



Addis Ababa University
School of Graduate Studies

**BIOLOGICAL THOUGHTS AS THEY ARE ENLIGHTENED IN THE
ETHIOPIAN COMMENTARY TRADITION: ANNOTATIONE,
TRANSLATIONS AND COMMENTARY**

**A Thesis Submitted to the School of Graduate Studies, Addis
Ababa University in partial fulfillment of the requirements for
the Degree of Master of Arts in Philology**

By: RODAS TADESE ABEBE

Advisor: Dr. Mersha Alehegne



April, 2013

Addis Ababa



**BIOLOGICAL THOUGHTS AS THEY ARE ENLIGHTENED IN THE
ETHIOPIAN COMMENTARY TRADITION: ANNOTATION,
TRANSLATIONS AND COMMENTARY**

By: RODAS TADESE ABEBE

INSTITUTE OF LANGUAGE STUDIES

Approved by the board of examiners

Chairman, Department Graduate

Signature

Submitted by Rodas Tadese

[Signature]

Advisor Metska Ateherne

[Signature]

Examiner Amsalu Tefera

[Signature]

Examiner Sirgiaw Gelaw

[Signature]



ACNOWLEDGEMENT

First and foremost, I would like to praise and glorify God the Almighty, who favored me in many ways during my studies and I would like to magnify Our Lady the Mother of God, the Blessed Virgin Mary for her being with me whenever I needed her support.

My deepest gratitude goes to my advisor Dr. Mersha Alehegne who spent much of his precious time and effort offering constrictive comments, invaluable insights and suggestion while I was writing this M. A. thesis.

I would also like to thank to Dr. Ralph Lee for his useful assistance.

Last but certainly not least, my deepest appreciation goes out to my family whose unconditional support enabled me to feel strong and creative. I am especially thankful to my grandmother W/o Asegash Tesema, my sister Birhanawit and others who are associated with them.

ABSTRACT

The andəmta corpus of Amharic commentary on Ge'ez biblical and patristic texts derives its name from the repeated use of 'andəm', meaning 'and (there is) one (who says)', to introduce different interpretations. The corpus is in four parts: Old Testament, New Testament, The Books of the Scholars and the books of Monks. It represents a long running Ethiopian oral tradition, possibly originating from Aksumite Kingdom between the advent of Christianity, and the ninth century, now written down and recently partly published, although important commentaries remain unpublished.

Although the primary goal of Andəmta are to spiritual ideas but also Andəmta as a hot bed for many Sciences such as historical, philological, biological and medical laws are raised here and there as it attempts to explain their relations to human's lives.

As a result of there are also many insights in andəmta to biological science like human biology, plant biology, and animal biology. Therefore, the study will discuss the above-mentioned points in detail especially in regard with the biological ideas from the andəmta.

ABBERIVIATIONS

A.	Andem
A.C	Andemta commentary
C.E	Common Era
Deut.	Deuteronomy
E.C	Ethiopian Calendar
Eccl.	Ecclesiastes
Exod.	Exodus
E.O.T.C	Ethiopia Orthodox Täwahedo Church
Gen.	Genesis
Judg.	Judges
Lev.	Leviticus
Matt.	Matthew
N.T	New Testament
Num.	Number
O.T	Old Testament
Prov.	Proverbs
Ps.	Psalms
Rev	Revelation
Sir.	Sirach
1Tim.	1Timothy
Rom	Roman

Table of Content

page

ACKNOWLEDGEMENTS

ABSTRACT

ABBERIVATION

Chapter One 1

1. Introduction 1

1. 1 Introduction and Background of the Study 1

1.2 Statement of the Problem 3

1.3 Objectives of the study 4

1.3.1 General Objective 4

1.3.2 Specific Objective 4

1.4 Significance of the Study 4

1.5. Methodology of the Study 5

1.6 Scope of the Study 5

Chapter Two 6

2. Review of Related Literature 6

2.1 The Andemta Commentary Tradition 6

2.2. Definition 6

2.3. History 7

2.3.1 The Andemta Interpretative Schools History 7

2.3.2 The School Tradition of the andəmta	8
2.4 Andəmta as a Hot Bed for many Sciences	10
2.5 Exegetical and Philological Approach	10
2.5.1 Linguistics	13
2.5.2 History	15
2.5.3 Sociology/Culture	20
Chapter Three	23
3.1 Human Biology	23
3.2 Plant Biology	30
3.3 Animal Biology	35
Chapter Four	50
4.1 Conclusion	50
4.2 Recommendations	51
Bibliography	53

Chapter One

1. Introduction

1. 1 Introduction and Background of the Study

Roger Cowley's initial studies showed that, the five books of Moses (Pentateuch) were brought to Ethiopia by Menilik I in c. 1000 B.C. These books, though brief, and not as today's *Andämta* Commentary, had explanations and a preface. It is said that the explanation was given by the then Judaic mentors¹. Although M.B Säyfa claims that from 350 E.C. until the beginning of the 6th century most of the Old Testament and New Testament books and later on the books of church scholars were brought and translated into Ge'ez.² Gebrä Mäsqäl and Tekle Haymanot, the known national scholars in the time of Frementius, were the major participants in the translation work as Gädlä Abrəḥa Wä'aşbəḥa records. Since then the commentaries of saints and fathers of the church before division of the creed began to be translated into Ge'ez. Ever since Amharic become dominant over Ge'ez the comprehension of Ge'ez among the people declined, but the teachers kept on telling the people the Ge'ez *Andämta* Commentary as handed down from Abunä Selama, despite the difficulty the people have in understanding Ge'ez for it is overshadowed by the newly flourishing Amharic language.³.

During the era of Yohannəs⁴ I and Aşe Adəyam Säggäd Iyasu⁵ the problem become prevalent and a solution had to be sought.

¹ Mäşafä Solomon wäSirac nəbabəna tərgwmew pp. II-III, Cowley The Traditional Interpretation of the Apocalypse of John in the Ethioian Orthodox Church p.15,

² ibid

³ Säyfa Səllse Yohannəs, Yä-ityoppya orthodox təwaḥədo krəstyan tarik kă-lədätä Krəstos əskä 2000 AD, ('The Ethiopian Orthodox Təwaḥədo Church from the Birth of Christ upto 2000 E.C') pp.186-187

⁴ Yohannəs is known by Yohannəs I (the saint) and he is the son of king Fasil, and Yohannəs ruled Ethiopia from 1659 to 1674 E.C

⁵ Aşe Adəyam Säggäd Iyasu is known as Aşe Eyasu the great and he is the son of king Yohannəs and he ruled Ethiopia from 1674-1698

Säyfa Sällse Yohannəs says, in 1674 E.C. when Aše Adəyam Säggäd Iyasu was enthroned, the problem of the gap between the scholars and the people and that their teaching as was no longer intelligible came to a head, and, a meeting was held in the presence of the king and decisions were passed, namely⁶:

- a. Books that have to be told and interpreted would be categorized into four.
- b. These books were to be read in Ge'ez but their interpretation would be in Amharic.
- c. One scholar would be assigned for each section, although each would know all Ge'ez books.
- d. These four scholars⁷ on four sections would be responsible for preparing their discourse.

Based on this decision four areas of teaching were defined

- Old Testament
- New Testament
- Books of Church Scholars
- Books of Monks

The following departments were responsible for preparing the Amharic Andəmta discourses.

- ✓ Echege Qale Awadi for O.T
- ✓ Mämħər Şärwe Krəstos for N.T
- ✓ Mämħər Kəflä Yoħannəs for Books of Church Scholars
- ✓ Aqabe Se'at Abranəyos for Books of Monks⁸

⁶ Säyfa Sällse Yohannəs, Yä-ityoppya orthodox täwaħədo krəstyan tarik kä-lədatä Krəstos əskä 2000 AD, ('The Ethiopian Orthodox Täwaħədo Church from the Birth of Christ upto 2000 E.C') pp. 187-188

⁷ These four scholars are Echege Qale Awadi, Mämħər Şärwe Krəstos, Mämħər Kəflä Yoħannəs, Aqabe Se'at Abranəyos

⁸ Mar Yəşhaq paragraph 5: 104

In addition to these, many other scholars took part in writing the Amharic *Andämta* discourse.

The king provided the scholars and their pupils with the necessary resources, and following the King's example regional and provincial governors supported teachers and pupils in their regions. Thus, the teaching continued in great monasteries and churches of Gondar, Axum, Gojjam, Šhäwa, Lasta and Amhara Sayänt and as a result, Amharic *Andämta* discourse spread all over the country⁹.

