



2017

THE DECLENSIONS OF MODERN EASTERN ARMENIAN: A PARADIGM FUNCTION MORPHOLOGY APPROACH

Malachi W. Oyer

University of Kentucky, mwoy222@g.uky.edu

Digital Object Identifier: <https://doi.org/10.13023/ETD.2017.323>

[Right click to open a feedback form in a new tab to let us know how this document benefits you.](#)

Recommended Citation

Oyer, Malachi W., "THE DECLENSIONS OF MODERN EASTERN ARMENIAN: A PARADIGM FUNCTION MORPHOLOGY APPROACH" (2017). *Theses and Dissertations--Linguistics*. 21.

https://uknowledge.uky.edu/lit_etds/21

This Master's Thesis is brought to you for free and open access by the Linguistics at UKnowledge. It has been accepted for inclusion in Theses and Dissertations--Linguistics by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.

STUDENT AGREEMENT:

I represent that my thesis or dissertation and abstract are my original work. Proper attribution has been given to all outside sources. I understand that I am solely responsible for obtaining any needed copyright permissions. I have obtained needed written permission statement(s) from the owner(s) of each third-party copyrighted matter to be included in my work, allowing electronic distribution (if such use is not permitted by the fair use doctrine) which will be submitted to UKnowledge as Additional File.

I hereby grant to The University of Kentucky and its agents the irrevocable, non-exclusive, and royalty-free license to archive and make accessible my work in whole or in part in all forms of media, now or hereafter known. I agree that the document mentioned above may be made available immediately for worldwide access unless an embargo applies.

I retain all other ownership rights to the copyright of my work. I also retain the right to use in future works (such as articles or books) all or part of my work. I understand that I am free to register the copyright to my work.

REVIEW, APPROVAL AND ACCEPTANCE

The document mentioned above has been reviewed and accepted by the student's advisor, on behalf of the advisory committee, and by the Director of Graduate Studies (DGS), on behalf of the program; we verify that this is the final, approved version of the student's thesis including all changes required by the advisory committee. The undersigned agree to abide by the statements above.

Malachi W. Oyer, Student

Dr. Gregory Stump, Major Professor

Dr. Edward Barrett, Director of Graduate Studies

THE DECLENSIONS OF MODERN EASTERN ARMENIAN:
A PARADIGM FUNCTION MORPHOLOGY APPROACH

THESIS

A thesis submitted in partial fulfillment of the
Requirements for the degree of Masters of Arts in
Linguistic Theory and Typology in the
College of Arts and Sciences
at the University of Kentucky

By

Malachi Wayne Oyer

Lexington, KY

Co-Directors: Dr. Gregory Stump, Professor of Linguistics
and Dr. Fabiola Henri, Assistant Professor of Linguistics

Copyright © Malachi Wayne Oyer, 2017

ABSTRACT OF THESIS

THE DECLENSIONS OF MODERN EASTERN ARMENIAN: A PARADIGM FUNCTION MORPHOLOGY APPROACH

In traditional grammar, the inflection of a word's different forms based on the possible morphosyntactic property combinations of the language can be ordered into tables. Words of the same part of speech often can be grouped together when they inflect in similar fashions. These similar groups are represented by a single word that expresses the morphosyntactic property set possible for that part of speech. These groups are called declensions. These declensions are not always complete sometimes there is a particular morphosyntactic property set that does not have a corresponding form (word). This is known as defectiveness. One approach that deals with this issue and more that arise with regard to gaps and redundancies in the morphology of a language is Paradigm Function Morphology (PFM). This type of morphology developed by Gregory Stump is based off his inferential-realizational "paradigm-linkage theory". Stump uses his theory to account for many of the issues that can arise in an inflectional system such as morphomic properties, overabundance, overdifferentiation, syncretism, deponency, metaconjugation, and heteroclisis. This thesis will evaluate the seven nominal declensions of Modern Eastern Armenian using Paradigm Function Morphology.

Keywords: Paradigm Function Morphology (PFM), Modern Eastern Armenian (MEA), inflection, morphology, declension

MALACHI WAYNE OYER

July 28, 2017

THE DECLENSIONS OF MODERN EASTERN ARMENIAN:
A PARADIGM FUNCTION MORPHOLOGY APPROACH

BY

Malachi Wayne Oyer

Dr. Gregory Stump

Co-Director of Thesis

Dr. Fabiola Henri

Co-Director of Thesis

Dr. Edward Barrett

Director of Graduate Studies

July 28, 2017

Acknowledgements:

I would like to thank Dr. Gregory Stump for his influence on my studies. He introduced me to complexities of morphology and inflectional systems. I was fortunate to take as many classes that were offered by him during my time at UK. Without his research and development of Paradigm Function Morphology this thesis would not exist. His continuous encouragement and feedback have been crucial to the development of this thesis.

I also extend my thanks to Dr. Fabiola Henri for her input and feedback into this work. Her expertise in syntax and morphology has aided me in making critical decisions about the data in this thesis. Her openness and encouragement to my ideas provided motivation to push forward when I thought I had reached dead ends.

I would also like to express thanks to Dr. Mark Lauersdorf for his unique perspective on this thesis. He has always provided exquisitely robust feedback, and insights that I would have not reached on my own. He is the example of what type of academic I strive to become someday.

I need to also thank my classmates at the University of Kentucky. Your fellowship and input along our journey through graduate school has made this thesis possible. I will miss you all and wish you the best in your future endeavors.

Finally and most importantly, I would like to thank my beautiful wife Abigail. Your constant encouragement and support empowered me to achieve things I did not believe I could on my own. You have enabled me to pursue my passion, the study of Linguistics. Without you none of this would have been possible.

TABLE OF CONTENTS:

Acknowledgements:iii

LIST OF TABLES:vii

LIST OF ABBREVIATIONS:ix

Section 1: Introduction 1

Section 2: Inflectional Morphology..... 2

Section 2.1: Case..... 2

Section 2.2: Number 3

Section 2.3: Definiteness..... 4

Section 2.4: The Paradigm..... 5

Section 3: Modern Eastern Armenian 6

Section 3.1: MEA Nominal Declensions 7

Section 3.2: Number in MEA 8

Section 3.3: MEA Declensions..... 10

Section 3.4: Observations of MEA Nominal Paradigms 17

Section 3.5: The Seven Declensions of MEA Nouns Tables..... 18

Section 4: Paradigm Function Morphology.....	24
Section 4.1: MEA Content Paradigm.....	24
Section 4.2: MEA Nominal Stems	25
Section 4.3: MEA Inflection Classes	27
Section 4.4: MEA Property Mapping.....	28
Section 4.5: MEA Nominal Stem Function.....	29
Section 4.6: MEA Rule Application.....	29
Section 4.7: MEA Rule Block	30
Section 5: Conclusions	31
Bibliography:	32
Appendixes:	34
Vita:	40

LIST OF TABLES:

Table 1: The declension of Turkish <i>adam</i> 'man'	5
Table 2: Standard MEA Inflection	8
Table 3: <i>i</i> -Declension, The paradigm of <i>sar</i> 'mountain'	11
Table 4: The <i>u</i> -declension The paradigm of <i>k'ami</i> 'wind'	12
Table 5: The <i>an</i> -declension The paradigm of <i>muk</i> 'mouse'	13
Table 6: The <i>an</i> - declension The paradigm of <i>muk</i> 'mouse' edited	14
Table 7: The <i>va</i> -declension The paradigm of <i>ōr</i> 'day'	15
Table 8: The <i>oĵ</i> -declension The paradigm of <i>k'uyr</i> 'sister'	16
Table 9: The consonant –a- declension The paradigm of <i>ankyun</i> 'corner'	16
Table 10: The consonant -o-declension The paradigm of <i>hayr</i> 'father'	17
Table 11: Seven Declensions of Modern Eastern Armenian Nouns	20
Table 12: Seven Declensions of Modern Eastern Armenian Nouns Stem Alternations	21
Table 13: Seven Declensions of Modern Eastern Armenian Nouns Exponent Alternations	22
Table 14: MEA Nominal Cells	25
Table 15: MEA Stems	27
Table 16: Inflection class function <i>ic</i> for MEA Nominal Inflection	28
Table 17: Definition of <i>pm</i> for MEA Nominal Inflection	28
Table 18: Definition of the MEA Nominal <i>Stem</i> function	29

Table 19: MEA Nominal Correspondence and Paradigm Functions.....	29
Table 20: Three blocks of MEA inflectional rules	30
Table 21: Transliteration of Modern Eastern Armenian alphabet.....	34
Table 22: Transliteration of Modern Eastern Armenian alphabet with phonetic values.....	35
Table 23: Content Form and Realized Paradigms for MEA Nominal Inflection ..	36

LIST OF ABBREVIATIONS:

1	first person
2	second person
3	third person
ABL	ablative
ACC	accusative
DAT	dative
DEF	definite
GEN	genitive
INDF	indefinite
INS	instrumental
LOC	locative
NOM	nominative
NUM	number ¹
SG	singular
PL	plural

¹This is an abbreviation I have created to have more uniform and concise tables.

Section 1: Introduction

The Modern Eastern Armenian language, henceforth MEA, uses case inflectional morphology to mark grammatical information of nouns such as case, number, and definiteness. This inflection is not a simple one to one correspondence of affixes to grammatical information; rather there are grater generalizations that can be made which capture syncretism, deponacy, and stem alternations of MEA nominal inflection. In order to best describe these generalizations and patterns in the nominal inflection, I will use Paradigm Function Morphology (PFM) to precisely account for the interface of morphology and syntax.

