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Notes on Eastern Armenian verbal paradigms

“Temporal mobility” and perfective stems

Abstract: The paper discusses two “hidden” semantic oppositions in the Armenian verbal system: both have no specific segmental markers but are manifested in the division of verbal forms into certain formal classes. In the first case, we deal with the division into synthetic and periphrastic forms, which corresponds to the expression of the so-called “temporal mobility” (or the ability to express the opposition between present and past). In the second case, it is the morphological opposition between the basic verbal stem and the stem with an alternation. The choice of the alternating stem is related to the perfective semantics of the verbal form, so that one can speak of a general aspectual opposition of perfective and imperfective sets of forms in Armenian (not isolated in traditional analysis).

Keywords: Armenian, verbal inflection, tense, aspect

1 Introduction

The main focus of the present paper will be certain formal properties of verbal paradigms in Armenian, first of all those which may have special cross-linguistic relevance. To the best of our knowledge, these properties have not been discussed in the specialized literature at any length (if at all). The main bulk of our material comes from the standard written language of the Republic of Armenia, i.e., Average East Armenian (cf. Vaux 1998). Hereafter, we will refer to it simply as “Armenian”, unless otherwise stated. Similar properties of other idioms of Modern Armenian (both Eastern and Western dialects) deserve a separate and a more detailed discussion, which is far beyond the scope of the present study.

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Inflectional morphology of the Armenian verb has been extensively described in grammars and works of narrower perspective (e.g., Abrahamyan 1962; Ağayan 1967; Abrahamyan, Pařnasyan and Ōhanyan 1974; Minassian 1980; Kozintseva 1991, 1995a, 1995), so we can rely here on a body of facts that may be considered generally agreed upon. However, when describing an inflectional system, it is important to establish not only the size of the paradigm and the rules of form composition but also what may be called a grammatical interpretation of these forms. The latter is related to grammatical semantics rather than to inflectional morphology as such and is a far less studied area. What will be addressed below are mainly problems belonging to this domain.

Firstly, we will briefly present the basic facts of verbal inflection (Section 2). We will then discuss the possibility to isolate, within the Armenian verbal paradigm, two “hidden” grammatical oppositions: “temporal mobility” (Section 3) and morphological marking of perfectivity (Section 4).

2 The general configuration of the Armenian verbal paradigm

One of the basic structural oppositions within the Armenian verbal paradigm is that of synthetic and analytic (periphrastic) forms. From a diachronic perspective, it is also important that the majority of periphrastic forms (according to a widely attested cross-linguistic pattern) have a more recent origin and display a greater variability in dialects. The older group of synthetic forms (well-documented already in Classical Armenian, which is known in its written form since the 5th century AD) has conserved, to a considerable degree, phonological shape and morphological structure but has undergone considerable semantic changes and migrated from the domain of aspectual-temporal forms of the indicative to the domain of non-indicative modality. An exception to this tendency is presented by the form of the so-called aorist, which remained in the system of indicative forms, conserving entirely its synthetic character.¹ Thus, the opposition of

¹ As Vaux (1998: 2) points out, “excepting the aorist, none of the classical formation remained in place”. This type of evolution of present and past forms of the indicative is well-attested cross-linguistically. Bybee, Perkins and Pagliuca (1994: 230–236), for instance, provide sufficient detail on it (Armenian data are also made mention of there). The authors suggest that non-indicative meanings of originally indicative forms arise out of their usage in subordinate clauses with modal semantics.

periphrastic and synthetic forms in Modern Eastern Armenian may be roughly characterized as that of the forms of indicative and non-indicative modality respectively. However, this preliminary characteristic needs further specification (see Section 3).

Another important exception is a little group of four stative verbs (*arže*- ‘cost’, *gite*- ‘know’, *ka*- ‘exist, be available’, *une*- ‘have’), as well as the closely adjacent irregular existential copula *ē*- (also used as an auxiliary in the majority of periphrastic forms). This group has no periphrastic forms at all. To express the indicative, these verbs use the old synthetic forms (of which only the present and the imperfect are available in their paradigm). Thus, this is a typical “relic group”, untouched by grammatical innovation — a very widespread phenomenon in the inflectional morphology of the world’s languages.² Naturally, our further discussion will not concern these verbs. We are also not going to discuss in detail the morphological rules of affixation to the verbal stem (which vary within different conjugations and, besides, have a number of important exceptions pertaining to frequency verbs). Some notes on the formal structure of the paradigm essential for our subject will be made in due course. In particular, the choice of a necessary verbal stem is essential: different verbal forms may differ not only in affixes but also in the type of the stem. This will be dealt with in more detail in Section 4.