1.2 Statement of the Problem

Although the primary goal of the commentaries is to give spiritual ideas, they also give historical, physical, chemical, biological and medical interpretations, which are raised here and there as it attempts to explain their relationship to human life.

Yet, the dominant thought is that those commentaries are the field of research of the traditional church scholars and theologians only. The history of science clearly illustrated that scientific truth is only relative, and is subject to modification or even reversal as scientific research progresses. Likewise, scholars revealed that men have often misinterpreted and misunderstood the absolute truth of the commentaries.

Biological science makes quantitative predictions, which can be tested experimentally. Yet, commentaries uses symbolic and analogical language to speak about biology in general, and this research is intended to demonstrate the scientific ideas represented in the Ethiopian *Andämta* Commentaries, and the extent of their agreement with modern biological sciences.

⁹ *Ibid* p.188

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of this study is to discuss biological thoughts regarding human beings, plants and animals as they are enlightened in the andəmta commentary corpus.

1.3.2 Specific Objectives

To achieve the aforementioned general objective, the following specific objectives are also aimed:

- a) to discuss the history and content of the andəmta and its school tradition,
- b) to demonstrate its significance for the study of many sciences such as philology, history, linguistics and sociology.
- b) to identify, translate, annotate and comment readings in the andəmta commentary corpus which carry biological thoughts regarding human beings, plants and animals.
- c) to demonstrate that the scholars of the andəmta had significant knowledge of human, plant and animal biology.

1.4 Significance of the Study

The researcher believes that the outcome of the study will help;

1. this study may also be of some help for the researchers to undertake extensive studies on the andəmta and its connection with the sciences.
2. to counteract the idea that the andəmta commentaries have only spiritual value, by demonstrating that they also have scientific values.

3. Many People think that the andāmta and science never go together, and they contradict with each other. So the study will help to understand the relation of ancient manuscripts with science and how they go hand in hand without contradiction.
4. The result of the study will also be useful for those who would like to make use of the research for the public.

1.5. Methodology of the Study

In the methodology part the researcher uses the following methodology consulting various sources. It will conduct through the investigation of Biological thoughts as they are enlightened in the Ethiopian Commentary tradition. The secondary sources are based on the relevant scientific books; periodical articles will be consulted as well. The researcher will consult some theological and secular scholars where it is necessary.

1.6 Scope of the Study

This study is mainly focused on the Biological thoughts as they are enlightened in the Ethiopian commentary tradition. There were many disciplines in science that corresponded with the Andāmta Commentary, but the researcher has examined only the Biological ideas.

Biology is a very wide subject, so in this study the areas are limited to human, plant and animal biology.

Chapter Two

2. Review of Related Literature

2.1 The Andemta Commentary Tradition

2.2. Definition

According to Häbtä Maryam Wärqnäḥ, the word 'and' (one) with the suffix of two letters, 'ግ' (mə) and 'ታ' (ta) gives the word *andəmta*; the term given to discourses or interpretations on scriptures. 'And' means "single", has no other following it, whereas 'andəm' means one more, and has another following to it. Therefore, *andəmta* means 'one that has another more'. Ethiopian scholars interpret a single word or sentence with more than one meaning, up to thirteen times, using the term *andəm* for each distinct interpretation instead of saying second or third and so on (Rev 6:2). Hence *andəmta* has become the name for interpretation of scriptures.¹⁰

The word *andəmta* is an Amharic term, so the word has been used ever since Amharic interpretation began. For Ge'ez *andəmta* another term was used. The word *andəm* was never written on commentary books. But a substituting word ቦ (bo) is written, and is read as *andəm* not as ቦ (bo). ቦ (bo) means one more, and it is derived from the Ge'ez interpretative method. But in today's published books of interpretation ቦ (bo) is substituted by *andəm*.¹¹

¹⁰ Häbtä Maryam Wärqnäḥ. 1963. *Təntawi Yä-ityoppäya sər'əatä təmhərt*, 1963 p.214

¹¹ Qəddase Maryam 1:7, Rom 1:1

2.3. History

2.3.1 The *Andämta* Interpretative Schools History

Säyfa Sällse Yohannäs studies¹² showed that, In the Ethiopian Orthodox *Täwähädo* Church there are two known *andämta interpretative* schools these being:

- The Upper House “አይ ቤት”
- The Lower House “ታች ቤት”

These two schools of thought were established at different times. The ‘Upper House *Andämta*’ school of thought, where the original *andämta* interpretations were taught, and the ‘Lower House’ were established later. According to tradition the ‘Lower House’ was organized by Mämhär arat ‘Ayna Esdros in 1716 E.C. Mämähär Esdros was more highly educated than many teachers, having read and thoroughly studied some three hundred holy and divine books of the Church Scholars in his tour of the monasteries of Lake Ṭana, he called a great assembly at Gonder *Lädäta Lämāryam*. At that time he taught many disciples including *Getaw Gälawdewos* and *Şänä Krastos*.¹³

Häbtä Maryam Wärqnäḥ says, mämhär Esdros revised the *andämta* interpretations, and many disciples wanted to study the way of the revised interpretations, but one disciple called *Geta Yonas* was only willing to study interpretations before the revisions, saying ‘We are not born of adultery’. Because of this the interpretations incorporating Mämhär Esdros’ revisions became known as the ‘Lower House’ and the more ancient interpretations taught by the followers of *Geta Yonas* became known as the ‘Upper House’, and this is the reason for the establishment of the two schools. The ‘Upper House’

¹² Säyfa Sällse Yohannäs, *Yä-ityoppya orthodox täwähädo krästyan tarik kä-lädätä Krastos äskä 2000 AD*, (‘The Ethiopian Orthodox *Täwähädo* Church from the Birth of Christ upto 2000 E.C.’) p. 194

¹³ *Ibid* p. 194

interpretations were more widely taught in Goğğgam, and are taught today, although today both schools of interpretation are taught there.¹⁴

2.3.2 The School Tradition of the andəmta

School tradition of the andəmta differs from school to school. But one can discuss the most common process of the teaching learning activity of the Amharic commentary tradition. Before starting lesson different rituals are conducted by the disciples and their instructor. The most frequent ritual is the prayers of wəddase Maryam and anqäšä Bərhan. For example, in the N.T andəmta class, firstly students would come and take their seat. Then the master will come and take his chair and start the lesson after a communal prayer which is lead by himself or a senior disciple usually with a priesthood. The instructor comments a verse at a time which is read to him by one of the students. While interpreting, the instructor may provide as many interpretations as possible according to the days. The disciples go on listening the commentaries silently. At the end, the master gives the chance to ask any question they might have and answer them. Then he closes the session with a prayer. After that the disciples will go out and discuss and recite what they have learnt.

Next the master will clap his hands loud and other groups who learn the Acts of the Apostles or the epistles of St. Paul or any other commentaries like the book of Revelation. Then, the same steps are performed by the master and disciples in all departments. Mean while, the disciples are expected to recite and understand all the andəmta of their master. Not only these, they should also follow their master's way of interpretation, tone and style in their own teaching life after graduation.

¹⁴ Häbtä Maryam Wäraqnäh. 1963. *Təntawi Yä-ityoppya sər'əatä təmhərt*, 1963 pp.214-215.

The learning and teaching process of the O.T andəmta books takes six years; and further to absorb the understandings it takes one more year. In general to master the O.T andəmta books, one needs seven years.

The learning and teaching process of the N.T andəmta books takes five years; and further to absorb the understandings it takes one more year. In general to master the N.T andəmta books, one needs six years.

The learning and teaching process of the Books of Scholars (Mäşəḥafä Liqawənt) andəmta books takes six years; and further to absorb the understandings it takes one more year. In general to master in the Books of Scholars (Mäşəḥafä Liqawənt) andəmta books, one needs seven years.

The learning and teaching process of the andəmta of the three books of the Monks takes three years; and further to absorb the understandings it takes one more year. In general to master in the three books of the Monks andəmta books, one needs four years.