Section 2: Inflectional Morphology

Inflectional morphology in its most simplistic terms are the addition of affixes to a stem that will convey some sort of new meaning or content. For instance in English typically when an adjective receives the suffix *-ly* it becomes an adverb, for example the adjective *quick* becomes an adverb *quickly* with the *-ly* suffix. This process is called affixation, and specifically in this case suffixation where the new suffix is being added to the end of the stem.

Section 2.1: Case

Baker (2015:1) states: “Case in the linguistic sense is known to be a morphosyntactic device that helps to indicate – imperfectly, but often usefully – what the role of a noun phrase (NP, DP, etc.) has within a larger grammatical structure.” This notion of case is still present today in the pronouns system of Modern English. Looking at the first person singular nominative pronoun *I*.

Consider the following sentences:

- (1) *I* went to the store.
- (2) **Me* went to the store

Example (1) is what one would expect a native English speaker to say. *I* is marked for the nominative case, which means it will function as the subject of the sentence. In example (2) *me* is ungrammatical for most native English

speakers. That is due to the object case that is expressed by *me*. Modern English does not differentiate in the first person singular between the dative and accusative cases and are viewed just as an object. This type of morphology is not inflectional however, but rather derivational and the primary focus of this work on Modern Eastern Armenian will show this case marking system through inflection on nominal.

Section 2.2: Number

Corbett (2000:1-5) describes number as a “feature” that can have as set of “values”. In the case of English there are the grammatical number features of singular, exactly one, and plural any quantity more than one. So at its simplest sense, grammatical number is talking about real world quantities of objects. For instance in Modern English noun *chair*:

(3) John sat in the chair.

(4) John sat the chairs.

In example (3) the noun *chair* is singular in number. It states that, John sat in that exactly one chair. Example (4) states the John has sat in no fewer than two chairs. The suffix *-s* is used to express the plural number that more than one chair has been sat in. This is another example of inflectional morphology where the stem *chair* receives an affix, *-s*, to denote the morphosyntactic property set, plural number.

Section 2.3: Definiteness

Definiteness is another “feature” that express the particular “values” of definite or indefinite. Lyons (1999:2) best summarizes the type of definiteness that this work is concerned with as: “Noun phrases with *the* and *a* and their semantic equivalents (or near equivalents) in other languages can be thought of as the basic instantiations of definite and indefinite noun phrases, that is definiteness or indefiniteness stems from the presence of the article, which has its essential semantic function to express this category.” Looking back at examples (3) and (4) one can see that John has sat in a specific chair in (3) and a specific set of chairs in (4), due to the presence of the article *the*. This specificity is the definite “value”, that this work will consider. For the indefinite “value”, where the exact chair is not specified, which is considered to be the opposite “value” of definite, Modern English uses the article *a*. Consider the following example:

(5) John sat on a chair.

Here the statement does not specify an exact chair in which John has sat. This is the type of indefinite “value” that will be discussed later with Modern Eastern Armenian.

Section 2.4: The Paradigm

Now that the relevant morphosyntactic properties or “feature values” have been discussed. We will look to see what the combination of the morphosyntactic properties will potentially look like. To do this we will employ the textbook example from Turkish *adam* ‘man.’ (Stump, 2015: 32)

Table 1: The declension of Turkish *adam* 'man'

	Singular	Plural
Nominative	<i>adam</i>	<i>adam-lar</i>
Accusative	<i>adam-ı</i>	<i>adam-lar-ı</i>
Dative	<i>adam-a</i>	<i>adam-lar-a</i>
Locative	<i>adam-da</i>	<i>adam-lar-da</i>
Ablative	<i>adam-dan</i>	<i>adam-lar-dan</i>
Genitive	<i>adam-ın</i>	<i>adam-lar-ın</i>

This paradigm is often cited as what a potential canonical exemplar will look like. Each “cell” consists of a stem, in this case *adam*, and the exponents that mark specific morphosyntactic property sets or “feature values”. This paradigm has the same stem for all case and number values. It also uses the same case marker in both the plural and singular numbers. The structure of each cell can be summarized as: stem – (NUM) – (CASE).

Section 3: Modern Eastern Armenian

The Armenian language is indigenous to the Armenian highlands, stretching from the south Caucasian Mountains toward the interior of the Anatolian plateau. The language rests in the Armenian branch of the Indo-European family, branching from Indo-European to Proto-Armenian to Classical Armenian to Middle Armenian to Western and Eastern Armenian. There have been different hypotheses by Indo-Europeanists to connect Armenian to Balkan languages, Indo-Iranian languages, and even Hurro-Urartian languages.

Armenian was first written in the 5th century, when Mesrop Mashtots translated the Bible into Classical Armenian. Classical Armenian is still used today for liturgical purposes by the Armenian Apostolic Church. Armenian has extensive contact with other languages throughout history, due to the political instability of the greater Caucasian area. Armenian has a wide range of loan words and shows language contact with Latin, Greek, Turkic, Persian, and Russian to name a few. Today the language consists of two recognized standard dialects or varieties. Modern Western Armenian was spoken throughout much of western Turkey until the late 19th and early 20th centuries and is now spoken by communities throughout the world. Modern Eastern Armenian (MEA) is the official language of the Republic of Armenia and is spoken by over 3 million native speakers there. The grammar of this paper will reflect the “standard” written MEA and the variety spoken in the Republic of Armenia.

Section 3.1: MEA Nominal Declensions

MEA is a highly agglutinative language with many affixed morphemes on stems. There are many irregularities aMEAs does not make a distinction for grammatical gender. MEA marks nouns for case, specifically nominative, dative, instrumental, ablative, and locative. These cases are suffixed to the noun stem. The nominative case based on Dum-Tragut's 2007 analysis is expressed without an explicit morpheme marking case, the analysis in this work will treat the Nominative stem as the default from which all other cases are inflected. The Dative case is marked with the suffix *-i*.² The Instrumental case is marked with the suffix *-ov*. The Ablative case is inflected with the suffix *-ic'*. Finally the Locative case is marked with the suffix *-um*, however the Locative case is falling out of favor and is often realized as a postpositional phrase with the postposition *meĵ* and the dative noun construction. This thesis will focus exclusively on the inflectional morphology of MEA nouns this type of periphrastic expression could be integrated into PFM for more information see: Bonami, 2015.

To summarize the following table represents the expected canonical inflection for case, number, and definiteness in MEA is as follows:

² A note on representation of phonetic information, all data reflects Dum-Tragut's (2007) grammar, in which a Latinized script was used with Armenian script for the data. Please see the appendix for IPA equivalents.

Table 2: Standard MEA Inflection

Nominative	stem-NUM(-DEF)
Dative	stem-NUM- <i>i</i> (-DEF)
Ablative	stem-NUM- <i>ic</i> '
Instrumental	stem-NUM- <i>ov</i>
Locative	stem- NUM- <i>um</i>

Section 3.2: Number in MEA

Dum-Tragut (2007:63-76) states that number is expressed on nouns in MEA for singular and plural. These nouns can be categorized by number distinction: count nouns, which can reference either singular or plural, and concrete or abstract, a singularia tantum, with nouns only of the singular variety, and a pluralia tantum that is no longer productive which was inherited from Classical Armenian. MEA nouns are singular by default, without a marking for number. The plural number of count nouns is productively marked by two different suffixes in MEA, *-er* for monosyllabic stems and *-ner* for polysyllabic stems. There are of course always exceptions. Looking at exceptions to the monosyllabic *-er* suffix: *rus* 'Russian' becomes *rus-ner* 'Russian'. Also nouns that originate in Classical Armenian of the former consonant *-n* declension lost the final *-n* when inherited in MEA. This left words like 'mouse' which in Classical Armenian was *mukn* is *muk* in MEA, see the *-an* declension for more discussion

on ‘mouse’ *muk*. This monosyllabic stem is also used for noun compounds when the final part of the compound is monosyllabic, for instance the plural formation of *heřagir* ‘telegraph’ is *heřagr-er*. Exceptions to the polysyllabic stem *-ner* involve the central vowel *-ě* [ə]. This unstressed vowel is viewed by Dum-Tragut as a having the weight of half a syllable not a whole. This means that any word containing one other vowel and *-ě* are viewed as having one and a half syllables. Of the two possible combinations of any other vowel that *-ě* and *-ě*, when *-ě* is the vowel in the first syllable of a word it is treated as polysyllabic, *ěkner* ‘friend’ vs. *ěkner-ner* ‘friends’. When *-ě* is the vowel in the second syllable of a two-syllable word, it will select the monosyllabic plural affix *-ěr*, *ast(ě)t³* ‘star’ vs *ast(ě)t-er* ‘stars’. The majority of the pluralia tantum inherited from Classical Arminian have been realized in MEA as typical count nouns, however the pluralia tantum is preserved in the geographical names and terms used to denote family of or kinship with a particular person. These few remaining “pluralia tantum” nouns cannot be inflected for number. There are three unproductive plural markers in MEA that have been preserved from Classical Armenian, *-ik* which marks words like *mard* meaning ‘human’ or ‘person’, *-ayk* which can mark *kin* meaning ‘woman’, and *-k* which marks *erexa* meaning ‘child’. The analysis of this paper will focus on the number of concrete count nouns, looking

