A note on the origin of the Classical Armenian causative

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Classical Armenian causative: synchrony

\textit{mtanem} ‘come in’

- Lexical causative: \textit{mucanem} ‘bring in’
- **Morphological causative:** \textit{mt-uc’-anem} ‘bring in, make come in’
- Analytical causatives: \textit{mtanel a\textit{nem}} ‘make come in’
  \textit{mtanel tam} ‘make/let come in’

- Analytical factitive: n./adj. + \textit{a\textit{nem}} ‘make’ \textit{p’\textit{a\textit{rawor a\textit{nem}}} ‘glorify’
  vs. Analytical inchoative: n./adj. + \textit{linim} ‘become’ \textit{p’\textit{a\textit{rawor linim}} ‘be(come) glorious’
Classical Armenian causative: synchrony

Lexical caus.  Morphological caus.  Factitive  Analitical caus.  Biclausal phrase

Direct  Indirect

The more compact is the morphological expression:

- the stronger is the fusion of the causing and caused sub-events;
- the stronger is the control of the Causer over the causing event;
- the more complete is the affectedness of the Causee.

Dixon 2000; Kulikov 2001; Shibatani & Pardeshi 2002; Aikhenvald 2011, etc.
Classical Armenian causative: synchrony

Lexico-syntactic features of the morphological causative:

- are rarely derived from passive verbs;
- are typically derived from verbs the first argument of which has some degree of autonomy (spontaneous events, experiential events, events with affected agent)
- are predominantly derived from intransitive verbs except for a few experiential and reflexive transitive verbs
- are not derived from canonical agentive and semantically transitive verbs

Classical Armenian causative: synchrony

- Aorist stem + -oyc‘- (stressed) / -uc‘- (unstressed):
  prs. im-an-am, aor. im-ac‘-ay ‘to understand’
  → caus. prs. im-ac‘-uc‘-anem, aor. im-ac‘-uc‘-i ‘to inform’, ipv. im-ac‘-o ‘inform’

- Root + -oyc‘- (stressed) / -uc‘- (unstressed)
  prs. c‘as-n-um, aor. c‘as-e-ay ‘to be angry’
  → caus. prs. c‘as-uc‘-anem, aor. c‘as-uc‘-i ‘to offend’, ipv. c‘as-o ‘offend!’

- Aorist stem + -oyz/uz-, -oys/us-
  prs. p‘l-an-im, aor. p‘l-ay ‘to collapse’
  → caus. prs. p‘l-uz-anem, aor. p‘l-uz-i ‘to make fall’, ipv. p‘l-o ‘make fall!’

- Root + -oys/us-
  prs. kor-nč‘-im, aor. kor-e-ay ‘to disappear’
  → caus. prs. kor-us-anem, aor. kor-us-i ‘to destroy’, ipv. kor-o ‘destroy!’
The decay of the PIE *eye/o-causative

- The merger of PIE *eye-causatives and thematic transitive verbs after the loss of intervocalic *y:

  PIE *top-eje/o- → CArm. t'at'aw-em tr. ‘to immerse’, cf. OCS topiti etc.
  PIE *bʰer-e/o- → CArm. ber-em tr. ‘to carry’, cf. Gk. φέρω etc.

**Scenario A**

<table>
<thead>
<tr>
<th>Lexical caus.</th>
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**Scenario B**

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Existing proposals

• -c’- of the causative suffix is connected to:
  ➢ *skeletal-present
  ➢ *ye/o-present
  ➢ *s-aorist

  ▪ Little explanatory value (cf. Klingenschmitt 1982: 264f.)
Existing proposals

- Kortlandt (1999 = 2003: 129f.): the causative suffix -oyc'/uc'- developed through the reanalysis of sigmatic aorists of roots ending in *-Vu̯K-s- and *-Vu̯t-s-.
  - Ample evidence for Proto-Armenian sigmatic aorists, from which nasal presents were derived.
  - The transitive function of *s-aor. in Greek, cf. ἔστη-σ-α tr. vs. ἔστη-ν intr.