When one masters these books and becomes an expert, he will be given a big title as follows:-

- For the O.T andəmta scholar, upon graduate he will be called 'Mäggabe Bəlu' (custodian of the O.T)
- For the N.T andəmta scholar, upon graduate he will be called 'Mäggabe Haddis' (custodian of the N.T)
- For the books of Scholars (Mäşəḥafä Liqawənt) andəmta scholar, upon graduate he will be called 'Mäggabe ma'əməran'
- For the books of monks (Mäşəḥafä mänəkösət) andəmta scholar, upon graduate he will be called 'Mäggabe məkər'

Roger Cowley's initial studies showed that, the content of the andəmta can be categorized into two Biblical and Patristic books. The category Biblical books themselves are divided into OT and NT while the patristic books, which are authorized by internationally canonized saints i.e. St. John Chrysostom, St.

Cyril etc., are also divided into namely the Books of the Scholars and the Books of the Monks¹⁵.

2.4 Andāmta as a Hot Bed for Many Sciences

Although the primary goal of andāmta is to explain spiritual ideas behind texts, it also serve as a hot bed for many sciences such as history, philology, medicine and biology as it attempts to explain their relations to human's lives.

As a result there are also many insights in andāmta to biological science like human biology, plant biology, and animal biology. Therefore, the study will discuss the above-mentioned points in detail especially regard with to the biological ideas from the andāmta.

2.5 Exegetical and Philological Approach

Throughout the andāmta corpus, a commentary on a particular verse consists normally of three and sometimes two parts¹⁶, namely:

1. The Gə'əz text, known as 'the scholars' text', regarded as authoritative, although sometimes we find texts which are different from other Gə'əz Bible texts. This may also contain variant readings, and notes from the margins of manuscript sources. The andāmta gives alternative titles and headings, corrections to the text, and has its own subdivisions of the text.
2. One or more idiomatic Amharic translations of the text, different versions emphasizing important meaning.
3. More detailed explanations, illustrative stories, and quotations. This part is sometimes omitted, or may be contained in more extensive andāmta collected together after several associated verses.

The following is a brief example from the andāmta on Num. 21:9

¹⁵ Cowley, (1983), "The Traditional Interpretation of the Apocalypse of John in the Ethiopian Orthodox Church" p.6

¹⁶ Ibid pp.3-5

(Ga'az) “ወገብረ ሙሴ አርዌ ምድር ዘብርት ወአቀሞ ገብ ይትኤመሩ ወእምክመ ነሰኮ አርዌ ምድር ለሰብእ ይኔጸሮ ለዝክቱ አርዌ ዘብርት ወየሐዩ”

(And Moses made a serpent out of bronze and raised it up to be shown as a sign and whenever a serpent bit a man he would look to that bronze serpent and he would be saved.)

(Amharic) ሙሴም አርዌ ብርቱን ሠርቶ በሚታይበት ቦታ ሰቀለው። ነዘሩ እባብ ሰውን በነደፈው ጊዜም ያን የብርቱን እባብ አይቶ ይድን ነበር፤ ይኸውም ምሳሌ ነው። አርዌ ምድር የዲያብሎስ፣ አርዌ ብርት የጌታ፣ በደማዊት ነፍስ ሕያው የሚሆን አርዌ ምድር የነደፋቸውን አርዌ ብርት እንዳዳናቸው በባሕርዩ ሕያው የሚሆን ዲያብሎስ የጎዳቸውን ጌታም በሰውነቱ ሐማሚ መዋቱ ሁኖ ለማዳኑ ምሳሌ

(Moses made a serpent of bronze and raised it up in a place where it could be seen, whenever a snake bit a man he would look at that serpent and would be saved; this is a symbol: the snake is for the devil; the bronze serpent for the Lord; with a living animal the snake which bit them the bronze serpent would save them; the devil who is living by nature and who harmed them, the Lord suffered and died in his body for salvation, this is a symbol.

አንድም “መርዝ ያለው አርዌ ምድር የጎዳቸውን አርዌ ብርት እንዳዳናቸው የኃጢአት መርዝ ያለው ዲያብሎስ የጎዳቸውን ንጹሐ ባሕርይ ጌታ የማዳኑ ምሳሌ”

A: (as the bronze serpent saved those who were hurt by the snake with a poison, the Lord who is pure in nature salivated those hurt by Devil with a poison of sin.)

አንድም “አርዌ ምድር የሕዳም፣ አርዌ ብርት የጌታ፣ አርዌ ምድር በመርዙ የጎዳቸውን አርዌ ብርት እንዳዳናቸው ሕዳም በኃጢአቱ የጎዳቸውን ጌታ በቸርነቱ የማዳኑ ምሳሌ”

A: (the snake [is a symbol] of Adam; the bronze serpent [is a symbol] of the Lord; As the bronze saved those who were hurt by the poison of the snake, it is the symbol that Lord, in his generosity, salivated those who were hunted by the sin of Adam.)

አንድም “ብርት ጸሩይ ነው ጌታም ጸሩየ ባሕርይ ነውና”

A: (bronze is pure, and the nature of the Lord is pure)

አንድም “ብርት ቀይ ነው ጌታም ሥጋውን ቆርሶ ደሙን አፍስሶ ዓለምን አድኗልና”

A: (bronze is red, for the Lord having sacrificed his flesh, and poured his blood, has saved the world.)

አንድም ብርት ድምፁ ከሩቅ ይሰማል የጌታም ሕማሙ ሞቱ ጸንፍ እስከ ጸንፍ ተሰምቷልና

A: (The sound of bronze is heard from far away, for the suffering and death of the Lord from one border to another is heard.)

“አንድም ብርት ከቆላም ከደጋም ይለቀማል ጌታም ከሕዝብ ከአሕዛብ ይወለዳልና ድምፁን ሰምተው መልኩን አይተው የዳኑ የሐዋርያት ድምፁን ብቻ ሰምተው የዳኑ እስከ ዕለተ ምጽኃት የሚነሱ ምእመናን ምሳሌ”

A: (bronze is found in hot lowlands and in temperate highland; the Lord will beget children from the Nation (the Jews) and from the Nations (the Gentiles) and the Apostles are those who were saved having heard his voice and seen his face; those saved having just heard his voice are the believers who are raised up until the day of his coming.)

The exegetical technique used in the *andämta* corpus is explained in the introduction to the commentary on the Pauline Epistles. The interpretation opens with a colloquial Amharic translation, often with alternatives that may

reflect textual variations. Other techniques employed include: grammatical analysis including the discussion of alternative punctuation; clarification of ambiguous or unclear Gə‘əz words; illustrate homophones or situations where gemmination of a consonant alters the meaning; elucidation of the meaning through poetical rearrangement; the supplying of words implied in the text; the identification of other biblical passages with similar meaning; the explanation of important details that might not be understood well by the listener; the retelling of related biblical passages often employing diverse authorities; and the explanation of the mystery or hidden meaning of the text, often utilizing the classical Ethiopic ‘wax and gold’ method for conveying meaning¹⁷.

2.5.1 Linguistics

Roger Cowley’s studies showed that the text of the *andəmta* contains various linguistic, historical and social features that are in themselves significant for research. Of linguistic interest is that the Amharic of the *andəmta* is archaic, with some obsolete words, and unusual sentence structure, and grammatical constructions. The teaching methodology in the *andəmta* schools has preserved the archaic uses within the tradition, and contemporary teachers use this form of Amharic in instructing their students¹⁸. The language forms employed in the *andəmta* are a fertile ground for the study of archaic Amharic. Some examples of unusual forms are:

1. “...ዛሬስ አያ የያዕቆብ ልጆች ጠገቡና የጋለሞታዋ ቤት ወዴት ነው እያሉ ይዞራሉ ኸነ ይበሉኝ...”¹⁹, here the use of ‘*aya*’ as an exclamation, and the use of *honä* with the imperfect is unusual,
2. “ያይወልድሽን አባት ያዕቆብን አቡነ ማለትሽ ሐሰትሽ”²⁰, here the relative verb construction is archaic, not using the modern ‘*yämay....*’, and the Gə‘əz

¹⁷ Ralph Lee, 2011, *Symbolic Interpretations in Ethiopic and Ephremic Literature* p.53

¹⁸ Cowley, 1983, “The Traditional Interpretation of the Apocalypse of John in the Ethiopian Orthodox Church” pp.24-25

¹⁹ Mat 1:3

²⁰ John 4:18

possessive suffix is used ‘*abunä*’ in place of ‘*abataččəhan*’, and the lack of use of the ‘*n*’ direct object suffix. The sentence is also in abbreviated form, lacking ‘*näw*’.