³ When an Armenian word was a character in parenthesis, such as ‘star’ *ast(ě)t*, the character is not written in Armenian script but pronounced by the speaker.

at the two productive suffixes. Nouns in MEA are typically inflected in the following way:

stem-(number suffix)-(case marker)-(definiteness)

Section 3.3: MEA Declensions

The declensions of MEA are formed by inflecting for number then affixing the grammatical case to the stem that has been marked for number. The case markers used in a declension are regular in both the singular and the plural. The grouping of MEA nouns together by declensions is motivated by both morphological formation and semantic features. MEA has seven declensions. These declensions are all relics of the much more robust declension system in Classical Armenian. Each declension gets its name from the dative singular, which is used to denote a specific declension class as well. The *-i*, *-u*, *-an*, *-va*, and *-oĵ* declensions are considered to be the five vowel declensions with the *i*-declension being the most productive. There are two “consonant” declensions as well, *-a* and *-o*. Both are unproductive and very small. Within each of the following paradigms, the *-ě* or *-n* suffixes represent definiteness. Definiteness can only be expressed on the nominative or dative cases. The unmarked noun stem is by default, indefinite. The use of the definite marker expresses definite and has allomorphs based on the final letter of what the marker is being affixed to. *-ě* is used when ending in a consonant and *-n* when ending in a vowel.

Table 3: *i*-Declension, The paradigm of *sar* ‘mountain’

	Singular	Plural
Nominative (-DEF)	<i>sar(ě)</i>	<i>sar-er(ě)</i>
Dative (-DEF)	<i>sar-i(n)</i>	<i>sar-er-i(n)</i>
Ablative	<i>sar-ic’</i>	<i>sar-er-ic’</i>
Instrumental	<i>sar-ov</i>	<i>sar-er-ov</i>
Locative	<i>sar-um</i>	<i>sar-er-um</i>

The *i*-declension is the most productive declension and can be used sometimes to replace other less productive declensions. The *i*-declension consists of the most nouns, including nominalized adjectives, pronouns, and possessive datives. This declension as stated above is used to replace other less productive declensions as is the case with words such as *huys* meaning ‘hope’, *luys* meaning ‘light’, and *sug* meaning ‘sorrow’ or ‘grief’, which belong to the extinct Classical Armenian *o*-declension. However in older classical forms and compounds as well as in idioms the original declension is preserved. Nouns that end in *-(ě)r* are directly inherited from Classical Armenian; they belonged to the now extinct *e*-declension, and now most often pattern according to the *i*-declension but in some cases, typically high literary style or in a compound, preserve the characteristics of the Classical Armenian *e*-declension. Nouns that end in *-st* and *-nd* come from the Classical Armenian *an*-declension; they pattern after the *i*-

declension in regular speech but often retain their Classical Armenian characteristics in high literary style and compounds.

The *u*-declension consists mainly of nominalized infinitives and nouns that end in *i*. If the stem does end in *i* it is deleted and replaced to with *u* in the Dative and Ablative cases, when vowel hiatus needs to be resolved.

Table 4: The *u*-declension The paradigm of *k'ami* ‘wind’

	Singular	Plural
Nominative (-DEF)	<i>k'ami</i> ⁴	<i>k'ami-ner(ě)</i>
Dative (-DEF)	<i>k'am-u(n)</i>	<i>k'ami-ner-i(n)</i>
Ablative	<i>k'am-uc'</i>	<i>k'ami-ner-ic'</i>
Instrumental	<i>k'am-ov</i>	<i>k'ami-ner-ov</i>
Locative	<i>k'am-um</i>	<i>k'ami-ner-um</i>

The locative is falling out of favor for the more productive periphrastic form, for instance *mard* ‘person’, which belongs to the *u*-declension is defective within the inflectional paradigm, lacking forms for the locative.

The *an*-declension consists mainly of archaic names and seasons. If the polysyllabic stem noun has an *u* in the final syllable it will be deleted in all cases

⁴ In the data I have *k'ami* ‘wind’ does not have a definite form in the Nominative case. I have been able to find a satisfactory explanation why.

except the nominative singular. If a monosyllabic stem noun has an *u* it will be reduced to a [ə] *ě* This declension has many nouns that reflect their Classical Armenian lineage and *-n-* is often inserted in the singular ablative, instrumental, and locative cases between the stem and the case marker. As discussed above the word *muk* ‘mouse’ that has lost *-n* in the word final position of the stem according to Dum-Tragut.

Table 5: The *an*-declension The paradigm of *muk* ‘mouse’

	Singular	Plural
Nominative (-DEF)	<i>muk(ě)</i>	<i>mk-ner(ě)</i>
Dative (-DEF)	<i>mk-an(ě)</i>	<i>mk-ner-i(n)</i>
Ablative	<i>mkn-ic’</i>	<i>mk-ner-ic’</i>
Instrumental	<i>mkn-ov</i>	<i>mk-ner-ov</i>
Locative	<i>mkn-um</i>	<i>mk-ner-um</i>

Table 6 below shows the *an*- declension with the reduced vowel that is present in the spoken data not the orthographic data. Dum-Tragut (2007) does not include *ě* in her paradigms, which reflect the orthography of MEA. She does say of the formation of nouns with *-u* this declension: “If the noun is monosyllabic, the final [u] -նւ -*u* is reduced to [ə] -ը -*ě*- in declension, as in e.g. դռնւն *dur’* (‘door’) - դռան *d(ě)ran*, մկնւկ *muk* (‘mouse’) - մկան *m(ě)kan*.” p. 73. I have chosen to include the schwa, [ə], because it is present phonetically and, I did

want to suggest that *mnk* was an accepted consonant cluster in MEA. A further note on *muk* ‘mouse’, in Classical Armenian the word for ‘mouse’ was *mukn*. I have chosen to include the *-n* with the stem in the plural and singular. This decision will lead to the need for an extra stem explained in section 4.2. This analysis will take the view that these cases have been reanalyzed from the dative case and the vowel from the dative case marker is also deleted creating the stem used in the ablative, instrumental, and locative. The alternative approach is that the *-a* is epenthesized in all case other than the Dative singular to avoid the *mkn* consonant cluster. Look to 4.2 for a further explanation of the impact this will have of the stems.

Table 6: The *an-* declension The paradigm of *muk* ‘mouse’ edited

	Singular	Plural
Nominative (-DEF)	<i>muk-(ě)</i>	<i>měkn-er-(ě)</i>
Dative (-DEF)	<i>měk-an-(ě)</i>	<i>měkn-er-i-(n)</i>
Ablative	<i>měkn-ic’</i>	<i>měkn-er-ic’</i>
Instrumental	<i>měkn-ov</i>	<i>měkn-er-ov</i>
Locative	<i>měkn-um</i>	<i>měkn-er-um</i>

The *va-*declension consists of almost all word in MEA that denote time. A few temporal words have assimilated to the *i-*declension from the *va-*declension. The

ablative singular is formed by suffixing the canonical ablative marker *-ic'* to the inflected dative form.

Table 7: The *va*-declension The paradigm of *ōr* 'day'

	Singular	Plural
Nominative (-DEF)	<i>ōr(ě)</i>	<i>ōr-er(ě)</i>
Dative (-DEF)	<i>ōr-va(n)</i>	<i>ōr-er-i(n)</i>
Ablative	<i>ōr-van-ic'</i>	<i>ōr-er-ic'</i>
Instrumental	<i>ōr-ov</i>	<i>ōr-er-ov</i>
Locative	<i>ōr-um</i>	<i>ōr-er-um</i>

The *oĵ*-declension is a very small declension and consists primarily of kinship terms. This declension is decaying and is defective in the locative case. This could be potentially due to a semantic restriction where it would be impossible to express locative relating to a person, note that there is no synthetic locative form see section 3.3 for further discussion.

Table 8: The *oĵ*-declension The paradigm of *k'uyr* 'sister'

	Singular	Plural
Nominative (-DEF)	<i>k'uyr(ě)</i>	<i>k'uyr-ner(ě)</i> ⁵
Dative (-DEF)	<i>k'r-oĵ(ě)</i>	<i>k'uyr-ner-i(n)</i>
Ablative	<i>kroĵ-ic'</i>	<i>k'uyr-ner-ic'</i>
Instrumental	<i>kroĵ-ov</i>	<i>k'uyr-ner-ov</i>
Locative	-----	-----

Consonant-*a*-declension consists of all nouns that ending in *-ut'yun* and *-yun* as well as monosyllabic nouns that end in *-un*. This declension is named for the alternation in the stem

Table 9: The consonant *-a-* declension The paradigm of *ankyun* 'corner'

	Singular	Plural
Nominative (-DEF)	<i>ankyun(ě)</i>	<i>ankyun-ner(ě)</i>
Dative (-DEF)	<i>ankyan(ě)</i>	<i>ankyun-ner-i(n)</i>
Ablative	<i>ankyun-ic'</i>	<i>ankyun-ner-ic'</i>
Instrumental	<i>ankyun-ov</i>	<i>ankyun-ner-ov</i>
Locative	<i>ankyun-um</i>	<i>ankyun-ner-um</i>

⁵ Dun-Tragut reports *k'uyr* 'sister' as forming the plural number with the polysyllabic suffix *-ner*, however I have found conflicting data from a non-academic source that shows this could be an error:

<https://en.wiktionary.org/wiki/пнлјп> I will show 'sister' with the monosyllabic plural suffix *-er* from here on.