But

- Limited evidence: luc'anem ‘kindle’ from PIE *leu̯k- (LIV²: 418f.).
- The reanalysis of sigmatic stems would yield mono-consonantal roots: 
  luc'-anem → l-uc'anem. No evidence for inherited disyllabic roots in -oyc'.
Existing proposals


-oyc’- < *-eh₁u-t-je/o-
  ← ptc. *-eh₁u-to- (next to *-eh₁u-ti- > -oyt’; Gk. -ευσις is a parallel formation)
  ← *-eh₁u-je/o- (cf. Greek denominal verbs in -εύω)
  ← agent nouns *-eh₁u- (cf. Greek agent nouns in -εύς).

But

- PIE *medʰ-je/o- > Arm. mēḏ ‘middle’.
- Why had a present stem grammaticalized into a formation with a root aorist?

Frequency of forms derived from the aorist and present stems of the 10 top-frequent causatives in the Bible (based on the online version of the Constantinople 1895 edition at www.arak29.am).

<table>
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<tr>
<th>Causative</th>
<th>Aorist Stem</th>
<th>Present Stem</th>
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<th>Present Stem</th>
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<td>darjuc’anem ‘to turn’</td>
<td>310</td>
<td>148</td>
<td>hatuc’anem ‘to return smth.’</td>
<td>145</td>
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<td>matuc’anem ‘to offer’</td>
<td>273</td>
<td>240</td>
<td>zatuc’anem ‘to separate’</td>
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<td>kac’uc’anem ‘to set’</td>
<td>273</td>
<td>66</td>
<td>usuc’anem ‘to teach’</td>
<td>117</td>
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<tr>
<td>yaruc’anem ‘to raise’</td>
<td>233</td>
<td>36</td>
<td>ijuc’anem ‘to lower’</td>
<td>76</td>
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<tr>
<td>aprec’uc’anem ‘to save’</td>
<td>146</td>
<td>59</td>
<td>barjuc’anem ‘to elevate’</td>
<td>68</td>
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Existing proposals

- A revision of Olsen’s proposal

Prs. *-eu-je/o- : aor. *-eũ-s- → aor. *-eũ-c- (cf. *u̯es- → *u̯ec- > zgec’-ay ‘put on’) → prs. *-eũc-ane-

- One might think of the parallel of Greek transitive verbs in -εύω (especially with a volitional DO) and thematic base nouns like μῶμ-ος ‘blame’ next to μωμ-εύ-ω tr. ‘to blame smb.’: Fraenkel 1906: 200ff.; Risch 1974: 332ff.:

κελεύω tr. ‘to urge, exhort’ (Il.23.767)
λωβεύω tr. ‘to mock’ (Od.23.15)
μνηστεύω tr. ‘to seek in marriage’ (Od.18.277)
μωμεύω tr. ‘to blame’ (Od.6.274)
κτιλεύω ‘to tame’ (Pi.Fr.238)
νυμφεύω tr. ‘to take as a wife’ (E.Med. 625)
ום hvor ‘to take a hostage’ (E.Rh.434) (Aeschin.3.133)
ὁρθεύω ‘to make rise’ (Eur.Orest.405), etc.

λώβη ‘dishonour’
μνηστός ‘wedded’
μῶμος ‘blame’
κτίλος ‘obedient’
νύμφη ‘maiden’
ὄμηρος ‘hostage’
ὄρθός ‘straight’
Further attempts...

• Greppin (1975: 122f.)