3. “...ከአባታችን ከአብርሃም አንተ ትበልጣለህን እርሱ እንኳ የሞተ...”²¹, here the use of the simple relative verb rather than the perfect is unusual, ‘*ymota*’ he who is dead instead of ‘*motwal*’, he died.
4. “...እኛታ ዕውራግ”²², the suffix ‘*ta*’ is no longer used.
5. “...ተአምራትስ ይህታ...”²³, again the ‘*ta*’ suffix does not reflect contemporary usage.
6. “...ግንባሩን እንደመቱት ውሻ አይግባኝን ወጥቶ ሄዶአል”²⁴ ‘*aygbagnun*’ meaning ‘behind’ is not contemporary.
7. “እንቢላችሁ ልጆቹ እንቢላችሁ”²⁵ the ‘*ale*’ verb is contracted from ‘*Enbi alačču*’

Additionally, the *andəmta* doesn’t only contain ‘*qəne*’, but the interpretations are sometimes presented in two or three syllable metrical form, for example:

1. “ፋሲል ይንገሥ አሚን ይመለስ” (let Fasil rule, and the faith returns)²⁶
2. “ሲሰበር ይሰንጠር ሲረዝግ ይጠር” (when something breaks it splinters)²⁷
3. “ብዙ ቢያወጥ ይዘነጥ ብዙ ቢተቹ ይሰላቹ”, (when someone talks a lot, he will be forgotten, with someone criticizes much, one will be tired.)²⁸
4. “ሲሶ ለነጋሽ ሲሶ ለቀዳሽ ሲሶ ለአንጋሽ”, (one third is for the king, one third is for the priest, a third is for the people.)²⁹
5. “ከቈረቦች አፈረሰች ከመነኩሰች ባሰች”, (after taking Holy Communion she did evil things, after become a monastic she did more evil things.)³⁰

²¹ Ibid 8:52

²² Ibid 9:51

²³ Acts 6:8

²⁴ Qeddase Basələyos p.351

²⁵ Psalm *andəmta* preface, p.2

²⁶ Fəṯḥa nəgāst *andəmta* p.2

²⁷ Qəddase Mariam p.14

²⁸ Ibid p.14

²⁹ Ibid p. 50

³⁰ Psalm *andəmta* preface, p.5

6. “የሚጠፋ ከተማ ነጋሪት ቢመቱበት አይሰማ” (the destroyed city doesn’t even hear the sound of the drum.)³¹
7. “ያረዝሹ ታስታውቅ ከደረት ትታጠቅ”, (a pregnant woman knows her condition; she is bound from her chest downwards.)³²

The andämta contain archaic spellings and obsolete forms of words; the use of አለ as a multiplier instead of the modern እን; the presence of the interrogative ን not at the end of a sentence; the negative form አይደለም with object suffixes; the use of ዎ as a third person singular polite suffix; the common use of the አስተ prefix; the use of gerund or the imperfect at the end of a sentence; the use of ስንት with no main verb; and various other subtle differences from contemporary Amharic. These all suggest that the Amharic has not been updated stylistically since the corpus was written down.

2.5.2 History

As Cowley mentioned³³, all of the emperors named in the andämta date from before 1533 EC., except to a reference to Tewodros II in the Ezekiel commentary³⁴, which is known to have been updated at the turn of the 19th/20th century. Those referred to are primarily those of the Gondär Kingdom. There are other historical references, but they are often difficult to date clearly. The emperors named in the andämta Commentary are the following: up to 1553 E.C:- Bazen³⁵, Abrha and Asbha³⁶, Yäkunno Amlak³⁷, Yesḥaq³⁸, Bä’ädä

³¹ Ibid p.7

³² Ibid p.10

³³ ³³ Cowley, 1983, “The Traditional Interpretation of the Apocalypse of John in the Ethiopian Orthodox Church” pp.24-25

³⁴ Ez 29:11

³⁵ Ps 71:10

³⁶ Rom. int

³⁷ darsan of Yoḥannäs Afäwäraq p.13

³⁸ Eccell. 30:18

Maryam³⁹, Na'od⁴⁰, Ləbnä Dəngəl⁴¹. During the Gondar kingdom- Särşä Dəngəl,⁴² Zädəngəl⁴³, Susənyos⁴⁴, Fasil⁴⁵, Yohannəs I,⁴⁶ Iyasu I,⁴⁷ Täklä

Haymanot I,⁴⁸ Tewoflos,⁴⁹ Yostos,⁵⁰ Bäkaffa,⁵¹ Iyasu II,⁵² Täklä Haymanot II,⁵³ Sälomon⁵⁴. As Cowley mentioned there appear to be no reference to later emperors, except to Tewodros II in Andəmta commentary psalms introduction and Ezra 29:11.⁵⁵

The kings mentioned in the explanations, first King Bazen, was the 68th king after the Queen of Sheba, as referred to in the Psalms andəmta:

*“ለጌታ ባቤን ንጉሠ ኢትዮጵያ ይገብርለታል፤ ወስመ ፲፱፻ ዓመተ መንግሥቱ
ለባቤን ተወልዶ እግዚእነ እንዲል”*

(let the tax be paid to the Lord Bazen, King of Ethiopia, as it says in the 18th year of the rule of Bazen our Lord was born’.)⁵⁶

The andəmta not only describes Ethiopian history, but also that of other countries, for instance Rome’s foundation by twins is compared to that of Ethiopia in the Romans andəmta.

*“ሮም ከማየ አይህ አስቀድሞ አርስጣጣል ትባል ነበር፤ ከማየ አይህም በኋላ ውሉደ
አይተም ሰፍረውባት በአይተም አይተም ተብላለች፤ ኋላም ሮምሎስ ፍማሎስ*

³⁹ Tägsaş of Yoḥannəs afäwäraq (p. 110-11)

⁴⁰ Ps 11:2

⁴¹ Ez 29:11

⁴² Ps. 150:4, Rev. 14:20, Ex. 2:5

⁴³ Rev. int., Tägsaş of Yoḥannəs Afäwäraq (p. 110-11)

⁴⁴ Ibid p113

⁴⁵ Fəṯḥa nägäst, (Law of kings), p.291, Haymanotä abäw Epiphanius, Cyril p, Qəddase p.271

⁴⁶ Haymanotä abäw Epiphanius, Qəddase p.271

⁴⁷ Tägsaş of Yoḥannəs Afäwäraq 20, ibid

⁴⁸ Ibid pp.110-11

⁴⁹ ibid

⁵⁰ ibid

⁵¹ 1 Kgs.14:28, Ps. 2:11, Ecclus. 9: 13

⁵² Estəgb’əuə

⁵³ Fəṯḥa nägäst p. 256

⁵⁴ Ibid

⁵⁵ Cowley, 1983, “The Traditional Interpretation of the Apocalypse of John in the Ethiopian Orthodox Church” p.27

⁵⁶ Ps. 71:10

የሚባሉ ኹለት ወንድማማቾች ነግሠውባት በሮምሎስ ሮም በሩማሎስ ሮሜ ሮምያ ተባለሉት በሀገራችን ኹለት ወንድማማቾች አብርሃ ወአጽብሐ ነግሠው እንደነበረ”

(Rome before the Flood was called ‘Arşataali’, and after the Flood the children of Käytäm settled in there, and the city was called Käytem, after the name the twins Romulus and Remus ruled there, it was called Rome after the name Romulus, and Romey and Romya afer Remus, just as in the twins Abrha and Atsbha ruled our country.)⁵⁷

In Ethiopia Aşe Na’od ruled from 1487-1500 E.C, This king was known by his spiritual life, and the scholars calculate his death as the 7000th year of creation, and they wrote a hymn in his honor. Especially he prayed that he would not see the 8000th year, as mentioned in the Psalms andämta.