The consonant –o-declension only consists of a few words like *hayr* ‘father’, *mayr* ‘mother’, *etbayr* ‘bother’, and the compounds of these words. In the singular dative, ablative, and instrumental all share the same stem. Note there is no synthetic locative form.

Table 10: The consonant -o-declension The paradigm of *hayr* ‘father’

	Singular	Plural
Nominative (-DEF)	<i>hayr(ě)</i>	<i>hayr-er(ě)</i>
Dative (-DEF)	<i>hor(ě)</i>	<i>hayr-er-i(n)</i>
Ablative	<i>hor-ic’</i>	<i>hayr-er-ic’</i>
Instrumental	<i>hor-ov</i>	<i>hayr-er-um</i>
Locative	-----	-----

Section 3.4: Observations of MEA Nominal Paradigms

When looking at the paradigms the most striking inference is that the *oř-* declension and the consonant-*o*-declensions are defective, that is lacking a synthetic form in the paradigm. It was mentioned earlier in this work that periphrasis is supplanting many synthetic forms particularly with the *mej* ‘in’ as the locative. Interestingly both these declension have semantically related content both consist of family and kinship terms. Sims (2015:42-44) discusses this very issue, where in MEA the periphrastic locative is possible for many of the words

but not *k'uyr* 'sister' do to semantic restrictions. Based on these arguments the analysis going forward in this paper will view both the *oĵ*-declension and the consonant-*o*-declensions as being defective.

Section 3.5: The Seven Declensions of MEA Nouns Tables

Table 11 (below) shows the complete paradigm of the Nominal inflection of MEA for case, number, and definiteness. Table 12 (below) is color coordinated to show the stem alternate across the entire paradigm. The light green color highlights cells that have the default stem across. The light blue cells highlight the stem alternation in the *u*-declension, which occurs in the singular number and the DAT, ABL, INS, and LOC cases. The light purple highlights the vowel reduction of the *an*-declension, and the darker purple marks the reemergence of the stem final *-n* that was present in Classical Armenian all the way across the paradigm for *muk* 'mouse'. Light red marks the *oĵ*-declension for the stem alternations in the SG DAT case and the darker red marks the reanalysis of the inflected DAT INDEF SG cell as the EABL and INS stems. The light orange marks the stem alternation of the SG DAT case in the Consonant-*a*-declension. The final color used in Table 12 is light gray which denotes the stem alternation in the Consonant-*o*-declension of the SG DAT, ABL, and INS cases. Table 13 highlights the exponent alternation of the complete paradigm. It has a little more action due to the complication of exponent alternation to avoid vowel hiatus and the

polysyllabic and monosyllabic definite markers. Looking at the color scheme I have chosen to use green for the NOM case, red for the DAT case, blue for the ABL case, orange for the INS case, and purple for the LOC case exponents. I have used a slightly lighter shade of these colors in the plural number when the polysyllabic exponent is present. In fact when looking at the plural exponents there isn't anything unusually happening at all since any declension could potentially have both monosyllabic and polysyllabic stems. The darkest shade of green is used for when no exponents are present. Which applies to the SG NOM INDEF and then the SG DAT INDEF of the Consonant-*o*-declension and the Consonant-*a*-declension. A lighter shade of green is used to mark the NOM DEF. Tan is used for the variation in the SG *an*-declension, gray for SG *va*-declension, and yellow for the SG *oĵ*-declension.

Table 11: Seven Declensions of Modern Eastern Armenian Nouns

Declension		<i>i-</i>	<i>u-</i>	<i>an-</i>	<i>va-</i>	<i>oĵ-</i>	Consonant- <i>a</i>	Consonant- <i>o</i>		
Stem:		<i>sar</i>	<i>k'ami</i>	<i>muk</i>	<i>ōr</i>	<i>k'uyr</i>	<i>ankyun</i>	<i>hayr</i>		
NUM	DEF	Case	'mountain'	'wind'	'mouse'	'day'	'sister'	'corner'	'father'	
SG	INDEF	NOM	<i>sar</i>	<i>k'ami</i>	<i>muk</i>	<i>ōr</i>	<i>k'uyr</i>	<i>ankyun</i>	<i>hayr</i>	
	DEF		<i>sar-ě</i>	<i>k'ami</i>	<i>muk-ě</i>	<i>ōr-ě</i>	<i>k'uyr-ě</i>	<i>ankyun-ě</i>	<i>hayr-ě</i>	
	INDEF	DAT	<i>sar-i</i>	<i>k'am-u</i>	<i>mēk-an</i>	<i>ōr-va</i>	<i>k'r-oĵ</i>	<i>ankyan</i>	<i>hor</i>	
	DEF		<i>sar-i-n</i>	<i>k'am-u-n</i>	<i>mēk-an-ě</i>	<i>ōr-va-n</i>	<i>k'r-oĵ-ě</i>	<i>ankyan-ě</i>	<i>hor-ě</i>	
	ABL		<i>sar-ic'</i>	<i>k'am-uc'</i>	<i>mēkn-ic'</i>	<i>ōr-van-ic'</i>	<i>kroj-ic'</i>	<i>ankyun-ic'</i>	<i>hor-ic'</i>	
	INS		<i>sar-ov</i>	<i>k'am-ov</i>	<i>mēkn-ov</i>	<i>ōr-ov</i>	<i>kroj-ov</i>	<i>ankyun-ov</i>	<i>hor-ov</i>	
	LOC		<i>sar-um</i>	<i>k'am-um</i>	<i>mēkn-um</i>	<i>ōr-um</i>	-----	<i>ankyun-um</i>	-----	
	PL	INDEF	NOM	<i>sar-er</i>	<i>k'ami-ner</i>	<i>mēkn-er</i>	<i>ōr-er</i>	<i>k'uyr-er</i>	<i>ankyun-ner</i>	<i>hayr-er</i>
	DEF		<i>sar-er-ě</i>	<i>k'ami-ner-ě</i>	<i>mēkn-er-ě</i>	<i>ōr-er-ě</i>	<i>k'uyr-er-ě</i>	<i>ankyun-ner-ě</i>	<i>hayr-er-ě</i>	
	INDEF	DAT	<i>sar-er-i</i>	<i>k'ami-ner-i</i>	<i>mēkn-er-i</i>	<i>ōr-er-i</i>	<i>k'uyr-er-i</i>	<i>ankyun-ner-i</i>	<i>hayr-er-i</i>	
DEF		<i>sar-er-i-n</i>	<i>k'ami-ner-i-n</i>	<i>mēkn-er-i-n</i>	<i>ōr-er-i-n</i>	<i>k'uyr-er-i-n</i>	<i>ankyun-ner-i-n</i>	<i>hayr-er-i-n</i>		
ABL		<i>sar-er-ic'</i>	<i>k'ami-ner-ic'</i>	<i>mēkn-er-ic'</i>	<i>ōr-er-ic'</i>	<i>k'uyr-er-ic'</i>	<i>ankyun-ner-ic'</i>	<i>hayr-er-ic'</i>		
INS		<i>sar-er-ov</i>	<i>k'ami-ner-ov</i>	<i>mēkn-er-ov</i>	<i>ōr-er-ov</i>	<i>k'uyr-er-ov</i>	<i>ankyun-ner-ov</i>	<i>hayr-er-um</i>		
LOC		<i>sar-er-um</i>	<i>k'ami-ner-um</i>	<i>mēkn-er-um</i>	<i>ōr-er-um</i>	-----	<i>ankyun-ner-um</i>	-----		