Periphrastic forms consist of the copula *ē*-, the locus of expression of tense and subject person/number, and the main converb marking aspect (with the help of various suffixes), as this is more closely connected with the semantics of the verbal stem. Although, from a grammatical point of view, converbs within periphrastic forms basically express aspectual oppositions, one should bear in mind that the actual range of meanings of periphrastic forms is somewhat wider and includes evidential and modal values as well.

All in all, there exist four forms of aspectual (in the wide sense determined above) converbs and, respectively, four classes of periphrastic forms: imperfective (in *-um*), perfective (in *-el*), resultative (in *-ac*), and destinative (in *-lu*). Each converb can combine with the present and past forms of the copula. Thus, all the four aspectual values listed above have a present and past series of personal forms.

² A parallel case is found, for example, in Modern Basque, where only several frequent verbs (including auxiliaries) have a synthetic conjugation while all the others display a periphrastic paradigm. From an areal perspective, it might be useful to draw a comparison with the Modern Persian verbal system, where a small group of stative verbs like ‘lie’, ‘stand’ and ‘sit’ demonstrates a narrowed set of forms, which also differ from most other verbs in their grammatical meaning (for more detail, see Rubinčik 2001: 233–234).

Now, we briefly explain the choice of labels for periphrastic forms, since not all of them are readily established in the literature. The Armenian linguistic tradition (reflected, for example, in Dum-Tragut 2009) tends to use different terminology, somewhat apart from what is typically expected in a cross-linguistically oriented study.

Imperfective forms express two main aspectual meanings, the progressive (to indicate the on-going activity) and the habitual. This type of polysemy (or “grammatical cluster”) is typical of aspectual systems in different areas. In particular, it is characteristic of all Slavic languages, Greek, Latin and many others. The present imperfective (i.e., forms like *grum ē*) is the most frequent form, which expresses the present tense as such. Traditional grammars usually call the past imperfective (i.e., forms like *grum ēr*) “imperfect”, which, in this case, is quite legitimate: the imperfect is commonly regarded as a past tense form combining aspectual meanings from both actual and habitual domains.

The forms of the *perfect* and *resultative* express the present and past tense of the perfect and (subject) resultative respectively. The meaning of resultative aspect is more specific and boils down to asserting the existence, at the moment of speech (or in some reference point in the past), of a “natural” (i.e., lexically inferable) result of the situation. This form (diachronically later than the perfect) is mainly possible with telic processes and has a relatively weak degree of grammaticalization in Modern Eastern Armenian (it is no accident that, in traditional descriptions, there are certain hesitations about its inclusion in the core inventory of grammatical forms).

The perfect, apart from its central value of “current relevance” (whatever it should mean), is also used in evidential contexts to report events not witnessed by the speaker personally, i.e., to express an inferential or a reportative meaning – more or less in keeping with what is observed in a variety of Great Evidential Belt languages (including Iranian, Turkic, Kartvelian and many others). In Western Armenian, as compared to Eastern Armenian, the grammaticalization of resultative forms is more advanced. There, the form that etymologically corresponds to the Eastern Armenian resultative is used as the (generalized) perfect while a cognate of the Eastern Armenian perfect (the form with the suffix *-er*) is now a dedicated evidential marker. For a more detailed account of the Eastern and Western Armenian perfect-resultative distinction, see, for example, Kozintseva (1988, 2000) and Donabédian (1996, 2001).³

³ Forms of the past perfect (like *grel ēr*) have their own range of uses, in many ways differing from that of the present perfect, and deserve a separate study. For a preliminary overview, see Kozintseva (1998) and Sitchinava (2013).

Finally, *destinative* forms denote a situation which, at the reference point, is considered by the speaker as bound to occur, mainly due to external circumstances. The present destinative (forms like *grelu ē*) is one of the functional equivalents of the future tense, yet with a strong tinge of modality (one may speak here of external deontic modality, according to van der Auwera and Plungian 1998). Some contexts where this form is used are reminiscent of what is now usually called “prospective aspect” but, in many respects, the Armenian destinative is not a typical prospective. For all intents and purposes, the meaning of the destinative is virtually close to the aspectual semantic domain, approaching varieties of the prospective.