“አጼ ናኦድ የሰምንተኛው ሺሕ ነገር ተገልጸላቸው ከጊዜው አታድርሰኝ ከእህል ከውሃው አታቅምሰኝ እያሉ ይጸልዩ ነበር፤ ይኸውም ሊታወቅ ሰምንተኛው ሺሕ በመስከረም ሊገባ በነሐሴ ሰባት ቀን አርፎዋል”

(The understanding of the 8000th year (being the end of the world), was revealed to Aşe Na’od and was praying saying, ‘may you prevent me from reaching the time and drink its water, For this to be known, the 8000th year will start in Mäskäräm (September), he died on the 7th of Nähase (August))⁵⁸

We also find the history of the Queen of Sheba and King Solomon as referred to in the Gospel andämta:

“የሰሎሞንን ጥበብ እያመጣ የሚነግራት ታምሪን የሚባል ነጋዴ ወዳጅ ነበራት ሄጄ ልረዳው ብላ 120 መክሊተ ወርቅ ተንክራ ዘኢትዮጵያ ይለዋል፤ ሱል በወዳያ የሚይገኝ በኛ አገር የሚገኝ ዝባድ ገጸ በረከት ይህ ሄደች፤ ስትሄድም

⁵⁷ Rom andämta preface, p.12
⁵⁸Ps. 71:10

እያዘራች ሄዳለች ስትመለስ ስንቅ ሊሆናት፤ አገር እንዳትዘርፍ ከእግሯ እንደ ምዳቋ ቀንድም እንደ አህያ ሰኮናም ቢሉ ነበረባት፤ ካደባባይ ስትደርስ ብላቴና አይቶ ገብቶ ንጉሥ በዘመንህ የማይመጣ የለም እንዲህ ያለች ሴት መጥታለች አለው ግቢ በላት አለው ስትገባ ከደጃ ወድቆ የሚኖር ግንድ ነበር ብትራመደው ወልቆ ወደቀላት ርስዋን አይቶ በዐይነ መከት አየው። ንጉሥ ሳላይ አልነገርኩህም ጠይቀህ ቅጣኝ አለ፤ ቢጠይቃት እውነቱ ነው ነበረብኝ። ነገር ግን ከደጃህ የወደቀ ገባሬ ተአምራት ዕፅ አለ ርሱ ፈወሰኝ እንጂ አለችው እርሷ አንድ ብር እርሱ አንድ ብር በኋላ 28 ነገሥታት ነግሠዋል 28 ብር ይለብጡብታል፤ ወርቁን ለይሁዳ ሰጥተው በዕንጨት ጌታን ስቅለውታል ብዙ እንቆቅልሽ ጠይቃለች ተሰውሮት የቀረ ያልተረገመላት የለም። እሱም ከዚያ ድረስ መጥታ ሥርዐተ መንግሥት እናሳያት እንጂ ብሎ እሱዋ ሁሉን ከምታይበት እሱዋ ከምትታይበት ቦታ አኑሮ ሥርዐተ መንግሥት አሳያት ከዚህ በኋላ በጄ በዩኝ አላት የሀገራችን መንግሥት በድንግልና ነው አይሆንም አለችው እንኳይስ አንችም የኔን ገንዘብ አልነካም ብለሽ ማዬ አላት። ማለች የሚያስጠማ ምግብ ሰጥቶ የምትጠጣውን ነግታ። ሰሎሞን ሲተኛ እንደ አንበሳ ዐይኑን ያፈጣል ሲነቃ ይጨፍናል ተኝቶ ሳለ ያየኛል ብላ ዝም ብላለች ነቅቶ ሳለ አሁንስ አያየኝም ተኝቷል ብላ በቧንቧ ያገባው ውሃ አለ ቀድታ ልትጠጣ መንቀል ይዛ ቀረበች። እጅዋን ያዛት አንቺ ከኔ ገንዘብ ላትነክ እኔም ያንቺን ገንዘብ ላልነካ መሐላ አልነበረምን? አላት። ይህማ ውሃ አይደለም? አለችው ከውሃ የበለጠ አለን አላት ያሁኑን ተወኝ ፈቃድህን ትፈጽማለህ አለችው ተገናኙ ሚኒልክ ተፀነሰ ወጥታ ስትሄድ ዐምደ ብርሃን ተከትሏት ሲሄድ አይቶ መንግሥት ወደ ኢትዮጵያ ሄደች ብሎ ትንቢት ተናግሯል።

(She had a merchant friend called Tamrin who used to tell her about the Wisdom of Solomon. Finally she said, 'I went to comprehend, she carried 120 gold coins of the Ethiopian standard, pearls, perfume that is found only in our country as gift and went; when she went she planted seeds, so that she would have provisions on her return, and so that the city would not be pillaged. Her leg was diseased, and appeared like the horn of an

antelope, or like the hoof of a donkey. When she arrived in the court a young servant saw her and went inside and said, 'O King! A woman, such as will never appear again in our generation has come'. He said, 'Tell her to enter'. When she entered there was a fallen tree at the gate, and when she passed that tree the diseased part of her leg fell, Solomon saw her, and the young man looked on in anger, saying, 'O King! Don't punish me for what I have not told you! Ask her!' When he asked her, 'He is right, I had that disease, however, it fell from me at your gate, there is a miraculous tree there, and it healed me!' she said to him. She put one piece of silver, as did he, and the 28 kings after him also each put one piece of silver, and the money was given to Judas, and Christ was crucified on the tree. She asked him many riddles, and nothing was hidden from him and there was nothing that he could not interpret. He said, 'she came from a place far away, let us show her the precepts of the kingdom', he put her in a place where she can see everything that could be seen, and everyone saw her, and he showed her the precepts of the kingdom. After this he asked her, 'let's sleep together!', but she replied, 'our kingdom is ruled in virginity, so it shall not be!' she said to him. He said, 'swear to me that you will not touch my property, and she did so. He gave her a tasty food, but denied her any drink. When Solomon went to sleep, he opened his eyes, like a lion. She thought, 'while he is awake he closes his eyes, but as he sleeps he sees me!', and was silent, 'when he is awake now he will not see me.' She thought, 'now he sleeps, there is water in the pipe that he put there' and she took a cup to draw water to drink. He grasped her hand, and said, 'Is there not an oath between us that you will not touch my property, and neither will I touch yours?' She said, 'isn't this just water?' He asked her, 'is there anything more precious than water?' She said, 'Leave us now and you can

fulfill your will', and they slept together, and she conceived Menelik. When she left, a pillar of light followed her. As it went, he saw and prophesied, 'the kingdom had passed to Ethiopia⁵⁹).

In our country's history those who fought on military campaigns, and gained victories are compared with those victories in the time of the Judges and Kings of Israel, for instance in the Psalms and *amta*:

“ነገሥታቱ የሚወጡበት የሚገቡበት ጊዜ ደረሰ ስለምን ይወጡ ነበር ቢሉ መንግሥት ለማዳረስ የሀገራችን ነገሥታት መንግሥት ለማዳረስ አክሱም ይኼዱ አንደነበር ሰራዊት አንዳይራብ ደዌ አንዳይናኝ ጠላት አንዳይሠለጥንባቸው በግንቦት በሰኔ ዘምተው በመስከረም በጥቅምት ይመለሳሉ በሀገራችን ነገሥታቱ በመስከረም በጥቅምት ዘምተው በግንቦት በሰኔ አንዳይመለሱ”

(The time for the expulsion of the kings had arrived. If it is asked why, 'to prevent the military from hunger, disease, and enemy, they march in May and June and return in September and October. As the kings march in September and October and return in May and June.)⁶⁰

2.5.3 Sociology/Culture

The general outlooks, and descriptions of everyday life, are those of rural, agricultural northern Ethiopia, with specific mentions of the times of year for sowing particular seeds, the land tenure system reflecting that of Bägemmædr rather than Eritrea. The most common characters are the priest, the farmer, and the trader, characteristic occupations are ploughing, digging, copying, and bookbinding, etc.