Table 12: Seven Declensions of Modern Eastern Armenian Nouns Stem Alternations

Declension		i-	u-	an-	va-	oĵ-	Consonant-a	Consonant-o	
Stem:		<i>sar</i>	<i>k'ami</i>	<i>muk</i>	<i>ōr</i>	<i>k'uyr</i>	<i>ankyun</i>	<i>hayr</i>	
NUM	DEF	Case	'mountain'	'wind'	'mouse'	'day'	'sister'	'corner'	'father'
SG	INDEF	NOM	<i>sar</i>	<i>k'ami</i>	<i>muk</i>	<i>ōr</i>	<i>k'uyr</i>	<i>ankyun</i>	<i>hayr</i>
	DEF		<i>sar-ě</i>	<i>k'ami</i>	<i>muk-ě</i>	<i>ōr-ě</i>	<i>k'uyr-ě</i>	<i>ankyun-ě</i>	<i>hayr-ě</i>
	INDEF	DAT	<i>sar-i</i>	<i>k'am-i-u</i>	<i>mėk-an</i>	<i>ōr-va</i>	<i>k'r-oĵ</i>	<i>ankyan</i>	<i>hor</i>
	DEF		<i>sar-i-n</i>	<i>k'am-i-u-n</i>	<i>mėk-an-ě</i>	<i>ōr-va-n</i>	<i>k'r-oĵ-ě</i>	<i>ankyan-ě</i>	<i>hor-ě</i>
	DEF	ABL	<i>sar-ic'</i>	<i>k'am-uc'</i>	<i>mėkn-ic'</i>	<i>ōr-van-ic'</i>	<i>kroj-ic'</i>	<i>ankyun-ic'</i>	<i>hor-ic'</i>
	INS		<i>sar-ov</i>	<i>k'am-ov</i>	<i>mėkn-ov</i>	<i>ōr-ov</i>	<i>kroj-ov</i>	<i>ankyun-ov</i>	<i>hor-ov</i>
	LOC		<i>sar-um</i>	<i>k'am-um</i>	<i>mėkn-um</i>	<i>ōr-um</i>	-----	<i>ankyun-um</i>	-----
PL	INDEF	NOM	<i>sar-er</i>	<i>k'ami-ner</i>	<i>mėkn-er</i>	<i>ōr-er</i>	<i>k'uyr-er</i>	<i>ankyun-ner</i>	<i>hayr-er</i>
	DEF		<i>sar-er-ě</i>	<i>k'ami-ner-ě</i>	<i>mėkn-er-ě</i>	<i>ōr-er-ě</i>	<i>k'uyr-er-ě</i>	<i>ankyun-ner-ě</i>	<i>hayr-er-ě</i>
	INDEF	DAT	<i>sar-er-i</i>	<i>k'ami-ner-i</i>	<i>mėkn-er-i</i>	<i>ōr-er-i</i>	<i>k'uyr-er-i</i>	<i>ankyun-ner-i</i>	<i>hayr-er-i</i>
	DEF		<i>sar-er-i-n</i>	<i>k'ami-ner-i-n</i>	<i>mėkn-er-i-n</i>	<i>ōr-er-i-n</i>	<i>k'uyr-er-i-n</i>	<i>ankyun-ner-i-n</i>	<i>hayr-er-i-n</i>
	ABL		<i>sar-er-ic'</i>	<i>k'ami-ner-ic'</i>	<i>mėkn-er-ic'</i>	<i>ōr-er-ic'</i>	<i>k'uyr-er-ic'</i>	<i>ankyun-ner-ic'</i>	<i>hayr-er-ic'</i>
	INS		<i>sar-er-ov</i>	<i>k'ami-ner-ov</i>	<i>mėkn-er-ov</i>	<i>ōr-er-ov</i>	<i>k'uyr-er-ov</i>	<i>ankyun-ner-ov</i>	<i>hayr-er-um</i>
	LOC		<i>sar-er-um</i>	<i>k'ami-ner-um</i>	<i>mėkn-er-um</i>	<i>ōr-er-um</i>	-----	<i>ankyun-ner-um</i>	-----

Table 13: Seven Declensions of Modern Eastern Armenian Nouns Exponent Alternations

Declension	<i>i-</i>	<i>u-</i>	<i>an-</i>	<i>va-</i>	<i>oĵ-</i>	Consonant- <i>a</i>	Consonant- <i>o</i>		
Stem:	<i>sar</i>	<i>k'ami</i>	<i>muk</i>	<i>or</i>	<i>k'uyr</i>	<i>ankyun</i>	<i>hayr</i>		
NUM	DEF	Case	'mountain'	'wind'	'mouse'	'day'	'sister'	'corner'	'father'
SG	INDEF	NOM	<i>sar</i>	<i>k'ami</i>	<i>muk</i>	<i>or</i>	<i>k'uyr</i>	<i>ankyun</i>	<i>hayr</i>
	DEF		<i>sar-ě</i>	<i>k'ami</i>	<i>muk-ě</i>	<i>or-ě</i>	<i>k'uyr-ě</i>	<i>ankyun-ě</i>	<i>hayr-ě</i>
	INDEF	DAT	<i>sar-i</i>	<i>k'am-u</i>	<i>měk-an</i>	<i>or-va</i>	<i>k'r-oĵ</i>	<i>ankyan</i>	<i>hor</i>
			DEF		<i>sar-i-n</i>	<i>k'am-u-n</i>	<i>měk-an-ě</i>	<i>or-va-n</i>	<i>k'r-oĵ-ě</i>
	DEF	ABL	<i>sar-ic'</i>	<i>k'am-uc'</i>	<i>měkn-ic'</i>	<i>or-van-ic'</i>	<i>kroj-ic'</i>	<i>ankyun-ic'</i>	<i>hor-ic'</i>
			INS		<i>sar-ov</i>	<i>k'am-ov</i>	<i>měkn-ov</i>	<i>or-ov</i>	<i>kroj-ov</i>
	LOC		<i>sar-um</i>	<i>k'am-um</i>	<i>měkn-um</i>	<i>or-um</i>	-----	<i>ankyun-um</i>	-----
PL	INDEF	NOM	<i>sar-er</i>	<i>k'ami-ner</i>	<i>měkn-er</i>	<i>or-er</i>	<i>k'uyr-er</i>	<i>ankyun-ner</i>	<i>hayr-er</i>
	DEF		<i>sar-er-ě</i>	<i>k'ami-ner-ě</i>	<i>měkn-er-ě</i>	<i>or-er-ě</i>	<i>k'uyr-er-ě</i>	<i>ankyun-ner-ě</i>	<i>hayr-er-ě</i>
	INDEF	DAT	<i>sar-er-i</i>	<i>k'ami-ner-i</i>	<i>měkn-er-i</i>	<i>or-er-i</i>	<i>k'uyr-er-i</i>	<i>ankyun-ner-i</i>	<i>hayr-er-i</i>
			DEF		<i>sar-er-i-n</i>	<i>k'ami-ner-i-n</i>	<i>měkn-er-i-n</i>	<i>or-er-i-n</i>	<i>k'uyr-er-i-n</i>
	ABL	INS	<i>sar-er-ic'</i>	<i>k'ami-ner-ic'</i>	<i>měkn-er-ic'</i>	<i>or-er-ic'</i>	<i>k'uyr-er-ic'</i>	<i>ankyun-ner-ic'</i>	<i>hayr-er-ic'</i>
			LOC		<i>sar-er-ov</i>	<i>k'ami-ner-ov</i>	<i>měkn-er-ov</i>	<i>or-er-ov</i>	<i>k'uyr-er-ov</i>
			<i>sar-er-um</i>	<i>k'ami-ner-um</i>	<i>měkn-er-um</i>	<i>or-er-um</i>	-----	<i>ankyun-ner-um</i>	-----

As stated earlier stated number marking of nouns patterns very regularly and the alternation between *-er* and *-ner* is based on a phonological process depending on the number of syllables of the stem. These declensions are also very canonical with respect to case marking in the plural. The action in this inflectional system happens in the dative case. Each declension has a unique dative marker. The u-declension expresses the dative case with the suffix *-u* and the ablative case with the suffix *-uc'*. All other declensions only deviate from the canonical case marking in the dative case. The alternation of the stems and will be discussed further in section 4.2.

Section 4: Paradigm Function Morphology

Stump (2015, 252) defines his paradigm –linkage theory as “an inferential-realizational theory of inflectional morphology.” This theory focuses on the inflection morphology of three different paradigms within a language, the content paradigm, the form paradigm, and the realized paradigm. The relation between these paradigms is defined by the *Corr* (correspondence) function, the *ic* (inflection class) function, the *Stem* function, and the *pm* (property mappings). Below is a Paradigm Function Morphological (PFM) analysis of MEA declensions.

In a cell $\langle L, \sigma : w \rangle$, the word form w **realizes** (is the **realization** of)

- the lexeme L ,
- the property set σ
- the combined content of L and σ , and
- the cell itself

(Stump, 2015:10)

Section 4.1: MEA Content Paradigm

This content paradigm of MEA nouns consists of 14 possible cells representing the five cases, two numbers, and definiteness with in a paradigm of a lexeme.

Note on definiteness, it can only be expressed in the nominative and the dative cases. Hypothetically a language would have a unique form in each cell. Within

a paradigm one could expect the same stem throughout the entire paradigm to be used and a unique exponent for morphosyntactic property set: case, number, and definiteness. One would then even expect that the same exponent used in one paradigm would be used in all the other same declensions. This obviously by the data presented above is not the case.

Table 14: MEA Nominal Cells

Case	Definiteness	SG	PL
NOM	indef	1	2
	def	3	4
DAT	indef	5	6
	def	7	8
ABL		9	10
INS		11	12
LOC		13	14

Section 4.2: MEA Nominal Stems

Each word will have exactly one lexeme:

“A lexeme can be thought of as an abstract characterization of all the linguistically important properties of a word, much like the information found in a dictionary entry.” (Spencer, 2016:27) For the PFM analysis the notion of lexeme is important because within a lexeme each declension will have stems

associated with that lexeme. These stems will be selected by the relevant morphosyntactic properties that correlate to the corresponding exponents. Due to the variation of the stems as seen in Table 11, I have put forth five potential stems in order to capture the variation of the morphosyntactic properties. There is the default stem, which is highlighted by the light green, is the most common stem and generally is the stem that will be used by the declension. The Dative singular stem is needed to account for the variation of the *oŷ*-declension and the *an*-declension. A unique ablative singular stem is only needed because the *va*-declension needs a unique stem, other wise the ablative, locative, and instrumental singular could all have the same stem. The instrumental and locative singular stem provides the stems for the rest of the singular forms. The plural stem is needed to satisfy the *an*-declension which has a different stem than the default in the plural. If not for that variation the default stem would be able to function as the plural stem.