Thus, despite somewhat different degrees of grammaticalization (which is the highest in the imperfective and the perfect and is lower in the destinative and especially in the resultative), the four series of periphrastic forms represent, in total, an orderly system of forms, a nucleus of the indicative paradigm. Besides, the system of the indicative also includes a synthetic aorist denoting, in full accordance with its name, perfective situations referring to the past and having (in contrast with the perfect) no connection with the moment of speech (for a recent in-depth treatment, see Donabédian 2016). In certain contexts, aoristic forms may be construed as expressing (in opposition with the perfect) an additional evidentiality-related component, indicating that the speaker has personally witnessed the situation referred to.

Morphologically, the formation of the aorist strongly differs from that of all other forms in the verbal paradigm. Aoristic forms are immediately distinguished from all other forms and may be easily identified. This is due to the fact that, in a given verbal form, the aorist is simultaneously marked several times. It always requires a special suffix, which may be of two types: in most verbs, it is the marker *-c'î-* (however, in the third person singular, before a zero subject marker, it has a reduced form *-c'⁴*) while some (sometimes called “strong”) verbs have a vocalic marker *-a-*. The aorist also has a special set of personal endings that differ from those in other synthetic paradigms of the singular (i.e., in the present and past subjunctive considered below). Plural endings are always the same. The strongest distinction is shown by the form of the third person, in which the aorist is opposed not only to all other verbal forms but is characterized, in strong verbs, by a non-zero ending *-v*, unique for all verbal forms. On the surface, third person singular forms of a “weak” aorist with the suffix *-c'* and a zero ending (like *grec'*

4 Special morphonological phenomena before the zero subject marker of the third singular are also characteristic of other forms of the Armenian verb, for instance, of the subjunctive (see below), so this allomorphic distribution is not unique.

from *grel* ‘write’) and of a “strong” aorist with the suffix *-a-* and the ending *-v* (like *ənkav* from *ənknel* ‘fall’) differ quite considerably not only from other verbal forms but also from each other. Finally, in many verbs, the aorist is formed with a special stem, which is frequently suppletive.

All other synthetic forms belong to different non-indicative moods, which represent a rich system in Modern Eastern Armenian (for a traditional nomenclature, see also Dum-Tragut 2010). Non-indicative moods include, in the first place, the imperative, inherited from Classical Armenian and represented only by forms of the second person with special endings (in the first or third person, commands are expressed with the help of other moods). A core element within the system of non-indicative moods is the so-called subjunctive, with a wide range of functions. It is used both in dependent clauses and independent sentences with optative and directive semantics, as well as in the protasis of conditional constructions. The subjunctive present and past are morphologically distinguished and these are the forms that historically go back to the present and imperfect indicative in Classical Armenian (i.e., to indicative forms of the imperfective series, which were substituted, in Modern Armenian, by periphrastic forms with converbs in *-um*).

The present and past subjunctive are formed with the help of special sets of personal endings (of the present and of the past respectively), which coincide in the plural. The forms of the past also have a suffixal marker *-i-* in all persons, except for the third singular.

In general, the third person singular of the subjunctive present and past (and also of the aorist indicative) displays a number of morphological peculiarities. In the present (forms like *gri* or *gna*), it is natural to isolate a zero person/number subject marker, which, however, causes the transition of the thematic vowel *-e* in the final position of the word-form into *-i* (the thematic vowel *-a* is not affected by this type of alternation). This seems more coherent than the traditional interpretation of the element *-i* in forms like *gri* as a personal ending.

Somewhat more difficult is the problem of a morphological interpretation of the past subjunctive third person singular form. It has a marker *-r* consisting of one phoneme (cf. the whole series of forms for the past subjunctive singular: first person *gre-i*, second person *gre-i-r* and third person *gre-r*). It would be most reasonable to believe that, in this case, one deals with a cumulative expression, by a phonologically indivisible marker, of past subjunctive and third person singular. Remarkably, in the paradigm of the past subjunctive, there is already a non-cumulative zero person marker (first person singular) and a non-cumulative person marker *-r* (second person singular). Certainly, as an alternative solution, one could speak of a special marker of the third singular, also a zero one (like in other

forms), which, unlike all other zero forms, causes the appearance of a unique past subjunctive suffix *-r*. However, this interpretation is, for obvious reasons, much more cumbersome and artificial, since it requires too many arbitrary assumptions.

