:258–9); the present-stem-based verbal adjective expresses a deontic modality, is normally passive, and agrees with its patient, while an optional agent appears in the genitive or instrumental (Thomas 1952:19–25); deviating occurrences are rare and often dubitable. Apart from obvious semantic differences, case syncretism of dative and genitive in Tokharian makes it more plausible that its genitive agent derives from a dative as found in deontic constructions in other Indo-European languages (cf. Hettrich 1990:64–6; Luraghi 1995: 262).

1 approach cannot account for inverse patterns, either, nor does it elucidate the in-
 2 variance of the copula (cf. Weitenberg 1986:17).¹¹

3 A completely different interpretation, suggested in varying forms by,
 4 inter alia, Meillet (1899–1900), Lohmann (1937), Tumanyan (1974), sees a
 5 Kartvelian-style ergative construction in the Armenian perfect. This explanation
 6 is unconvincing, however, owing both to the lack of explanations as to how the
 7 construction would have found its way into Armenian and to the fact that pre-
 8 literary language contact between the Kartvelian languages and Armenian is es-
 9 sentially non-existent.¹² Furthermore, in Armenian O is clearly marked accusative
 10 (and thus differently from S), and therefore the label “ergative” is inapplicable.
 11 While a direct relation between the two languages in this respect is implausible, it
 12 is noteworthy that agent inversions (nominative for genitive, and vice versa) are
 13 found also in Georgian (cf. Schmidt 1980:165; Schmalstieg 1984:141), leading
 14 Schmidt to speculate that the Armenian perfect may be a hybrid, transitional form
 15 between ergative and nominative alignment (1980:166).

16 Despite the brevity of the above summary, it is hoped that the shortcomings
 17 of previous accounts of the Classical Armenian periphrastic perfect have become
 18 evident; while various attempts at explaining the genitive agent are theoretically
 19 possible, none could explain the invariant copula or the occurrence of inverse
 20 agent forms. As the appeal to external influence in the form of the Kartvelian
 21 languages suggests, all resorts to internal motivation for this syntagma seem to be
 22 depleted; while Kartvelian language contact cannot yield any results, other con-
 23 tact languages, viz., Middle Iranian, may prove to be more productive in this re-
 24 gard.¹³

25 4. Middle Iranian influence

26 Since the seminal work of Hübschmann (1877) it has been clear that Armenian is
 27 not an Iranian language, but has been influenced significantly by the Middle Iran-

11 Weitenberg’s own analysis of the construction derives the genitive from an old adjectival for-
 mation and, rather than solving the problem, adds to it; for reasons of space, it cannot be dis-
 cussed here.

12 The few suggested findings in Deeters 1927:111–4 and Vogt 1937 have been rejected by more
 recent scholars (cf. Gippert 2005:153–5).

13 No attention has been given to the differentiation made by some approaches between predica-
 tively and attributively used participles, viz., periphrastic perfect vs. *participium coniunctum*.
 Since the participle is originally intransitive-passive, its active use must have arisen secondari-
 ly, in analogy to the transitive perfect; see further §5.

1 ian languages, especially by Parthian. Numerous studies have explored the pho-
 2 nological and lexical interactions between the two languages,¹⁴ without doubt the
 3 result of, first, Parthian and, later, Sasanian domination over the Armenians. This
 4 well-established connection raises the question of whether circumstances, both
 5 linguistic and socio-political, were such that not only linguistic matter, viz., lexi-
 6 cal items, could be replicated, but also patterns, that is, syntactic constructions.

7 Inquiry into the Parthian verbal system reveals that it indeed operates with a
 8 tense-sensitive alignment split; the non-past construes along nominative-
 9 accusative lines (S = A ≠ O), while the past¹⁵ follows an ergative pattern (S = O ≠
 10 A).¹⁶ This surface likeness to the Armenian pattern warrants further inspection of
 11 the specific construction in Parthian.

- 12 (6) *wd 'z 'gd hym kw 'c bzkr*
 13 and 1. SG.DIR come.PTCP be.1.SG.PRS so-that from evil-doer
 14 *bwj-'n*
 15 rescue-1.SG.SBJV
 16 “And I have come so that I may rescue (you) from the evil-doer.”
 17 (AR/VI/64a)¹⁷

18 Intransitive verbs construe their past by means of the participle and a form of the
 19 copula, agreeing with S. In (6), 'z /az/ ‘I’ accordingly agrees with *hym* /hēm/ ‘I
 20 am’, while *'gd* /āyad/ ‘come’ remains unchanged; this construction is directly
 21 parallel to the one in Armenian, (1) above.