Table 15: MEA Stems

Lexemes	default stem	DAT SG stem	ABL SG stem	INS/LOC SG stem	PL stem
<i>sar</i> ‘mountian’	<i>sar</i>	<i>sar</i>	<i>sar</i>	<i>sar</i>	<i>sar</i>
<i>k’ami</i> ‘wind’	<i>k’ami</i>	<i>k’am</i>	<i>k’am</i>	<i>k’am</i>	<i>k’ami</i>
<i>muk</i> ‘mouse’	<i>muk</i>	<i>měk</i>	<i>měkn</i>	<i>měkn</i>	<i>měkn</i>
<i>ōr</i> ‘day’	<i>ōr</i>	<i>ōrva</i>	<i>ōrvan</i>	<i>ōr</i>	<i>ōr</i>
<i>k’uyr</i> ‘sister’	<i>k’uyr</i>	<i>k’r</i>	<i>kroj</i>	<i>kroj</i>	<i>k’uyr</i>
<i>ankyun</i> ‘corner’	<i>ankyun</i>	<i>ankyan</i>	<i>ankyun</i>	<i>ankyun</i>	<i>ankyun</i>
<i>hayr</i> ‘father’	<i>hayr</i>	<i>hor</i>	<i>hor</i>	<i>hor</i>	<i>hor</i>

Section 4.3: MEA Inflection Classes

The inflection class function *ic* establishes the index by which the stems are connected to an inflection class. This inflection class will be used to identify the stems property mapping.

Table 16: Inflection class function *ic* for MEA Nominal Inflection

Stem X	$ic(X)$
<i>sar</i>	{iD}
<i>k'ami, k'am</i>	{uD}
<i>muk, mĕk, mĕkn</i>	{anD}
<i>ōr, ōrvan</i>	{vaD}
<i>k'uyr, k'r, kroĵ</i>	{oĵD}
<i>ankyun, ankyan</i>	{CaD}
<i>hayr, hor</i>	{CoD}

Section 4.4: MEA Property Mapping

The property mapping

Table 17: Definition of *pm* for MEA Nominal Inflection

Morphosyntactic property set σ in a content cell	$pm(\sigma)$	Morphosyntactic property set σ in a content cell	$pm(\sigma)$
$\sigma:\{ \text{NOM sg indef} \}$	{ NOM }	$\sigma:\{ \text{NOM pl indef} \}$	{ NOM pl }
$\sigma:\{ \text{NOM sg def} \}$	{ NOM def }	$\sigma:\{ \text{NOM pl def} \}$	{ NOM pl def }
$\sigma:\{ \text{DAT sg indef} \}$	{ DAT sg }	$\sigma:\{ \text{DAT pl indef} \}$	{ DAT pl }
$\sigma:\{ \text{DAT sg def} \}$	{ DAT sg def }	$\sigma:\{ \text{DAT pl def} \}$	{ DAT pl def }
$\sigma:\{ \text{ABL sg} \}$	{ ABL sg }	$\sigma:\{ \text{ABL pl} \}$	{ ABL pl }
$\sigma:\{ \text{INS sg} \}$	{ INS sg }	$\sigma:\{ \text{INS pl} \}$	{ INS pl }
$\sigma:\{ \text{LOC sg} \}$	{ LOC sg }	$\sigma:\{ \text{LOC pl} \}$	{ LOC pl }
$\sigma:\{ \text{LOC oĵD} \}$	-----	$\sigma:\{ \text{INS pl CoD} \}$	{ LOC pl }
$\sigma:\{ \text{LOC CoD} \}$	-----		

N. B. $\sigma:\{a\ b\ c\}$ represents every property set σ having $\{a\ b\ c\}$ as a subset.

Section 4.5: MEA Nominal Stem Function

Based on the relevant morphosyntactic property sets a lexeme L is going to select the corresponding stem based on the property mapping.

Table 18: Definition of the MEA Nominal *Stem* function

Where $\langle L, \rho \rangle$ is a content cell and $\sigma = pm(\rho)$, $Stem(\langle L, \sigma \rangle)$ has the following values:

	σ	$Stem(\langle L, \sigma \rangle)$
a.	$\sigma: \{ \text{dat} \}$	L's DAT SG stem
b.	$\sigma: \{ \text{abl sg} \}$	L's ABL SG stem
c.	$\sigma: \{ \text{ins sg} \}$	L's INS/LOC SG stem
d.	$\sigma: \{ \text{pl} \}$	L's PL stem
e.	by default	L's default stem

Section 4.6: MEA Rule Application

Table 19: MEA Nominal Correspondence and Paradigm Functions

<p>(A) Definition of the MEA <i>Corr</i> function</p> <p>Where $pm(\sigma) = \tau$ and $Stem(\langle L, \tau \rangle) = X$: $Corr(\langle L, \sigma \rangle) = \langle X, \tau \cup ic(X) \rangle$ [U represents set union]</p>
<p>(B) MEA paradigm function</p> <p>For any content cell $\langle L, \sigma \rangle$ whose form correspondent is $\langle Z, \tau \rangle$,</p> $PF(\langle L, \sigma \rangle) = PF(\langle Z, \tau \rangle) = [\text{III} : [\text{II} : [\text{I} : \langle Z, \tau \rangle]]],$ <p>where $[n : \langle Z, \tau \rangle]$ is the result of applying to $\langle Z, \tau \rangle$ the narrowest applicable rule in Block n.</p>

X -> Y or general rule

Section 4.7: MEA Rule Block

Table 20: Three blocks of MEA inflectional rules

Block I.	a. X, { pl } when X is monosyllabic	→ <i>Xer</i>
	b. X, { pl } when X is polysyllabic	→ <i>Xner</i>
Block II.	c. X, { DAT }	→ <i>Xi</i>
	d. X, { <i>uD</i> DAT sg }	→ <i>Xu</i>
	e. X, { <i>anD</i> DAT sg }	→ <i>Xan</i>
	f. X, { <i>vaD</i> DAT sg }	→ <i>Xva</i>
	g. X, { <i>oĵD</i> DAT sg }	→ <i>Xoĵ</i>
	h. X, { ABL }	→ <i>Xic'</i>
	i. X, { INS }	→ <i>Xov</i>
	j. X, { LOC }	→ <i>Xum</i>
	k. X, { <i>uD</i> ABL }	→ <i>Xuc'</i>
	l. X, { <i>CoD</i> DAT sg } ∨ { <i>CaD</i> DAT sg }	→ <i>X</i>
Block III.	m. XV, { def }	→ <i>XVn</i> where V is a vowel
	n. XC, { def }	→ <i>XCě</i> where C is a consonant

Section 5: Conclusions

This thesis has analyzed the seven declensions of Modern Eastern Armenian. It has also provided a Paradigm Function Morphology analysis of those declensions to accurately represent in interface of morphology and syntax.

Looking at the variation of the MEA declension paradigms features that were not sensitive to syntax arose. MEA exhibited defective cells in its paradigm, and stem and exponent alternations that were the result of the morphomic properties. These irregularities were captured by the PFM analysis. This evidence contributes to treating morphology separate from syntax.

Further applications of this analysis would be to incorporate it into a non-transformational syntactic framework like Head Driven Phrase Structure Grammar. It would also be beneficial to conduct fieldwork to see how generalizable these findings are with spoken data.

Bibliography:

- Bender, Emily M., Sag, Ivan A., & Wasow, Thomas. (2003). *Syntactic Theory: A Formal Introduction*. Stanford, CA: CSLI Publications.
- Baker, M. (2015). *Cambridge Studies in Linguistics*: 146. *Case: Its Principles and Parameters*. Cambridge, United Kingdom: Cambridge University Press.
- Blake, B. (2001). *Case*. Cambridge, United Kingdom: Cambridge University Press.
- Bonami, O. (2015). Periphrasis as Collocation, *Morphology*, 25, 63-110.
- Bonami, O. (2011). Reconstruction HPSG Morphology, 18th International Conference on Head-Driven Phrase Structure Grammar, Seattle, WA, August 22-25, 2011.
- Bonami, O. & Stump, G. (2016). *Paradigm Function Morphology*. In A. Hippisley & G. Stump(Eds), *The Cambridge Handbook of Morphology*. (pp. 449-481) Cambridge, UK: Cambridge University Press.
- Corbett, G. (2000). *Number*. Cambridge, United Kingdom: Cambridge University Press.
- Finkel, R. & Stump, G. (2016). *Cambridge Studies in Linguistics*: 138. *Morphological Typology: From Word to Paradigm*. Cambridge, United Kingdom: Cambridge University Press.
- Dum-Tragut, J. 2009. *Armenian: Modern Eastern Armenian*. Philadelphia, PA: John Benjamin's North America.
- Lyons, C. (1999). *Definiteness*. Cambridge, United Kingdom: Cambridge University Press.
- Sims, A. (2015). *Cambridge Studies in Linguistics*: 148. *Inflectional Defectiveness* Cambridge, United Kingdom: Cambridge University Press.
- Spencer, A. (1991) *Morphological Theory: An Introduction to Word Structure for Generative Grammar*. Oxford, United Kingdom: Blackwell Publishers LTD.