⁵⁹ Matt 12:41

⁶⁰ Ps 6:1

In the andəmta we find many customs and cultures from the various regions of our country. From this we can understand that the customs and culture of different regions of the time. As these are studied, we can learn many important things from the andəmta, for instance, in our country's culture, people eat many foods, amongst these raw meat is eaten, but when it is eaten it is not easily digested, and so the traditional drink called 'täḅḅ' is drunk with it. This traditional drink was also drunk by the Israelites when they ate the Passover bread, and they are compared in the andəmta,

“በዚያ ወራት የሚበሉት ቁጣ ነውና እንዲሁ እንዲበትንላቸው”

‘For they eat bread during that month, [they drink it] so that it can digest [their food] like ‘Aräqe’.⁶¹

In the rural areas, the different kinds of cultural food and drink that the farmers consume during the rainy and dry seasons is explained in the andəmta:

“የክረምት ገበሬ ሊት ሲወጣ ምሳ ሳይበላ ይወጣል፤ ቀን ከዋለበት ከውሃ ላይ ቁም ክላይ ውሃ ሲወርድበት ይውላል፤ ማታም በተመለሰ ጊዜ ምግብ ተዘጋጅቶ አይቀርብለትም ጎመን ጠምቆ ያድራል፤ የበጋ ገበሬ ሊት ሲወጣ ምሳውን በልቶ ይወጣል፤ ከዋለበትም እሸቱን እንኩቸውን ሲበላ ይውላል፤ ማታም በተመለሰ ጊዜ ምግብ ተዘጋጅቶ ይቆያል፤ እንጅራው በሌማት ጠላው በማቶት”

(The farmer during the rainy season, goes out in the morning without eating. He spends the day standing on water, and with water falling on him. When he returns at night, he doesn't get any food prepared for him, and eats washed cabbage, and sleeps. In the dry season, he goes out having eaten breakfast. He spends the day eating fruits and grains. When he comes home in the

⁶¹Matt.26:25

evening, prepared food waits for him, he eats Enjera from a plate, and drinks tälla with a cup.)⁶²

In Ethiopian customs, what the kings who ruled before the time of Emperor Tewodros did is explained in the andämta. But how the customs changed after Emperor Tewodros is explained in the Psalms andämta,

*“የቀደመ ነገሥታት የበሉትን በልተው የተረፋቸውን ክህዘቶች ይጥሉ ነበር
ይህም እስከ ዐፄ ቴዎድሮስ ሲያያዝ መጥቶ ነበር በርሳቸው ጊዜ ቀርቷል”*

(The former kings eat their food, and their left-over was thrown into a pit, and this was continued until the time of Emperor Tewodros, and this ceased during his time.)⁶³

In the andämta we find the tradition of swimming during the Gondärine period intensively discussed in the andämta. The following is an example:

*“መንግሥት በጎርጎራ ሳለ ያጤ መለክ ሰገድ ልጆች ውሃ ዋና ይማሩ
እንደነበር”*

(When the government was at Gorgora, Aše Mälke Sägäd’s children used to learn how to swim⁶⁴)

In this chapter, the researcher has presented how andämta became the hot bed of many sciences like linguistic, sociology, history. The researcher presents, biological thoughts related with human, animal, and plants in the following chapter.

⁶² Jn 4:37

⁶³ Ps. andämta preface p. 9

⁶⁴ Acts 7:21

Chapter Three

3.1 Human Biology

Human Biology is an interdisciplinary area of study that examines humans through the influence and interplay of many diverse fields such as genetics, evolution, physiology, epidemiology, ecology, nutrition, population genetics and sociocultural influences. It is closely related to biological anthropology and other biological fields⁶⁵.

In the andämta commentaries are different biological discussions pertinent to human beings. Conception is one of these discussions. The question is asked as to why do not walk soon after they are born while animals can. The following quotation from the Genesis andemta gives a detailed discussion of sexual relations:

“ሰው በተወለደ ጊዜ ከናቱ ማሕፀን እንደወጣ ፈጥኖ አለመሄዱ እንስሳት በተወለዱ ጊዜ ፈጥነው መሄዳቸው ስለምን ነው ቢሉ የሰው ዘኛ ሲዘራ ተራክቦ ሲያደርጉ በመኝታ ነውና ስለዚህ፤ እንስሳት በተወለዱ ጊዜ ፈጥነው መሄዳቸው ዘኛ ሲዘራ ተራክቦ ሲያደርጉ ቆመው ነውና ስለዚህ ነው”

(If enquired as to why man cannot walk soon after he is born, [but] animals walk quickly, [if is because] men have procreate sleeping [while] animals standing.)⁶⁶

This demonstrates that the scholars who wrote the andämta had a broad knowledge about human procreation and the process of conception.

Scientists estimate 100 trillion microbes consisting of bacteria, fungi and other entities, are contained in niches within humans⁶⁷. Many of them have evolved as ‘colonies of creatures’ that their lives are so inseparably intertwined that

⁶⁵ [Http// www. Ehow.com](http://www.Ehow.com), ehow, hobbies and Science, Human biology-Wikipedia, the free encyclopedia

⁶⁶ Mersha Alehegne, 2011. p. 409

⁶⁷ Mekuria Lakew, Characterization of novel bioactive compounds of plant, algae and microbial origin for vaccines, diagnostic and treatment of infectious and non-infectious diseases p.2

they cannot live without each other. Very few of them by different means, defy the immune system and cause diseases that put human survival as at stake.

Because scientists are able to speak about micro-organisms and their causing disease, the andəmta also, in the following quotation, discusses how they hurt our health, and relates it to the curse of Adam;

“እሾህ አሜክላ ይብቀልብህ” አለው እንዲህ ባለው ጊዜ በደህና ገላ ኃጢአት በተሠራ ጊዜ ዋጣ፣ ቁጥኝ፣ ችፍሬ፣ ጎርምጥ እንዲወጣ በደህና ዕንጨት ሁሉ እሾህ ኮሽሽላ ወጥቶበታል። አንድም እሾህ አሜክላ ያለው ኮሶ፣ ወስፋት በሆድ ውስጥ ያሉ ተዋህሲያን ናቸው። አንድም ፍትወታት ኅጣውእ ይሰልጥኑብህ ሲል ነው”

(Thorns and thistles it shall bring forth against you, it says. When it says thus, sin was performed with a healthy body so skin disease, syphilis, eczema, sores were produced, with all healthy trees, thorns and thorny plant came out to harm them. Andəm The one who says thistles and thorns, those whom have *koso* or other worms in their stomach. Andəm it means sinful desires will have power over them.)⁶⁸

This, demonstrates the scholars’ knowledge about the cause of various diseases, the understanding of worm infections. Additionally, scientists seek knowledge of microorganisms and their origin, and the andəmta may be of use for them. In general, the andəmta is useful for research in both theology and science.

In the book of Genesis, the text relates that God chose Abraham and his descendants to be a “special” people who were set apart from all other nations. The covenant that God made with Abraham included a physical “sign” that was to be implemented in all future generations of Abraham’s descendants. And God specifically directed Abraham to circumcise newborn males on the

⁶⁸ Gen 1:18

eighth day. Regarding why circumcision is performed on the eighth day, Kyle (2009) stated “in 1935, Professor H. Dam proposed the name “vitamin K” for the factor in foods that helped prevent hemorrhaging in baby chicks. We now know vitamin K is responsible for the production (in the liver) of the element known as prothrombin. If vitamin K is deficient, there will be a prothrombin deficiency and hemorrhaging may occur. Oddly, it is only on the fifth through to the seventh days of the newborn male’s life that vitamin K (produced by bacteria in the intestinal tract) is present in adequate quantities. Vitamin K, coupled with prothrombin, causes blood coagulation, which is important in any surgical procedure. Holt and McIntosh, in their classic work, “Holt Pediatrics”, observed that a newborn infant has “peculiar susceptibility to bleeding between the second and fifth days of life.... Hemorrhages at this time, though often inconsequential, are sometimes extensive; they may produce serious damage to internal organs, especially to the brain, and cause death from shock and exsanguinations”.⁶⁹

Similarly, the *andəmta* discusses the health problems that will come if the child is circumcised earlier, on the sixth or seventh day or later, on the ninth or tenth day, in the following quotation:

“ከፍ ብሎ በዘጠኝ በዐሥር ዝቅ ብሎ በስድስት በሰባት ሳይል ስለምን በስምንት ቀን ይገዘር አለ ቢሉ፤ ከፍ ብሎ በዘጠኝ በዐሥር ቀን ቢኾን ጸንቶ ባመመው ነበርና ዝቅ ብሎ በስምስት በስድስት ቢሆን ልህሉህ ሁኖ ደም ባፈታበት ነበርና ስለ ርህራሄ መካከለኛውን ቀን ሲፈልግ በስምንተኛ ቀን ግዘሩ አለ”

(why it said at the eighth day without saying at the ninth or sixth or seventh, the baby could feel the pain if it said the ninth day; had it said at the fifth or sixth day, his skin is very soft that it could bleed

⁶⁹ (Kyle Butt (2009), scientific foreknowledge and Acumen of the Bible, <http://www.apologeticspress.org/articles/article= 2024>)

continuously. He is generous to human beings, he said let you circumcise at the eighth day)⁷⁰

This benefit of circumcision on the eighth day, that is found in the andəmta is similar to recent scientific findings, and demonstrates the andəmta's use for scientific theories.