22 Similarly, the Parthian past passive construes along the same lines as its Ar-
 23 menian counterpart, (2) above; the copula (if present) agrees with the patient-like,
 24 promoted S, while an (optional) agent occurs in a prepositional phrase.

- 25 (7) *'wd pd tw bst dydym 'w hrwyn dwšmn-yn*
 26 and by 2. SG bind.PTCP diadem for all enemy.PL
 27 “And a diadem was bound by you for all enemies.” (AR/VI/56a)

14 To name but a few: Benveniste 1957–8; Bolognesi 1960; Schmitt 1983.

15 This alignment pattern is restricted to the past tense built on the past participle, as in Armeni-
 an; remnants of the Old Iranian synthetic imperfect occur only in Middle Persian and there
 construe like the present (see Skjærvø 1992; Durkin-Meisterernst 2014:245).

16 For a thorough discussion of ergativity, see Dixon 1994; a good overview of other alignment
 patterns is provided in Bickel and Nichols 2008.

17 References to Middle Iranian texts follow the conventions laid out in Durkin-Meisterernst
 2014:523–25.

1 Parthian morphology poses a significant problem in the determination of a propo-
 2 sition’s argument structure. Owing to apocope of word-final syllables preceding
 3 their first attestation, the Middle Iranian languages show far more restricted ver-
 4 bal and (pro-)nominal paradigms than Old Iranian, resulting in a two-case system
 5 of direct and oblique with limited expressive power.¹⁸ In the past active, then,
 6 ergative alignment is marked by oblique-case A, and the agreement of the copula
 7 with O.

8 (8) *byc* ‘w’s *cy=m* *dyd* ‘yy *’w=m*
 9 and now COMP=1.SG.OBL see.PTCP be.2.SG.PRS and=1.SG.OBL
 10 *tw* *sxwn* ‘*šnwd*
 11 2.SG speech hear.PTCP
 12 “But now that I have seen you and heard your speech ...” (MKG 1398–
 13 1400)

14 Two features of the Parthian past ergative construction stand out in (8): O need
 15 not be expressed in the first and second person, since the copula agreement can
 16 signify O; no copula is found with third singular objects.

17 While adherence to SV / AOV word order serves to mitigate the parsing dif-
 18 ficulties caused by the limited morphological possibilities, Parthian has devel-
 19 oped further means to mark objects, both in accusative and ergative settings.

20 (9) ‘*w* *zmyg-’n* *gr’b* *pdmwxt*
 21 OBJ earth-OBL.PL womb put-on.PTCP
 22 “(He) put on the womb of the earths.” (M741/7b)

23 Both prepositional object marking and pressure from the other tenses had an im-
 24 pact on the further development of the ergative construction within the Middle
 25 Iranian languages: traces of reinterpretation as an active construction (including

18 The situation is further complicated by the fact that, over time, the functional distribution of case markers and their spread across paradigms is unstable; where initially NOM.SG and NOM.PL were unmarked, and opposed to GEN.SG *-ē and GEN.PL -ān, evidence suggests that GEN.SG would become unmarked, and -ān generalized as plural marker, leveling all case distinctions; epigraphic evidence sets the *terminus post quem* for the decay of this system in the fourth century CE. For further discussion, see Skjærvø 1983:49, 176–9; Haig 2008:100; Durkin-Meisterernst 2014:198, 199 n.93.

1 the third singular copula) are found in the Turfan material already, and later
2 standardized in Classical Persian.¹⁹

3 Recalling the proposal in Schmidt 1980:166 that the Armenian perfect may
4 represent a transitional stage from ergative to accusative alignment, and with all
5 internally motivated models failing closer scrutiny, the only plausible option re-
6 maining is to look for answers in language contact (cf. Poplack and Levey 2010:
7 397–8). Since Parthian exhibits alignment patterns that could furnish the basis for
8 a change as envisaged, in essence, by Schmidt, and indeed shows similar tenden-
9 cies by itself, it stands to reason that Armenian may have replicated this syntactic
10 pattern.

11 **5. Pattern replication and tripartite alignment**

12 While the “borrowing” of extraneous alignment features is not as common as that
13 of lexical items, such cases are still well attested, e.g., for the import of ergative
14 alignment from Kurmanci into Northeastern Neo-Aramaic (Khan 2007:202–3) or
15 from Balti into Šīnā (Anderson 1977:344; Verbeke 2013:257).