- Spencer, A. (2016). *Two Morphologies or One?* In A. Hippisley & G. Stump(Eds), *The Cambridge Handbook of Morphology*. (pp. 27-49) Cambridge, UK: Cambridge University Press.
- Stump, G. (2001). *Cambridge Studies in Linguistics: 93. Inflectional Morphology: A Theory of Paradigm Structure*. Cambridge, United Kingdom: Cambridge University Press.
- Stump, G. (2015). *Cambridge Studies in Linguistics: 149. Inflectional Paradigms: Content and Form at the Syntax-Morphology Interface*. Cambridge, United Kingdom: Cambridge University Press.

Appendixes:

Table 21: Transliteration of Modern Eastern Armenian alphabet

adapted from Dum-Tragut (2007:10)

Ա ա	A a	Յ յ	Y y
Բ բ	B b	Ն ն	N n
Գ գ	G g	Շ շ	Š š
Դ դ	D d	Ո ո	O o
Ե ե	E e	Զ զ	Č č
Զ զ	Z z	Պ պ	P p
Է է	Ē ē	Ջ ճ	ǰ ǰ
Ը ը	Ě ě	Ռ ռ	Ř ř
Թ թ	T' t'	Ս ս	S s
Ժ ժ	Ž ž	Վ վ	V v
Ի ի	I i	Տ տ	T t
Լ լ	L l	Ր ը	R r
Խ խ	X x	Ց զ	C' c'
Ծ ծ	C c	ՈԻ ոԼ	U u
Կ կ	K k	Փ փ	P' p'
Հ հ	H h	Ք ք	K' k'
Ջ ճ	J j	Ա	ew
Ղ ղ	ł	Օ օ	Ō ō
Ճ ճ	Č č	Ֆ ֆ	F f
Մ մ	M m		

“This is the alphabetic order of Armenian letters (from left to right) with the usual transliteration and their (isolated) phonetic value.” Dum-Tragut 2007:11

Table 22: Transliteration of Modern Eastern Armenian alphabet with phonetic values

ա	բ	գ	դ	ե	զ	է	ը	թ	ժ	ի	լ	խ
a	b	g	d	e	z	ē	ě	tʰ	ž	i	l	x
[a]	[b]	[g]	[d]	[(j)ɛ]	[z]	[ɛ]	[ə]	[tʰ]	[ʒ]	[i]	[l]	[χ]
ծ	կ	հ	ձ	ղ	ն	ւ	յ	օ	շ	ո	չ	պ
c	k	h	j	ł	č	m	y	n	š	o	čʰ	p
[ts]	[k]	[h]	[dz]	[ɣ]	[tʃ]	[m]	[j]	[n]	[ʃ]	[(v)ɔ]	[tʃʰ]	[p]
ջ	ռ	ս	վ	տ	ր	ց	և	փ	ք	ւ	օ	ֆ
j	ř	s	v	t	r	cʰ	u	pʰ	kʰ	ew	ō	f
[dʒ]	[r]	[s]	[v]	[t]	[r]	[tsʰ]	[u]	[pʰ]	[kʰ]	[jɛv]	[ɔ]	[f]

Adapted from Dum-Tragut 2007:13

Table 23: Content Form and Realized Paradigms for MEA Nominal Inflection

Content Paradigm		Form Paradigm		Realized Paradigm
<SAR, {nom sg}>	→	<sar, {nom sg}>	→	<sar, {nom sg}>
<SAR, {nom sg def}>	→	<sar, {nom sg def}>	→	<sar-ě, {nom sg}>
<SAR, {dat sg}>	→	<sar, {dat sg}>	→	<sar-i-n, {dat sg}>
<SAR, {dat sg def}>	→	<sar, {dat sg def}>	→	<sar-i-n, {dat sg def}>
<SAR, {abl sg}>	→	<sar, {abl sg}>	→	<sar-ic', {abl sg}>
<SAR, {ins sg}>	→	<sar, {ins sg}>	→	<sar-ov, {ins sg}>
<SAR, {loc sg}>	→	<sar, {loc sg}>	→	<sar-um, {loc sg}>
<SAR, {nom pl def}>	→	<sar, {nom pl}>	→	<sar-er-ě, {nom pl}>
<SAR, {dat pl def}>	→	<sar, {dat pl}>	→	<sar-er-i-n, {dat pl}>
<SAR, {abl pl}>	→	<sar, {abl pl}>	→	<sar-er-ic', {abl pl}>
<SAR, {ins pl}>	→	<sar, {ins pl}>	→	<sar-er-ov, {ins pl}>
<SAR, {loc pl}>	→	<sar, {loc pl}>	→	<sar-er-um, {loc pl}>

Content Paradigm		Form Paradigm		Realized Paradigm
<SAR, {nom sg}>	→	<sar, {nom sg}>	→	<sar(ě), {nom sg}>
<SAR, {dat sg}>	→	<sar, {dat sg}>	→	<sar-i(n), {dat sg}>
<SAR, {abl sg}>	→	<sar, {abl sg}>	→	<sar-ic', {abl sg}>
<SAR, {ins sg}>	→	<sar, {ins sg}>	→	<sar-ov, {ins sg}>
<SAR, {loc sg}>	→	<sar, {loc sg}>	→	<sar-um, {loc sg}>
<SAR, {nom pl}>	→	<sar, {nom pl}>	→	<sar-er(ě), {nom pl}>
<SAR, {dat pl}>	→	<sar, {dat pl}>	→	<sar-er-i(n), {dat pl}>
<SAR, {abl pl}>	→	<sar, {abl pl}>	→	<sar-er-ic', {abl pl}>
<SAR, {ins pl}>	→	<sar, {ins pl}>	→	<sar-er-ov, {ins pl}>
<SAR, {loc pl}>	→	<sar, {loc pl}>	→	<sar-er-um, {loc pl}>

Content Paradigm		Form Paradigm		Realized Paradigm
<K'AMI, {nom sg}>	→	<k'ami, {nom sg}>	→	<k'ami, {nom sg}>
<K'AMI, {dat sg}>	→	<k'ami, {dat sg}>	→	<k'am-u(n), {dat sg}>

⟨K'AMI, {abl sg}⟩	→	⟨ <i>k'ami</i> , {abl sg}⟩	→	⟨ <i>k'am-uc'</i> , {abl sg}⟩
⟨K'AMI, {int sg}⟩	→	⟨ <i>k'ami</i> , {ins sg}⟩	→	⟨ <i>k'am-ov</i> , {ins sg}⟩
⟨K'AMI, {loc sg}⟩	→	⟨ <i>k'ami</i> , {loc sg}⟩	→	⟨ <i>k'am-um</i> , {loc sg}⟩
⟨K'AMI, {nom pl}⟩	→	⟨ <i>k'ami</i> , {nom pl}⟩	→	⟨ <i>k'ami-ner(ě)</i> , {nom pl}⟩
⟨K'AMI, {dat pl}⟩	→	⟨ <i>k'ami</i> , {dat pl}⟩	→	⟨ <i>k'am-ner-u(n)</i> , {dat pl}⟩
⟨K'AMI, {abl pl}⟩	→	⟨ <i>k'ami</i> , {abl pl}⟩	→	⟨ <i>k'am-ner-uc'</i> , {abl pl}⟩
⟨K'AMI, {ins pl}⟩	→	⟨ <i>k'ami</i> , {ins pl}⟩	→	⟨ <i>k'am-ner-ov</i> , {ins pl}⟩
⟨K'AMI, {loc pl}⟩	→	⟨ <i>k'ami</i> , {loc pl}⟩	→	⟨ <i>k'am-ner-um</i> , {loc pl}⟩

Content Paradigm

⟨K'AMI, {nom sg}⟩	→	⟨ <i>k'ami</i> , {nom sg}⟩	→	⟨ <i>k'ami</i> , {nom sg}⟩
⟨K'AMI, {dat sg}⟩	→	⟨ <i>k'ami</i> , {dat sg}⟩	→	⟨ <i>k'am-u(n)</i> , {dat sg}⟩
⟨K'AMI, {abl sg}⟩	→	⟨ <i>k'ami</i> , {abl sg}⟩	→	⟨ <i>k'am-uc'</i> , {abl sg}⟩
⟨K'AMI, {int sg}⟩	→	⟨ <i>k'ami</i> , {ins sg}⟩	→	⟨ <i>k'am-ov</i> , {ins sg}⟩
⟨K'AMI, {loc sg}⟩	→	⟨ <i>k'ami</i> , {loc sg}⟩	→	⟨ <i>k'am-um</i> , {loc sg}⟩
⟨K'AMI, {nom pl}⟩	→	⟨ <i>k'ami</i> , {nom pl}⟩	→	⟨ <i>k'ami-ner(ě)</i> , {nom pl}⟩
⟨K'AMI, {dat pl}⟩	→	⟨ <i>k'ami</i> , {dat pl}⟩	→	⟨ <i>k'am-ner-u(n)</i> , {dat pl}⟩
⟨K'AMI, {abl pl}⟩	→	⟨ <i>k'ami</i> , {abl pl}⟩	→	⟨ <i>k'am-ner-ic'</i> , {abl pl}⟩
⟨K'AMI, {ins pl}⟩	→	⟨ <i>k'ami</i> , {ins pl}⟩	→	⟨ <i>k'am-ner-ov</i> , {ins pl}⟩
⟨K'AMI, {loc pl}⟩	→	⟨ <i>k'ami</i> , {loc pl}⟩	→	⟨ <i>k'am-ner-um</i> , {loc pl}⟩