Scientists have identified many symptoms that indicate the state conception Of a women, even before the physical signs are apparent. These include the ceasing of menstruation, breast swelling and tenderness and change in color, abdominal cramps and bloating, food cravings, fatigue and tiredness, elevated body temperature, nausea and vomiting, frequent urination, general darkening of the skin, stress, and headaches.

The andəmta discusses the variety of symptoms of pregnancy in the different parts of the body, especially how wise and intelligent women know that they have conceived through these symptoms, in the following quotation:

“በልግኛ ሴቶች ሲፀገሱ ያውቁታል፤ ግራ ቀኝ ከላሊታቸው ይጮኻል፤ ጡታቸው ይጠቁራል፤ ከንፈራቸው ያራል፤ ጸቅ ጸቅ ያሰኛቸዋልና”

(Intelligent women know when they have conceived. Their kidneys make a noise on both sides; their breasts gets darker; their lips gets dry and they feel like spitting.)⁷¹

These symptoms of pregnancy that are found in the andəmta demonstrate that the scholars who wrote the andəmta knew the external and internal symptoms of pregnancy. Those symptoms recorded in the andəmta are very similar with contemporary scientific findings. So we may conclude that in the andəmta there are many scientific theories that are worth investigating.

According to Schatz (1973:573) chromosomes and their subdivisions called genes, are the means by which inheritable traits are transmitted. Each person

⁷⁰ Mersha Alehegne, (2011), p. 409

⁷¹ Ps 6:1

has 46 Chromosomes, of which 23 are transmitted to his Child. On average, a brother and sister, and a parent and child have one-half of their chromosomes the same. Similarly, uncle and niece, aunt and nephew, grandparent and grandchild, and half-brother and half-sister have one-quarter of their chromosomes of the same type. Cases where one-eighth of the chromosomes are identical are first cousins, great-uncles and great-nieces, great-aunts and great-nephews, and great-grandparents and great-grandchildren.

Just as the scientists, the andəmta similarly discusses the sexual relations between husband and wife, and the oneness that they form between each other, and how a baby takes characteristics from both parents, as shown in the following quotation:

“ወበእንተዝ የጎድግ ብእሲ አባሁ ወእሞ ወይተልዋ ለብእሲቱ” ሐዋን ከአዳም ስለተገኘች ወንድ አባት እናቱን ትቶ ሚስቱን ተከትሎ ይሄዳል። ቆላ ብትወርድ ቆላ ደጋ ብትወጣ ደጋ። አንድም ወበእንተዝ ፈቃድ ሥጋ ስለተነሣበት የጎድግ እሞ ወይእቲኒ ተጎድግ አባሃ ወንዱ በናቴ ላድርገው አትልም ሴቲቱም በአባቱ ላድርገው አትልም። ወይተልዋ ይትላጸቃ ሲል ነው። ወይታለዋ አባግዐ ቀርማሎስ እንዲል በግብር ከእሷ ጋር አንድ አካል ይሆናሉ። ወይክውኑ ክልኤሆሙ አሐደ ሥጋ ሁለቱ አንድ አካል ይሆናሉ። አንድ ልብስ በመልበስ አንድ ክብር በመውረስ ነው። በግብር ወንድ ቢወለድ ያንተ ነው ሴት ብትወልድ ያንቺ አይባባሉምና። አንድም ክናት ደም ካባት ዘር ተከፍሎ አንድ ሁኖ ይወለዳልና”

(Therefore shall a man leave his father and his mother, and shall cleave unto his wife; Since Eve was taken out of Adam’s rib, a man leaves his father and mother to be joined to his wife. If she goes to the lowland, he follows her; and if she goes to the high land he follows her. A. when his fleshly feeling [desires] is raised, he leaves his mother and she leaves her fathers. The man cannot [possibly] think to do it with his mother. And the women cannot [possibly] think to do it with her father. It is to say that he

follows and clings to her. As it says, and the sheep of Qärmelos are followed by each other. He being joined to her by deed and becomes one)⁷².

The science of genetics has developed in recent years, and has been developed with extensive research on chromosomes, and their influence in determining inherited features, but the *andəmta* briefly and precisely explains some of these aspects, so again we may conclude that the study of the *andəmta* could be useful for research in human biology.

In the world of medicine, many cures are taken from plant and animal products, after extensive research in the laboratory, and are given to us in the form of tablets. From amongst these, animals eat many plants, the bees gain health benefit from what they take from flowers, and also humans find medicine in the form of butter or honey. Also, because plants have many medicinal properties, if we take too much from them in the form of alcoholic drink we may become intoxicated. When we are drunk, the *andəmta* explains why our blood rises to our heads in the following quotation:

“ጌታ ለኖኅ ሺሕ መድኅኒት ነግሮታል፤ ሰባቱን መቶ ቃል በቃል ነግሮታል፤ 300ውን ክቅቤና ክማር ታገኛለህ ብሎታል፤ ሣሬ ጠጅ የሚያሰክረው ክብዙ ዕፀዋት ስለ ተሰበሰበ ነው፤ መጠጥ ሲበሣ ክሳንባ ሥር ደም ይፈላል፤ ሀልገዥ⁷³ የሚባል የ666ቱ ስሮች አበጋዝ አለ፤ ደሙን ይዞ ወደናላ ይወጣል፤ አእምሮ ያለ በናላ ነው፤ በደም ትለወሳለች በዚህ ጊዜ ማገፍ ግድግዳው ዘንዶ መስሎ ይታየዋል ባሕር ልጥለቅ ገደል ልውደቅ ይላልና፤ ክብዙ ዕፀዋት እንደ ተሰበሰበ ብዙ መከራ ያገኘዋል ፍርሃት፣ ረከድ፣ ድንጋጤ፣ ትካዝ፣ ረድኤት ማጣት ናቸው።”

(The Lord told to Noah about 1000 medicines. [Among which] 700 He told him orally. And the rest 300, He told him that he gets from butter and honey. It is because of this that *täggä* gets one drunk for

⁷² Mersha Alehegne, 2011, pp.410-411
⁷³ According to Ethiopian Commentary tradition *hālgāz* is the leader of the 666 veins in the human body,

it is amassed from different plants. With much drink, blood bleeds from the root of the lung. There is *hālgāz* which is the main root among the 666 veins. It goes up to the brain carrying blood. For the brain is in the skull, it gets spoiled with blood. Then when he sees beams in the wall it seems like a serpent, then he wants to dive and sink into the sea, or jump from a high cliff; since it is gathered from many trees, much suffering will come, fear, trembling, shock, trouble, cause the loss of grace.)⁷⁴

Various aspects of the veins, lungs, the brain and the human body in general are mentioned in the *andəmta*, demonstrating the scholars who wrote the *andəmta* knew about these things. Additionally how drunkenness affects human physical health, and also its impacts on spiritual life is explained in various sections of the *andəmta*.

In the *andəmta* commentaries is described how the human body was created with the four elements: fire, air, water, and earth. Our nature of fire is clear from the warmth of our bodies; our nature of water is clear from blood, saliva, and sweat; our nature of air is clear from breathing; our nature of earth is clear from our flesh, nails, hair and bones. These four elements are clear not only from our bodies, but also from our age, which is discussed in the following quotation from the *andəmta*:

“ሰው ከተወለደ ጀምሮ እስከ ሃያ ዓመት ያለው ምግብ ነፋስ ነው ብር ብር እያለ የሚሠራውን አያውቅም። ከሃያ እስከ አርባ ያለው ዘመን ምግብ እሳት ነው ማወቁን ያውቀዋል እየተናደደ ይሠራዋል። ከዐርባ እስከ ስላ ያለው ምግብ ማይ (ውሃ) ነው ሰውነቱ እየደከመ ይኼዳል፤ ተመልሶ የሕፃንነቱን ሥራ ልሥራ ቢል አይቻለውም”

(From the time of his delivery until they are twenty years old, it is the time of wind; while they run to and from they don't know how to work. From twenty to forty, the time of fire, they have

⁷⁴ *kədash Maryam andəmta* 6:92

knowledge but they work with anger. From forty to sixty, the time of 'food of water', their bodies are becoming weary, and they can't go back to doing children's work.)⁷⁵

3.2 Plant Biology

Botany, or plant biology, is the science devoted to the study of plants. Botany, microbiology and zoology together comprise the science of biology.

The Genesis commentary of chapter one- two, interprets the significance of the acts of the creation of plants. A broad discussion of this is found in the Genesis andämta, regarding the creation of plants: who is the creator, from what kinds of things they are created, and when each was created are questions that the andämta seeks to answer.