16 The alignment attested in the Classical Armenian perfect is, however, not er-
17 gative; in most instances, S, A, and O are in fact marked differently: S receives
18 nominative, A genitive, and O accusative marking, as in (1) and (3) above. This
19 so-called tripartite alignment pattern ($S \neq A \neq O$) often occurs in languages tran-
20 sitioning from ergative to nominative alignment (cf. Skalmowski 1974; Payne
21 1980:150), but can still be diachronically stable (e.g., in Yazgulyami, an Iranian
22 language from the Pamir valley).²⁰

23 Assuming that originally, viz., in pre-literary Armenian, the Parthian ergative
24 pattern was replicated as is, two principal questions arise: how did accusative O-
25 marking come about and what is the source of the genitive agent? The rise of ac-
26 cusative marking is likely due to two factors. First, it needs to be borne in mind
27 that in both nominal and pronominal systems, Armenian differentiates nominative
28 and accusative only in the plural, thus: NOM/ACC.SG *ašakert* ‘student’, *na* ‘s/he’;
29 NOM.PL *ašakertk’*, *nok’a*; ACC.PL *ašakerts*, *nosa*. In a considerable number of
30 instances, therefore, nominative and accusative are only distinguishable by means

19 Parthian has no known daughter language; yet, since many of the phonological, morphologi-
cal, and syntactic developments of Parthian are paralleled in Middle Persian, this comparison
may stand. See Haig 2008:193; Durkin-Meisterernst 2014:398–400.

20 Tripartite alignment also occurs in languages with an NP-split alignment system, where it
“bridges” nominative and ergative patterns; see Dixon 1979:86–8.

1 of the object-marking proclitic *z=*; as example (10) illustrates, however, *z=* does
 2 not occur with indefinite objects:

3 (10) *ew gteal Yisowsi ēš mi.*
 4 and find. PTCP Jesus.GEN.SG donkey.NOM/ACC.SG INDF

5 “And Jesus found a donkey.” (NT, Jn. 12:14)

6 The assumption must be, accordingly, that at the beginning of the replication
 7 process, an ergative pattern with O in the nominative as in (10) was applied irre-
 8 spective of the object’s (in-)definiteness; since O is the grammatical object,
 9 however, and if definite marked with *z=* in the other tenses, this pattern
 10 encroached upon the ergative, effectively resulting in tripartite alignment. The
 11 second factor supporting this assumption lies in prepositional object marking in
 12 Parthian, as mentioned above; the spread of *z=* to the perfect need not have been
 13 motivated by Armenian-internal pattern pressure alone, but was assisted by com-
 14 parable occurrences in the model language.²¹

15 If the ergative construction was indeed replicated in pre-literary Armenian
 16 with a nominative object, the case chosen for the agent must have differed to
 17 avoid confusion; the choice of the genitive is best explained as reflecting other
 18 functional commonalities with the Parthian oblique case.

19 In (9) above, the oblique *zmgv’n /zamīgān/* ‘of earths’ was shown to denote
 20 appurtenance, as does the Armenian genitive in, e.g., *i tohmē t’agaworin Hayoc’*
 21 *ašxarhin* “from the family of the King of Armenia.”²² Similarly, Armenian uses a
 22 genitive with some prepositions borrowed from Iranian, which there take an
 23 oblique.²³ Typologically, it is not uncommon for ergative marking to be taken on

21 *z=* occurs not only as direct object marker, but also, among other things, as a preposition with ablative and instrumental meaning ‘about; around’. Derived from PIE **ǵʰō-* in HAB, its cognates, Russ. *za*, Lith. *ažù* ‘behind, after; for; beyond’, and Latv. *āiz* ‘behind, beyond’, do not share the object-marking feature. Any resemblance with Parthian *’c /až/*, Middle Persian *’c /az/* ‘from, out of; on; for’ is likely coincidental, despite the fact that its reflexes in some Modern Iranian languages are used for direct object marking (cf. Payne 1980:161–72). It cannot be excluded a priori, however, that prepositional object marking as a concept in Armenian may have been influenced by Parthian.

22 See also Skjærvø 1983 for Middle Iranian and Jensen 1959:169 for Armenian. Both languages further have a copulative possessive construction with a genitive possessor; see Durkin-Meisterernst 2014:370.