“This [nominal] suffix [-oyc’] is clearly entwined with the factitive suffix -uc’anem <...>. However, whether -oyc’ is a back formation from a pre-existing verb or -anem is added to a pre-existing stem in -oyc’ is unclear.”

mat-oyc’ ‘access’  
mat-č’im ‘to approach’  
caus. mat-uc’-anem ‘to offer’

mac-oyc’ ‘glue’  
mac-anim ‘to stick to’  
caus. mac-uc’-anem ‘to glue’

saṙ-oyc’ ‘frost’  
saṙ-num intr. ‘to freeze’  
caus. saṙ-uc’-anem tr. ‘to freeze’

• Djahowkyan 1982: 192

Forms in -oyc’ can be second members of compounds and simplex nouns

mart-us-oyc’ ‘teacher of fighting’, us-uc’-anem ‘to teach’

saṙ-oyc’ ‘ice’
Causative back-formation vs. verbal nouns in -oyc'

- Back-formations from the causative rely on a productive model:
  
  \[ \text{anc}'\text{anem} \quad \text{‘to pass’} \rightarrow \text{anc}'-k' \quad \text{‘passage’} \]
  
  \[ \text{anicanem} \quad \text{‘to curse’} \rightarrow \text{anēc}-k' \quad \text{‘curse’} \]
  
  \[ \text{elanem} \quad \text{‘to go out’} \rightarrow \text{el}-k' \quad \text{‘exit’} \]

- Nouns in -oyc' derived from base verbs
  
mat-oyc’: a causative back-formation

• Mat-oyc’ ‘offer’ ← matuc’anem ‘to offer’

*Buz. 5, § 28:* Ew zays alôt’s matowc’anôr êrêc’n yařaŋ k’an zmatowc’anêln pataragin, ew yet aysorik matoyc’ katareac’ zpataragamatoyc’n zamenayn:

“The priest offered this prayer before the offering of the sacrifice, and after this he completed the offering of the entire sacrifice of the liturgy” (trans. Garsoïan 1989: 209)

→ *pataraga-matoyc’, a-st. ‘offering of the sacrifice; liturgy’ (Buz. 5, § 28)
→ *srba-matoyc’ ‘reverent; indoctrinated’ (Koriwn, § 17; Ag. § 138)
mat-oyc’: a noun derived from base verb

- Mat-oyc’ ‘approach’ ← matč‘im ‘to approach’

Toponym the Ascent of Adummim (the main route from Jericho to Jerusalem)

*Josh. 15:7:* or ἐ handēp matowc‘in Ełomimay

ή ἔστιν ἀπέναντι τής προσβάσεως Αδδαμιν

“which is opposite the ascent of Adummim”

→ an-mat-oyc’, i-st. ‘unapproachable’ (e.g. 1Tim. 6:16, etc.)

→ džowara-mat-oyc’ ‘difficult to approach’ (2Mac. 12:21; Koriwn, § 10)

- A morphological type overshadowed by productive causative back-formations.
Further evidence

Nominal stems in -oyc' attested in the dated 5th century sources *apud* Jungmann & Weitenberg 1993: 274:

- unambiguous causative back-formations like *matoyc' ‘offer’*
- unambiguous nouns derived from base verbs like *matoyc' ‘approach’*
- controversial cases
Causative back-formations in -oyc'

-anc‘oyc‘ ‘letting go down’
  1) loys-anc‘oyc‘ ‘letting the light pass’ (Ag. §734)

-hat-oyc‘ ‘recompensing’
  2) varj-a-hatoyc‘ ‘rewarding’ (K §2; LP §39)

-heţoyc‘ ‘suffocated’
  3) jř-a-heţoyc‘ ‘suffocated with water’ (Ag. §557)

-iţoyc‘ ‘letting go down’
  4) loys-iţoyc‘ ‘letting the light down’ (Buz. 5, §6)

-kařoyc‘ ‘fixing eyes on smth.; constructing’
  5) akn-kařoyc‘ ‘with eyes fixed on’ (Buz. 6, §8)
  6) naw-a-kařoyc‘ ‘shipbuilder’ (MX 1, §4)

-kec‘oyc‘ ‘saving; saved’
  7) amen-a-kec‘oyc‘ ‘all-saving’ (Ag. §368)
  8) ašxarh-a-kec‘oyc‘ ‘saving the world’ (Ag. §854)
  9) k’ristos-a-kec‘oyc‘ ‘saved by Christ’ (Ag. §826)