Furthermore, in the system of non-indicative moods, one can distinguish the so-called conditional mood, which is morphologically formed by the addition of the prefix *k(ə)-* to the forms of the present and past subjunctive. In many modern dialects (including Western Armenian), it is this form (or its diachronic continuation) that occupies the niche of the imperfect in the indicative. Certainly, if we rely on its semantics, there are no special grounds to postulate a formation of the conditional “from” the subjunctive, as traditional practical grammars usually do: this form is used in the apodosis of conditional constructions and denotes a real or hypothetical consequence, as well as a probable future occurrence.

We are not going to consider here the form of the debitive (like *piti gri* ‘must write’), often referred to in the grammars as the fourth non-indicative mood, since its meaning reduces to a combination of the meaning of the predicative invariable particle *piti* ‘is needed’ with the meaning of the subjunctive, with which this particle is combined as a head predicate. Accordingly, the debitive construction practically does not differ from constructions with verbs of volition or command also requiring subjunctive marking on the dependent verb. So, in terms of both its meaning and form, it belongs to the domain of the subjunctive.

Such is, in the most general lines, the structure of the Armenian verbal paradigm. The question is: what are the non-trivial consequences for a description of the grammatical semantics of Armenian verbal forms that one can draw from analyzing formal properties of this structure (if any)? Now, we proceed to discuss this matter.

3 Periphrastic and synthetic forms

As has already been said, one of the main structural oppositions within the paradigm formed in the course of the transition from Middle to Modern Armenian is the opposition of periphrastic and synthetic forms. Thus, a natural question arises, viz., whether there is some semantic difference behind that formal opposition, which is so important in the Armenian verbal system. Our answer would be positive but defining this semantic opposition in a clear and unambiguous way is not a simple task.

At first sight, it seems that periphrastic forms are connected with the indicative while synthetic ones are connected with non-indicative moods (somewhat

similar statements have been made explicitly or, more often, implicitly in many traditional descriptions). However, the problem with this opposition lies in the fact that the notion of non-indicative mood itself has no positive content. Rather, it denotes a class formed on the basis of a negative principle. Generally speaking, for a typologically oriented description, an appeal to such purely “structural” classes is not very informative.

Let us look more carefully at the two classes of forms within the Armenian verbal paradigm. Their names are shown in Table 1.

Tab. 1: Periphrastic and synthetic forms of the Armenian verb

Periphrastic forms	Synthetic forms
imperfective (present and past)	aorist
perfect (present and past)	imperative
resultative (present and past)	subjunctive (present and past)
destinative (present and past)	conditional (present and past)

The system presented in Table 1 is rather interesting. It can be seen that the division in two classes is connected neither with the opposition of the indicative and non-indicative moods nor with the opposition of diachronically “new” and “old” forms. The former opposition is contradicted, on the one hand, by the existence of a synthetic form of the aorist indicative and, on the other hand, by the presence of a modal component in perfect forms and particularly in destinative ones – while the latter opposition is contradicted, for instance, by the periphrastic character of the perfect as attested as early as in Classical Armenian.

The closest correlation between the opposition of synthetic and periphrastic forms seems to be related to the expression of the category of tense. It is primarily tense that is expressed by periphrastic markers (through auxiliaries) – and, hence, the verbal forms that allow tense oppositions are periphrastic. They may be called “temporally mobile”. On the other hand, we find synthetic forms either among those without any temporal reference at all (as in non-indicative moods, whose “tense” forms, as is well-known, are not related to time) or with a fixed temporal reference (as with the imperative and aorist, rigidly connected with the future and past respectively). Accordingly, verbal forms with a fixed tense reference have no separate morphological tense marker: their temporal reference is expressed cumulatively, together with aspect or mood.