23 This is the case for Armenian *vasn* ‘for, because’, related to (but not directly derived from) Parthian *wsn’d /wasnāō/* ‘id.’; that the case governed by the preposition must be oblique is most readily visible in the occurrence of pronominal enclitics, which do not have direct forms;

1 by the genitive, as shown by Eskimo, Northeast Caucasian Lak, and Tibeto-
 2 Burman Ladakhi (cf. Dixon 1994:57). If we further take into account the fact that
 3 the genitive does not mark any other core arguments and is therefore unlikely to
 4 be misunderstood in its agent function, and given the parallels in usage between
 5 Armenian and Parthian, it seems sensible that the genitive should take on ergative
 6 function.

7 While accusative object marking and genitive subjects are likely to have de-
 8 veloped under direct influence from Parthian, this cannot be the case for the in-
 9 variant 3.SG form of the copula; as mentioned above, in Parthian the copula
 10 agrees with O, but never occurs in the 3. SG. It needs to be borne in mind, howev-
 11 er, that the copula is not mandatory in Armenian.

12 A simple solution to this problem is not immediately forthcoming, but paral-
 13 lels in other languages may shed some light on the issue. Talyši, a Modern Iran-
 14 ian language spoken on the Western coast of the Caspian Sea, is one such
 15 language containing an invariant copula in ergative environments (cf. Payne
 16 1979:442; Pirejko 1979:486–7); similar “frozen” forms are attested in a number
 17 of Eastern Indo-Aryan languages such as Magahi, Bhojpuri, and Maithili (cf.
 18 Verbeke 2013:140). In a discussion of the Iranian dialect of Dānesfahān, Comrie
 19 (1978:341–2) remarks that such lack of agreement is indicative of languages in
 20 which ergative patterns are in the process of being replaced by accusative align-
 21 ment; he suggests that

22 at an intermediate stage in the development from ergative-absolutive to nomina-
 23 tive-accusative, a situation can be reached where the conflict between moribund
 24 ergative-absolutive morphology and nascent nominative-accusative morphology
 25 is resolved by simply omitting all morphological markers.

26 In intransitive, monovalent verbs, agreement with S is the only possible option; in
 27 transitive, divalent verbs, however, the question arises whether the copula should
 28 agree with the logical, ergative agent, or the grammatical, nominative/accusative
 29 object. The choice of no agreement may thus be seen as a viable compromise be-
 30 tween A and O agreement.²⁴

31 Finally, the occurrence of inverse subject marking, specifically that of nomi-
 32 native agents in the transitive perfect, likely is a sign of further transitions from

cp. *kw=m wsn'd /kūm wasnāḍ/* ‘and for me’, where the 1. SG enclitic =*m* attaches to the con-
 junction, but is governed by the preposition.

24 There are other impersonal constructions in Armenian that may have contributed to the rise of
 an invariant 3.SG copula, such as the possessive construction mentioned above, n.19.

1 the synchronically stable tripartite system to accusative alignment as found in all
2 other tenses; similar developments occur in Georgian (cf. Schmidt 1980:165).²⁵

3 In summary, the replication process must have begun with a straightforward
4 adoption of the Parthian ergative pattern; the Armenian genitive was chosen
5 as the correspondent of the Parthian oblique, representing A, owing to other func-
6 tional similarities. Initially, O would have been expressed as a nominative, cor-
7 responding to the Parthian direct case, but was later reinterpreted as a,
8 morphologically often identical, accusative under pressure from the non-perfect
9 tenses. Since the copula in Parthian agrees with O and 3. SG objects are the most
10 common, the ergative construction is likely to have been “borrowed” without a
11 copula; since it was used like other finite verb forms, however, an invariant 3. SG
12 copula is sometimes inserted without any agreement features.

13 One issue remains to be addressed: the question of the socio-political and cul-
14 tural circumstances of this instance of language contact.

15 **6. Armeno-Iranian language contact**

16 For obvious geographical reasons, Armenian speakers have been in contact with
17 Iranian speakers for a considerable amount of time, at the very least since the
18 conquest of Armenia by the Achaemenid King Darius I in the late sixth century
19 BCE (cf. Behistun inscription, DB II §§26–30). The satrapy, and later kingdom,
20 of Armenia was almost constantly ruled by members of Iranian dynasties, most
21 notably the Parthian Arsacids from 54 until 428 CE.

22 Documentary and epigraphic evidence is scant for the centuries BCE; the
23 few extant inscriptions on Armenian territory are composed largely in Aramaic
24 heterograms and can only provide limited linguistic data. Some onomastic infor-
25 mation, however, e.g., from an inscription of King Artaxšēs (r. 190–160 BCE) in
26 Zangezur, is indicative of the early affiliation between Armenian and Iranian.²⁶
27 The lexicon of literary Armenian, as mentioned in §4 above, was influenced by

25 Occurrences of genitive agents in the intransitive perfect are rarer, but signify a different kind of system pressure, namely from the perfect transitive on its intransitive counterpart. Understandably, the pressure from other tenses was greater and thus prevailed.