← anc‘-uc‘-anem tr. ‘let pass’
← hat-uc‘-anem tr. ‘give back’
← helj-uc‘-anem tr. ‘suffocate’
← iţ-uc‘-anem tr. ‘bring down’
← kař-uc‘-anem tr. ‘fix eyes’
← kař-uc‘-anem tr. ‘construct’
← kec‘-uc‘-anem tr. ‘vivify’
Causative back-formations in -oycʽ

-<i>lc</i>ʽoycʽ ‘filling’
  10) <i>amen</i>-<i>a</i>-<i>lc</i>ʽ-oycʽ ‘all-filling’ (Ag. § 492)

-<i>sa</i>rōycʽ ‘freezing’
  11) <i>sastk</i>-<i>a</i>-<i>sa</i>rōycʽ ‘freezing (winter)’ (MX 3, § 67)

-<i>ši</i>jōycʽ ‘extinguishing’
  12) <i>amen</i>-<i>a</i>-<i>ši</i>jōycʽ ‘all extinguishing’ (Wis. 16:17)

-<i>u</i>rōycʽ ‘swollen’
  13) <i>p</i>‘k’ocʽ-<i>u</i>r-oycʽ ‘swollen with breath’ (Ag. § 406)

-<i>us</i>oycʽ ‘one that teaches; taught’
  14) <i>amen</i>-usoycʽ ‘all-teaching’ (Ag. § 257)
  15) <i>ardar</i>-usoycʽ ‘righteously teaching’ (Ag. § 16)
  16) <i>astuac</i>-usoycʽ ‘taught by God’ (1Thess. 4:9)
  17) awrēns-usoycʽ ‘law teacher’ (Acts 5:34)
  18) k’al<i>c</i>ʽ-usoycʽ ‘sweetly instructing’ (Ag. § 482, 847)
  19) mart-usoycʽ ‘fighting instructor’ (Ez. § 56)

<sup>2/2</sup>
Nouns in -oyc’ derived from base verbs

Simplex nouns

• *ag-oyc* ‘holder’ (Ex. 37:10, 14) ← *aganim* tr. ‘pun on’

• *hang-oyc* ‘road junction’ (MX 2, § 46) ← *ankanim* ‘fall; end’ (yang ‘end’) (Djahukyan 2010: 445)

  ‘road station’ (MX 2, § 46)

  *hang-oyc* ‘knot’ (Buz. 5, § 38; Elišē) ← ? *hangč’im* ‘rest’

• *mat-oyc* ‘approach’ (Josh. 15:7) ← *matč’im* intr. ‘approach’

• *zr-oyc* ‘discours, news’ ← ?

• *vał-a-yaroyc* ‘getting up early’ (1Kings 29:10) ← *yarinem* ‘get up’

  ...ew *vaḷayaroyc* linic’ik i čanaparh ew lowsasc’i jez ew gnasjik’:
  “Start early in the morning, and leave as soon as you have light.”
  (καὶ ὀρθρίσατε ἐν τῇ ὁδῷ, καὶ φωτισάτω ύμῖν, καὶ πορεύθητε)
Ambiguous cases

- **diwr-a-hasoyc’** (Ag. § 886)
  ‘easily understood (by S)’ ← hasanem tr. ‘understand’
  ‘made easy to understand (by external A)’ ← *hasuc’anem ‘explain’

  ...zi heštən kalk’ ew diwrə hasoyc’k’ txmaragownic’n ew marmnakan irôk’ zbałeloc’n linic’in.

  “...that they might be intelligible and easily understood by the ignorant and those occupied with worldly affairs.” (Thomson 1976: 418f.)