Thus, in a sense, one may say that the Armenian verb expresses formally a highly specific category of temporal mobility. It contrasts the forms allowing the

opposition of both present and past events and the forms disallowing a change of temporal reference (or, in general, having no such reference at all). Interestingly, it is the capacity to denote present time situations that appears to be a crucial semantic criterion for entering the class of temporally mobile forms: when such a capacity exists, the verbal form also has a past reference. However, if a present time interpretation of the verbal form is impossible, the temporal mobility is obviously absent. One can roughly identify this feature with so-called actuality, i.e., with the capacity to refer to situations occurring directly at the moment of speech.⁵ In this case, the distribution of periphrastic and synthetic verbal forms may be formulated more easily: the categories that, in principle, can mark actual situations are expressed by periphrastic forms while the categories excluding, for some reason, an actual interpretation have a synthetic expression.

Once again, although we see the opposition of temporally mobile (actual) and non-actual verbal forms as rather specific and, so to speak, idiosyncratic, one typological parallel seems nonetheless useful here. It is the verbal category of reality status, which also consists of two values conventionally called “realis” and “irrealis”. The category of reality status usually divides the verbal system into two classes of forms. One of them qualifies a situation as belonging to the real world (the world of events that are actually occurring or took place in the past) while the other does not (for a more detailed discussion, see Elliott 2000; Plungian 2005).

The opposition of real and unreal forms can be based on different semantic strategies. Therefore, the size and the structure of real and unreal forms may not coincide cross-linguistically. Along with the forms whose interpretation in the languages that grammatically mark reality status is always identical, there exist forms that are marked as real in some languages and as unreal in others. Such are, for instance, forms of the imperative and habitual: they have properties of both classes of situations. Imperatives denote a situation which does not belong to the real world but is believed to occur after the moment of speech in all likelihood. On the other hand, habituals describe not a real situation but a kind of abstract property: it expresses the speaker’s judgment about the world and not a specific situation observed. This ambiguity can explain the not infrequent existence of imperatives with realis marking and habituals with irrealis marking.

⁵ The term “actuality” is also often used in another sense, i.e., to denote the capacity of a verbal form to refer to a definite temporal interval (which does not necessarily include the moment of speech). However, the term “temporal localization” (used, for instance, in Kozintseva 1991) is more preferable to denote this sense. Notably, the Armenian aorist has the property of temporal localization (but not actuality, as we understand it here).

Hence, a comparison of the category of temporal mobility with that of reality status may be of interest, since the strategies of ascribing these two categories to verbal forms look similar. This similarity becomes particularly striking if we consider the role of actuality in the choice of both categories. Recall that the temporally mobile forms are exactly those verbal categories that are able to express the semantics of actuality. However, actuality is one of the most crucial factors that determine the marking of a given verbal form as real (see also Plungian 2005 for more discussion). Thus, generally speaking, the category of temporal mobility may be considered a non-conventional variant of the category of reality status. It is non-conventional both at the level of content (since it opposes forms allowing and disallowing actual reference) and at the level of expression (since it opposes periphrastic and synthetic verb forms).

4 Two verbal stems

The second salient opposition in the Armenian verbal paradigm is the distinction between two types of verb stems. As already noted in Section 2, verbal stems may differ not only with regard to specific suffixal or prefixal grammatical markers or with regard to sets of person/number endings (providing subject person/number marking) but also with regard to the type of the stem itself.

Traditionally, Armenian grammars distinguish two types of conjugation depending on the stem-final thematic vowel (-*e*- or -*a*-). The information about the conjugation type is necessary for building a wide range of grammatical forms which have a different shape in each conjugation, such as the singular and plural imperative and the resultative and perfective converbs. In particular, the thematic vowels behave differently before suffixes with a vocalic initial: the vowel /*e*/ is truncated while the vowel /*a*/ requires, as a rule, a consonant augment -*c*-. Some forms use different markers in different conjugations, such as the forms of the imperative singular *ktr-ir* ‘cut!’ from the stem *ktr-e*- and *xaġa* ‘play!’ (with a zero marker) from the stem *xaġ-a*-.

In both conjugation types, one can additionally distinguish “simple” stems and stems with suffixal “extensions”.⁶ These extensions include the following elements: -*n(e)*-, -*č'(e)*-, -*an(a)*- and -*en(a)*-, as well as the causative suffix -*c'n(e)*-

⁶ The term “stem extension” is more preferable than “suffix” because one can rarely ascribe an independent meaning to these elements (though causative suffixes, for instance, also belong to the class of extenders). On top of that, not all verbal suffixes can determine the type of conjugation.