26 This inscription is discussed in Perikhanian 1966. It is noteworthy for the spelling of the name *ʰštrsr̥t* /Axšahrsart/, a compound whose first part is cognate with Avestan *xšaθra* ‘power, kingdom’; the prothetic vowel *a-* (denoted by aleph), together with other phonological changes, suggests a West Middle Iranian, but non-Parthian origin of the name. Based on this and a few other Armenian lexical items, Perikhanian suggests that the source language may have been (Middle) Median, which is otherwise unattested.

1 Parthian, and later by Middle Persian, to an extent indicating “overwhelming
 2 long-term cultural pressure from [the] source-language speaker group,” viz. Par-
 3 thian (Thomason and Kaufman 1988:50).²⁷ Pattern replication, that is the “bor-
 4 rowing” of syntactic structures, can result from a number of language contact
 5 situations in principle, but the complexity of a different alignment system sug-
 6 gests that language convergence, in particular, may be most likely (cf. Matras and
 7 Sakel 2007:849). The basic prerequisites (extended, intensive contact; great pro-
 8 portion of bilingual speakers) are given, as just mentioned. For the Armenians,
 9 Parthian was the language of culture and administration; for the Parthians, Arme-
 10 nian the language of their subjects. In the first instance the ergative construction
 11 may have made its way into Armenian as the result of code-switching in compe-
 12 tent bilinguals, or even as an L2-acquisition mistake.²⁸

13 While little work has been done exploring the language contact situation of
 14 Parthian and Armenian beyond the lexicon, there are strong indications that the
 15 alignment of the periphrastic perfect was not the only replicated pattern; both the
 16 canonical reflexive *anjn iwr* (lit. ‘own soul’) and the multifunctional discourse
 17 particle *ink’n* ‘self’ are modeled in use after their Parthian counterparts, *xwyš*
 18 *gryw* ‘own soul’ and *wxd* ‘self’ (cf. Meyer 2013).

19 7. Conclusions

20 The unusual construction of the Classical Armenian transitive perfect, consisting
 21 of a genitive-case agent, a direct object in the accusative, and an invariant form of
 22 the copula, has received much attention in the scholarly literature. All previous
 23 accounts have, however, fallen short of explaining cogently all the features of this
 24 construction. Since all internally motivated explanations seem to have led to in-
 25 complete results, it is suggested here that external influence, specifically pattern
 26 replication as a result of extended contact with the Middle Iranian language Par-
 27 thian, has resulted in the unusual pattern found in Armenian. The synchronically
 28 stable tripartite alignment of the Classical Armenian perfect appears to have de-
 29 veloped from an ergative pattern modeled on Parthian; pressure from the other

27 The replication of both technical and basic vocabulary from Parthian corroborates this assump-
 tion, and suggests that these borrowings were the result of extended bilingual code-switching
 (cf. Heine and Kuteva 2003:530).

28 Given the sparse data concerning the linguistic composition of the time and era, it is equally
 possible that the replication of ergative features is the result of language shift, and thus imper-
 fect acquisition, from Parthian to Armenian; a vaguely similar situation is that of Norman
 French and English after the Norman Conquest in 1066 CE.

1 tenses has induced first the creation of tripartite alignment in fifth-century Arme-
 2 nian, often found in languages transitioning from ergative to accusative systems,
 3 and finally the complete transition to nominative alignment across all tenses by
 4 the eighth century.

5 Language contact between Armenian and Parthian is widely attested in the
 6 Armenian lexicon and corroborated by close political and cultural ties. The pre-
 7 cise manner by which Middle Iranian syntagmata found their way into Armenian
 8 must remain speculative due to the paucity of available extralinguistic data;
 9 cross-linguistic evidence suggests, however, that language convergence or lan-
 10 guage shift of the Armeno-Parthians are the models best suited for this context.

11 Further inquiries seeking to corroborate this hypothesis through close study
 12 of the available literary and epigraphic evidence, as well as through a corpus
 13 study of diachronic changes in fifth-century Armenian texts, are currently being
 14 conducted. It is hoped that more forays into Armeno-Iranian language contact
 15 beyond the lexicon will ensue, providing additional comparative evidence for the
 16 study of contact situations in historical languages.

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