- **sahman-a-t’ak’oyc’** (Ag. § 330)
  ‘one that is hiding within limits (of S)’ ← t‘ak’ç‘im intr. ‘hide’
  ‘one that is hidden within limits (by external A)’ ← t‘ak’-uc’anem tr. ‘hide’

  ew oč’ et’ē anč’ap’akal bnowt’iwn=n Astow coy sahmanat’ak’oyc’ew kołmnap’ak ic’ē...
  “and not that the immeasurable nature of God is limited or circumscribed...” (Thomson 1970: 65)
Ambiguous cases

- **zawr-a-hatoyc‘**
  - ‘one with a detaching army’ ← *hatanim* intr. ‘to separate oneself’
  - ‘one that is detaching an army’ ← *hat-uc‘-anem* tr. ‘to detach’

- **1Mac. 9:63**: *Ew ibrew etes Bak‘idd, zawrahatoyc‘ linēr, ew gayr pašarēr:*
  “When Bacchides learned of this, he assembled all his forces, and sent orders to the men of Judea.”

- **1Mac. 6:56**: *...et‘ē zawrk‘n amenayn i na hatan.*
  “…with the forces that had gone with the king.”

- **2Mac. 14:39**: *hatoyc‘ zawr aweli k‘an zhing hariwr*
  “…sent more than five hundred soldiers”
Derivational semantics of verbal nouns in -oyc‘

- Anticipated/achieved result of a purposeful action expressed by an agentive verb

n. agoyc‘ ‘binding, jointing’ (*a unit to put on’)
n. hangoyc‘ ‘knot’ (*a unit to interlace’)
n. hangoyc‘ ‘road junction/station’ (*a destination’, *a place to rest’)
n./adj. matoyc‘ ‘ascent’ (*a place to approach’), ‘adv. to approach’
adj. diwra-hasoyc‘ ‘easy to understand’
adj. vaľa-yaroyc‘ ‘having waken up early’
? adj. sahmana-t‘ak‘oyc‘ ‘hiding within limits (by itself)’
? adj. zawra-hatoyc‘ ‘preparing/having a detached army’
Irregular participles of verbs with *i*-stem aorists

- **Verbal noun in -oyc’**
  - n. *agoyc’*  
    - Ptc. of the base verb: *ag-eal*  
    - Base verb: *aganim*
  - n. *hangoyc’* ‘knot’  
    - Ptc. of the base verb: *ank-eal*  
    - Base verb: *ankanim* or *ankanem*
  - ? n. *hangoyc’* ‘station’  
    - Ptc. of the base verb: *hang-uc’-eal*  
    - Base verb: *hangč’im*
  - n./adj. *matoyc’*  
    - Ptc. of the base verb: *mat-uc’-eal*  
    - Base verb: *matč’im*
  - adj. *diwra-hasoyc’*  
    - Ptc. of the base verb: *has-eal*  
    - Base verb: *hasanem*
  - adj. *vaña-yaroyc’*  
    - Ptc. of the base verb: *yar-uc’-eal*  
    - Base verb: *yaɾnem*
  - ? adj. *sahmana-t’ak‘oyc’*  
    - Ptc. of the base verb: *t’ak‘-uc’-eal*  
    - Base verb: *t’ak‘č’im*
  - ? adj. *zawra-hatoyc’*  
    - Ptc. of the base verb: *hat-eal*  
    - Base verb: *hatanim*

- were verbal nouns back-formed from irregular participles?
- or had the participle in *-eal* recharacterized agentive/reflexive verbal adjectives?

- **Verbs of agentive directed motion.**
Sources of causative affixes: a typological outlook

Song 1991

Stage 1  Biclausal purposive construction is used to express causation.

Stage 2  The association between the causative semantics and the purposive grammatical element (PURP) is strengthened.

Stage 3  PURP takes over the causative function while the original causative predicate (e.g. light verb ‘make’, ‘do’, ‘cause’ etc.) is omitted.

Stage 4  In its causative use, PURP [is reduced into an affix and] becomes productive.

PURP = any grammatical element expressing the cause or purpose meaning (for example, directional, goal, dative, benefactive markers).