(in parentheses, we indicate the thematic vowel immediately following the extension). One can see that each extension unambiguously determines the choice of the thematic vowel. Stems with extensions are found among verbs of both conjugations.

It is stems with extensions that have an additional morphological peculiarity in Armenian: they exist in two variants forming the so-called “two-stem conjugation”.⁷ The forms of the aorist, perfect, resultative, and imperative display a variant with alternation while other forms show a basic variant (the forms of the converbs of simultaneity behave in a particular way, see below). The alternation involves a simple truncation (in the case of a one-phoneme extension) or the replacement of the phoneme /n/ with the phoneme /r/ (in the causative suffix) or with the phoneme /c^h/ (in other longer suffixes). Consider the building of resultative converbs: *ənk-n-el* ‘fall’ and *ənk-ac*, *mot-en-al* ‘come closer, approach’ and *mot-ec-ac*, *mot-ec-n-el* ‘bring closer’ and *mot-ec-r-ac*.

Thus, in verbs with extensions (as well as in suppletive verbs close to them, of the type *dnel* ‘put’), one can single out two stems with their distribution depending on the grammatical meaning of the corresponding verbal form: the basic stem is maintained in the imperfective, destinate, subjunctive and conditional (as well as in the infinitive and in the converb of simultaneity) while a stem with alternation appears in the aorist, perfect, resultative and imperative. Semantically, this division seems to be sufficiently transparent: overall, it corresponds to the (aspectual) opposition of imperfective versus perfective forms.

The only exception to this interpretation may be the participle of simultaneity (or the “subject” participle) with the marker -oġ. Forms of this participle have different structures in different conjugations. All verbs with the thematic marker -e- use a basic stem (e.g., *ənk-n-oġ* ‘falling’) while verbs with the thematic marker -a- use an alternating stem (e.g., *mot-ec-oġ* ‘approaching’ instead of the expected **mot-ena-c-oġ*). Most probably, forms like *motec-oġ* emerged under the influence of participles from verbs of the *a*-conjugation without extension (like *xaġa-c-oġ* ‘playing’), where the suffix -c-oġ is an allomorph of the marker -oġ, which regularly appears after the thematic vowel -a-. Thus, the deviant behavior of the participles of simultaneity (which are imperfective from a semantic point of view) may be explained by morphological contamination.

To sum up, the opposition of two stem types, though not entirely systematic and not applying to all verbal lexemes, expresses one more hidden category of

7 A number of irregular verbs have a two-stem conjugation. These are verbs whose stems are suppletive or connected by irregular alternations: *ta-/tve-* ‘give’, *dne-/dre-* ‘put’, *ga-/ek-* ‘come’, *line-/eġe-* ‘be’ and some others.

the Armenian verb: the aspectual category of perfectivity. The value of perfectivity is attributed to all resultative verbal forms, to the aorist (in keeping with Donabédian 2016's analysis) and to the imperative, the latter deserving special attention. An interesting typological feature of the Armenian imperative appears to be its “default” perfective interpretation. Cross-linguistically, this is not unique: the imperative tends to suggest a kind of completed event.

5 Conclusion

We have considered two “hidden” semantic oppositions in the Armenian verbal system. They are hidden in the sense that they have no specific segmental markers but are manifested in the division of verbal forms into certain formal classes.

In the first case, the role of a formal correlate is played by the division into synthetic and periphrastic forms, which, we believe, corresponds to the division of all Armenian verbal forms into those that are able to express the opposition of the present and past (“temporally mobile”) and those that either do not express the category of tense at all or do not oppose different tenses. Typologically, the category of temporal mobility seems to be rather idiosyncratic but it is reminiscent of that of reality status (with the binary distinction of *realis* and *irrealis*).

In the second case, it is the opposition of the basic stem and the alternating one that plays the role of a formal correlate. Alternation is conditioned by some grammatical elements in the verbal form, so a meaningful division of verbal forms also takes place here. In our view, the choice of the alternating stem is related to the perfective semantics of the verbal form and one can speak of a general aspectual opposition of perfective and imperfective sets of forms in Armenian.