Form Paradigm

Realized Paradigm

Content Paradigm

⟨MUK, {nom sg}⟩	→	⟨ <i>muk</i> , {nom sg}⟩	→	⟨ <i>muk(ě)</i> , {nom sg}⟩
⟨MUK, {dat sg}⟩	→	⟨ <i>muk</i> , {dat sg}⟩	→	⟨ <i>měk-an(ě)</i> , {dat sg}⟩
⟨MUK, {abl sg}⟩	→	⟨ <i>muk</i> , {abl sg}⟩	→	⟨ <i>měkn-ic'</i> , {abl sg}⟩
⟨MUK, {int sg}⟩	→	⟨ <i>muk</i> , {ins sg}⟩	→	⟨ <i>měkn-ov</i> , {ins sg}⟩
⟨MUK, {loc sg}⟩	→	⟨ <i>muk</i> , {loc sg}⟩	→	⟨ <i>měkn-um</i> , {loc sg}⟩
⟨MUK, {nom pl}⟩	→	⟨ <i>muk</i> , {nom pl}⟩	→	⟨ <i>měkn-er(ě)</i> , {nom pl}⟩
⟨MUK, {dat pl}⟩	→	⟨ <i>muk</i> , {dat pl}⟩	→	⟨ <i>měkn-er-i(n)</i> , {dat pl}⟩
⟨MUK, {abl pl}⟩	→	⟨ <i>muk</i> , {abl pl}⟩	→	⟨ <i>měkn-er-ic'</i> , {abl pl}⟩
⟨MUK, {ins pl}⟩	→	⟨ <i>muk</i> , {ins pl}⟩	→	⟨ <i>měkn-er-ov</i> , {ins pl}⟩
⟨MUK, {loc pl}⟩	→	⟨ <i>muk</i> , {loc pl}⟩	→	⟨ <i>měkn-er-um</i> , {loc pl}⟩

Form Paradigm

Realized Paradigm

Content Paradigm		Form Paradigm		Realized Paradigm
<MUK, {nom sg}>	→	< <i>muk</i> , {nom sg}>	→	< <i>muk(ě)</i> , {nom sg}>
<MUK, {dat sg}>	→	< <i>muk</i> , {dat sg}>	→	< <i>měk-an(ě)</i> , {dat sg}>
<MUK, {abl sg}>	→	< <i>muk</i> , {abl sg}>	→	< <i>měkn-ic'</i> , {abl sg}>
<MUK, {int sg}>	→	< <i>muk</i> , {ins sg}>	→	< <i>měkn-ov</i> , {ins sg}>
<MUK, {loc sg}>	→	< <i>muk</i> , {loc sg}>	→	< <i>měkn-um</i> , {loc sg}>
<MUK, {nom pl}>	→	< <i>muk</i> , {nom pl}>	→	< <i>měkn-er(ě)</i> , {nom pl}>
<MUK, {dat pl}>	→	< <i>muk</i> , {dat pl}>	→	< <i>měkn-er-i(n)</i> , {dat pl}>
<MUK, {abl pl}>	→	< <i>muk</i> , {abl pl}>	→	< <i>měkn-er-ic'</i> , {abl pl}>
<MUK, {ins pl}>	→	< <i>muk</i> , {ins pl}>	→	< <i>měkn-er-ov</i> , {ins pl}>
<MUK, {loc pl}>	→	< <i>muk</i> , {loc pl}>	→	< <i>měkn-er-um</i> , {loc pl}>

Content Paradigm		Form Paradigm		Realized Paradigm
<ŌR, {nom sg}>	→	< <i>ōr</i> , {nom sg}>	→	< <i>ōr(ě)</i> , {nom sg}>
<ŌR, {dat sg}>	→	< <i>ōr</i> , {dat sg}>	→	< <i>ōr-van(n)</i> , {dat sg}>
<ŌR, {abl sg}>	→	< <i>ōr</i> , {abl sg}>	→	< <i>ōr-van-ic'</i> , {abl sg}>
<ŌR, {int sg}>	→	< <i>ōr</i> , {ins sg}>	→	< <i>ōr-ov</i> , {ins sg}>
<ŌR, {loc sg}>	→	< <i>ōr</i> , {loc sg}>	→	< <i>ōr-um</i> , {loc sg}>
<ŌR, {nom pl}>	→	< <i>ōr</i> , {nom pl}>	→	< <i>ōr-ner(ě)</i> , {nom pl}>
<ŌR, {dat pl}>	→	< <i>ōr</i> , {dat pl}>	→	< <i>ōr-ner-i(n)</i> , {dat pl}>
<ŌR, {abl pl}>	→	< <i>ōr</i> , {abl pl}>	→	< <i>ōr-ner-ic'</i> , {abl pl}>
<ŌR, {ins pl}>	→	< <i>ōr</i> , {ins pl}>	→	< <i>ōr-ner-ov</i> , {ins pl}>
<ŌR, {loc pl}>	→	< <i>ōr</i> , {loc pl}>	→	< <i>ōr-ner-um</i> , {loc pl}>

Content Paradigm		Form Paradigm		Realized Paradigm
<ŌR, {nom sg}>	→	< <i>ōr</i> , {nom sg}>	→	< <i>ōr(ě)</i> , {nom sg}>
<ŌR, {dat sg}>	→	< <i>ōr</i> , {dat sg}>	→	< <i>ōr-van(n)</i> , {dat sg}>
<ŌR, {abl sg}>	→	< <i>ōr</i> , {abl sg}>	→	< <i>ōr-van-ic'</i> , {abl sg}>
<ŌR, {int sg}>	→	< <i>ōr</i> , {ins sg}>	→	< <i>ōr-ov</i> , {ins sg}>
<ŌR, {loc sg}>	→	< <i>ōr</i> , {loc sg}>	→	< <i>ōr-um</i> , {loc sg}>
<ŌR, {nom pl}>	→	< <i>ōr</i> , {nom pl}>	→	< <i>ōr-ner(ě)</i> , {nom pl}>
<ŌR, {dat pl}>	→	< <i>ōr</i> , {dat pl}>	→	< <i>ōr-ner-i(n)</i> , {dat pl}>
<ŌR, {abl pl}>	→	< <i>ōr</i> , {abl pl}>	→	< <i>ōr-ner-ic'</i> , {abl pl}>

<ŌR, {ins pl}> → <ōr, {ins pl}> → <ōr-ner-ov, {ins pl}>
 <ŌR, {loc pl}> → <ōr, {loc pl}> → <ōr-ner-um, {loc pl}>

Content Paradigm	Form Paradigm	Realized Paradigm
<K'UYR, {nom sg}>	→ <k'uyr, {nom sg}>	→ <k'uyr(ě), {nom sg}>
<K'UYR, {dat sg}>	→ <k'uyr, {dat sg}>	→ <k'r-oj(ě), {dat sg}>
<K'UYR, {abl sg}>	→ <k'uyr, {abl sg}>	→ <kroj-ic', {abl sg}>
<K'UYR, {int sg}>	→ <k'uyr, {ins sg}>	→ <kroj -ov, {ins sg}>
<K'UYR, {loc sg}>	→ <k'uyr, {loc sg}>	→ -----
<K'UYR, {nom pl}>	→ <k'uyr, {nom pl}>	→ <k'uyr-ner(ě), {nom pl}>
<K'UYR, {dat pl}>	→ <k'uyr, {dat pl}>	→ <k'uyr-ner-i(n), {dat pl}>
<K'UYR, {abl pl}>	→ <k'uyr, {abl pl}>	→ <k'uyr-ner-ic', {abl pl}>
<K'UYR, {ins pl}>	→ <k'uyr, {ins pl}>	→ <k'uyr-ner-ov, {ins pl}>
<K'UYR, {loc pl}>	→ <k'uyr, {loc pl}>	→ -----

Content Paradigm	Form Paradigm	Realized Paradigm
<K'UYR, {nom sg}>	→ <k'uyr, {nom sg}>	→ <k'uyr(ě), {nom sg}>
<K'UYR, {dat sg}>	→ <k'uyr, {dat sg}>	→ <k'r-oj(ě), {dat sg}>
<K'UYR, {abl sg}>	→ <k'uyr, {abl sg}>	→ <kroj-ic', {abl sg}>
<K'UYR, {int sg}>	→ <k'uyr, {ins sg}>	→ <kroj -ov, {ins sg}>
<K'UYR, {loc sg}>	→ <k'uyr, {loc sg}>	→ -----
<K'UYR, {nom pl}>	→ <k'uyr, {nom pl}>	→ <k'uyr-ner(ě), {nom pl}>
<K'UYR, {dat pl}>	→ <k'uyr, {dat pl}>	→ <k'uyr-ner-i(n), {dat pl}>
<K'UYR, {abl pl}>	→ <k'uyr, {abl pl}>	→ <k'uyr-ner-ic', {abl pl}>
<K'UYR, {ins pl}>	→ <k'uyr, {ins pl}>	→ <k'uyr-ner-ov, {ins pl}>
<K'UYR, {loc pl}>	→ <k'uyr, {loc pl}>	→ -----

Vita:

Malachi Wayne Oyer

Education:

B.A. in Linguistics

The Ohio State University, 2014

M.A. in Linguistic Theory and Typology

The University of Kentucky, 2017

Professional Positions Held:

Teaching Assistant, August 2016 – May 2017

University of Kentucky, Department of Linguistics