Typology of the sources of causative affixes

Song 1991: 176

(27) Thai
khõw khïn côtõay hây khùn tôop
he write letter PURP you answer
‘He wrote a letter so that you would answer.’

Stage 1

(28) Thai
Sãã-ndã tham hây nisaa tïi chân
Saka cause PURP Nisa hit I
‘Saka made Nisa hit me.’

Stage 2

(29) Thai
Sãã-khai hây dêk win
Saka PURP child run
‘Saka had a child run.’

Stage 3
Typology of the sources of causative affixes

Song 1991: 177ff.  Ijaw (Niger-Congo) directional/causative suffix -mọ

(30) Ijọ
(a) tọbọ̀ wẹni-mọ
child walk-DIR
‘Walk towards the child.’

(32) Ijọ
(a) eri árụ-bi  mị mọ-mi
he canoe-the make sink-CS-ASP
‘He made the canoe sink.’

(c) àràví tọbọ̀ bụnu-mọ-mi
she child sleep-CS-ASP
‘She laid the child down to sleep.’
Grammaticalization of the factitive construction -oyc‘

- Factitive construction with verbal nouns in -oyc‘ (goal, purpose, anticipated result)
- Stage 2
  \[
  \text{Detach-PURP} \quad \text{made} \quad \text{OBJ=fources}
  \]
  “he made the army departing / to depart”

  Buz. (2003: 380): ...ibrew zawr hatoyc‘n ahrēr Šapowh Parsic‘ t‘agaworn z zawrs iwr i veray ašxarhin Hayoc’...
  “...at the time that Šapuh king of Persia was disposing his forces against the Armenian realm...” (Garsoïan 1989: 189)

- Stage 3
  \[
  \text{Detach-CAUS} \quad \text{OBJ=fources}
  \]

  2Mac. 14:39: hatoyc‘ zawr aweli k’an zhing hariwr
  “prepared more than five hundred soldiers”

- Reanalysis: 3sg. aor. hat-oyc‘ arar → hat-oyc‘[arar] → 3sg. aor. hatoyc‘Ø.
Why the verbal class with aor. -Ø- : prs. -an-?

• Why do the causatives not belong to the productive denominal class in -em, cf. tʽagawor ‘king’ → tʽagaworem ‘to rule’?

• Verbal nouns in -oyc’- were reanalyzed as the 3sg. aorist form without a stem suffix and with a zero ending like e-bek-Ø ‘broke’ and e-ber-Ø ‘brought’.

• The vast majority of transitive verbs with the root aorist belong to the class with the present an-stem, cf. 3sg. aor. e-bek-Ø, prs. bek-an-ē.

• Primary verbs in -anem include canonical transitive agentive verbs bekanem ‘break’, hatanem ‘cut’, spananem ‘kill’ etc.
Factitive construction in Classical Armenian

• Productive

Out of 340 occurrences of *aṙnem* in the Gospels (Arakelyan 2018):
  ▪ 54x in the factitive construction (ca. 16%)
  ▪ 1x in the analytical causative with *aṙnem* (Lk. 14:23)

• Competes with the morphological causative

  *mecacʽ-ucʽ-anem* (Lk. 1:46)  
  *mec aṙnem* (Lk. 1:15)  
  ‘to magnify’

  *patrastecʽ-ucʽ-anem* (MX, III, 63)  
  *patrast aṙnem* (Num. 16:16)  
  ‘to prepare’

  *spitakecʽ-ucʽ-anem* (Mk. 9:2)  
  *spitak aṙnem* (Mt. 5:36)  
  ‘to make white’

  *tʽagaworecʽ-uc-anem* (Judg. 9:6)  
  *tʽagawor aṙnem* (Rev. 1:6)  
  ‘to let rule’
Causative continuum: PArm. > CArm.

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<td>PArm. 2 Direct</td>
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- The morphological causative may be a recent Proto-Armenian phenomenon.
- Whatever be the etymology of -oyc‘ its original function need not be associated with the causative semantics.
References