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References

- Abrahamyan, A. 1962. *Bayə žamanakakic' hayerenum* [The verb in Modern Armenian]. Erevan: AAS Press.
- Abrahamyan, S., N. Pařnasyan & H. Ōhanyan. 1974. *Žamanakakic' hayoc' lezu* [Modern Armenian Language], volume 2. Erevan: AAS Press.
- Ağayan, E. 1967. *Žamanakakic' hayereni holovumə ew xonarhumə* [The declension and conjugation of Modern Armenian]. Erevan: AAS Press.

- Bybee, Joan, Revere Perkins & William Pagliuca. 1994. *The evolution of grammar: Tense, aspect and modality in the languages of the world*. Chicago: University of Chicago Press.
- Donabédian, Anaïd. 1996. Pour une interprétation des différentes valeurs du médiatif en arménien occidental. In Zlatka Guentchéva (ed.), *L'énonciation médiatisée*, 87–108. Paris: Peeters.
- Donabédian, Anaïd. 2001. Towards a semasiological account of evidentials: An enunciative approach of -er in Modern Western Armenian. *Journal of Pragmatics* 33 (3). 421–442.
- Donabédian, Anaïd. 2016. The aorist in Modern Armenian: Core value and contextual meanings. In Zlatka Guentchéva (ed.), *Aspectuality and temporality: Descriptive and theoretical issues*, 375–411. Amsterdam: John Benjamins.
- Dum-Tragut, Jasmine. 2009. *Armenian*. Amsterdam: John Benjamins.
- Dum-Tragut, Jasmine. 2010. Mood in Modern Eastern Armenian. In Björn Rothstein & Rolf Thieroff (eds.), *Mood in the languages of Europe*, 492–508. Amsterdam: John Benjamins.
- Elliott, Jennifer R. 2000. Realis and irrealis: Forms and concepts of the grammaticalisation of reality. *Linguistic Typology* 4 (1). 55–90.
- Kozintseva, Natalia A. 1988. Resultative, passive and perfect in Armenian. In Vladimir P. Nedjalkov (ed.), *Typology of resultative constructions*, 449–468. Amsterdam: John Benjamins.
- Kozintseva, Natalia A. 1991. *Vremennaja lokalizovannost' dejstvija i ee svjazi s aspektual'nymi, modal'nymi i taksisnymi značenijami* [Temporal localization of action and its connections to aspectual, modal and taxis meanings]. Leningrad: Nauka.
- Kozintseva, Natalia A. 1995a. *Modern Eastern Armenian*. Munich: LINCOM Europa.
- Kozintseva, Natalia A. 1995b. The tense system of Modern Eastern Armenian. In Rolf Thieroff (ed.), *Tense systems in European languages*, volume 2, 277–297. Tübingen: Niemeyer.
- Kozintseva, Natalia A. 1998. Pluperfect in Armenian. In Marina Ju. Čertkova (ed.), *Tipologija vida: Problemy, poiski, rešenija* [Typology of aspect: Problems, search, solutions], 207–219. Moscow: Jazyki russkoj kul'tury.
- Kozintseva, Natalia A. 2000. Perfect forms as a means of expressing evidentiality in Armenian. In Lars Johanson & Bo Utas (eds.), *Evidentials: Turkic, Iranian and Neighbouring languages*, 401–417. Berlin: De Gruyter.
- Minassian, Martiros. 1980. *Grammaire d'arménien oriental*. Delmar, NY: Caravan Books.
- Plungian, Vladimir A. 2005. Irrealis and modality in Russian and in typological perspective. In: Björn Hansen & Peter Karlík (eds.), *Modality in Slavonic languages: New perspectives*, 187–198. Munich: Sagner.
- Rubinčik, Jurij A. 2001. *Grammatika sovremennogo persidskogo literaturnogo jazyka* [A grammar of Modern Standard Persian]. Moscow: Vostočnaja Literatura.
- Sitchinava, Dmitry V. 2013. *Tipologija pljuskvamperfekta. Slavjanskij pljuskvamperfekt* [Typology of pluperfect. Slavic pluperfect]. Moscow: AST-Press.
- van der Auwera, Johan & Vladimir A. Plungian. 1998. Modality's semantic map. *Linguistic Typology* 2 (1). 79–124.
- Vaux, Bert. 1998. *The phonology of Armenian*. Oxford: Clarendon Press.