The andämta commentaries also discuss the different kinds of plants, and on which days they were created, and especially their relation with the four elements, fire, water, wind and earth, and how they were formed from them. Further more they discuss how the trees of Paradise are to be distinguished, as illustrated in the following quotation:

“በዚህም ቀን አራት ፍጥረታትን ፈጠረ፤ ወገብረ አርባዕተ ዘመደ ይላል በከፋሌ በጥፍር የሚላጡ እነ ወይን እነ ትርንጎ በማጭድ የሚታጨዱ አዝርእትን እነ ስንዴን እነ ገብስን በምሣር የሚቆረጡ እነ ዋንዛን እነ ዝግባን አራተኛ ዕፀወ ገነት ናቸው። ምንው ዕፀወ ገነት ከዚህ ዓለም ዕፀወ ልዩ ናቸውን ቢሉ አዎን ልዩ ናቸው ብርሃን አይለያቸውምና። ፍሬያቸውን ቁርጠው ወደ አፍ፣ ወስደውት እስኪመለሱ ድረስ ፍሬ ይተካሉና፤ እነዚህንም ለመሰብሰብ እንዲመቹ አድርጎ አስገኝቷቸዋል፤ እኩሌታው እሸት እኩሌታው ዝርዝር እኩሌታው ደረቅ ሁነው ተገኝተዋል፤ አንድ ጊዜ የደረሱ እንደሆነ ሰው ይቸገራልና፤ እነዚህ ልዩ አይደሉምን ቢሉ ልዩነትስ ልዩ ናቸው ተፈጥሯቸው ግን ከምድር ስለሆነ ነው። እሊህም አራቱ ባሕርያት አለባቸው፤ ይኸውም አስታና አስታ ቢያማቱት እሳት

⁷⁵ Matt. preface no. 13, p. 50

ይወጣዋል። የእሳት ባህርይ እንዳላቸው በዚህ ይታወቃል። የነፋስ ባህርይ እንዳላቸው ለማወቅ በነፋስ ያድጋሉ በነፋስ ይለመልማሉ በነፋስ ያበባሉ በነፋስ ያፈራሉ በነፋስ ይደርቃሉ። እስመ ነፋስ ያልህቆ ወያገዝ፤ ወያየብሶ ለፍሬ እንዲል። የውሃ ባሕርይ እንዳላቸው ለማጠየቅ ቀልጭል ቅንጭብ የወጉት እንደሆነ ደግሞ ይወጣዋል፤ ይህ የውሃ ባሕርይ እንዳላቸው ያጠይቃል፤ ቁርጠ የጣሉት እንደሆነ ይበሰብሳል ይህ የመሬት ባሕርይ እንዳላቸው ያጠይቃል።”

(On this day, He created for created beings, for it says in *Jubilee's*, ‘*And God made four species*’;⁷⁶ the one that are gathered with the hand like the grape, the citron; the ones that are harvested with a sickle, like barley, wheat, the ones that are chopped with an axe like Wanza and Zəgba⁷⁷. The fourth are the trees of paradise. If enquired as whether the trees of paradise are different from the trees of this world, yes, they are different, because they replace their fruit at the moment one cuts it and put it into mouth and returns [the hand] back. He [God] caused these [plants] to be, as they can easily be gathered. They were found half ripe and half dry. Because, if they would be ready [ripe] at the same time, it would be difficult for man [to collect them]. If enquired whether they are different from these, yes, they are different; for they are always bright; and because they replace their fruit at the moment one cuts it and puts it into the mouth and returns [the hand] back. He [God] caused these [plants] to be, as they can easily be gathered. They were found half ripe and half dry. Because, if they would be ready [ripe] at the same time, it would be difficult for man [to collect them]. If enquired whether they are different from these, yes, they are different. But their creation is from the earth. There are four elements in them. If *asta*⁷⁸ is struck against asta, fire comes out;

⁷⁶ Jub. 3:1. 2:6
⁷⁷ Highland trees, *Cordia Africana* and *Podocarpus gracilior*, Cowly p.177
⁷⁸ A plant namely, *Erick arborea*.

this proves that they have the element of fire. To verify that they have the element of wind- they grow by the wind, they get flowered by the wind, they produce fruit, they dry up, as it says, “the wind fattens the fruit.” If “*qwelawl*”⁷⁹ or “*qencheb*”⁸⁰ is pierced, blood comes out; this verifies that they have the element of water. If it is cut and thrown, it gets soaked. This verifies that they have the element of the earth)⁸¹

The various aspects of plants mentioned in *andəmta* of the Genesis, demonstrates that the scholars had a great knowledge of aspects of plant biology. The *andəmta* also indicates from what plants were made, and other aspects that are important for an understanding of plant biology.

Additionally, the *andəmta* commentaries also discuss the relationship between the four elements, the plants, and the four seasons, in the following quotation:

“እነዚህም አራቱ ባሕርያት አራቱን ክፍለ ዘመን ተካፍለው ይመግቡታል፤ አመጋቢት ጳጅ ቀን ጀምሮ እስከ ሰኔ ጳጅ የመሬት ባሕርይ ይመግባል፤ ወርቅ ፀደይ ይለዋል፤ ወርቅ መሬት ማለት ነው ይህ ይታወቅ ዘንድ ድንጋይ ቢፈነቅሉ ጋን ቢያነሡ ቡቃያ ይገኛል”።

(These four elements share the custodianship of the four seasons. From Mäggabit 25 until Säne 25⁸², prevails the element earth that it is called Şädäy⁸³; which means *the period of earth*. For this to be known, one may find seedling under a stone or a big jar)⁸⁴.

“ከሰኔ ጳጅ ቀን ጀምሮ እስከ መስከረም ጳጅ የውሃ ባሕርይ ይመግባል፤ ወርቅ ክረምት ይለዋል ወርቅ ማይ ማለት ነው፤ ይኸ ይታወቅ ዘንድ አፍላጋት ይመላሉ፤ አንቅፅት ይመነጫሉ”

⁷⁹ Cacti, Species of Euphorbia and Opuntia

⁸⁰ Another succulent plant

⁸¹ Mersha Alehegne, 2011, pp.393-394

⁸² About April 3-July 2

⁸³ Spring

⁸⁴ Mersha Alehegne, 2011, p. 394

(From Säne 25 until Mäskäräm 25,⁸⁵ prevails the element water, thus is called kərämt⁸⁶ which means ‘the period of water’. For this to be known rivers are full and the springs bubble up.)⁸⁷

“ከመስከረም ጳጅ እስከ ታሕሣሥ ጳጅ ነፋስ ይመጣል፤ ወርኃ መጸው ይለዋል ወርኃ ነፋስ ማለት ነው፤ ይኸ ይታወቅ ዘንድ አዝርዕት፣ አትክልት ያበባሉ፣ ያፈራሉ”

(From Mäskäräm 25 untill Taḥsas 25,⁸⁸ prevails the element wind that is called *Mäṣaw*⁸⁹. For this to be known, the grains and the plants flower and give fruit [at this time].)⁹⁰

“ከታሕሣሥ ጳጅ ጀምሮ እስከ መጋቢት ጳጅ ቀን እሳት ይመጣል፤ ወርኃ ሐጋይ ይለዋል፤ ወርኃ እሳት ማለት ነው፤ ይኸ ይታወቅ ዘንድ መሬቱ ሁሉ እንደ እሳት ያቃጥላል፤ አዝርዕት አትክልት ይደርቃሉ”

(From Taḥsas 25 until Mägabit 25,⁹¹ prevails fire, thus it is called ḥagay. For this to be known, all the earth burns like fire, and the grains and plants dry up.)⁹²

The four seasons as described in andəmta of the Genesis, demonstrate a broad knowledge of how plants grow, and the effects of the seasons on the growth of plants. Therefore, the andəmta gives practical information on the sowing of seeds.

The andəmta also attributes other significance to some trees and plants that have specific symbolic significance for human beings. Among these are the

⁸⁵ About October 5-January 3

⁸⁶ Summer

⁸⁷ Mersha Alehegne, 2011, p. 394

⁸⁸ About October 5- January 3

⁸⁹ Autumn

⁹⁰ Mersha Alehegne, 2011, p. 394

⁹¹ About January 3-April 3

⁹² Mersha Alehegne, 2011, p. 394

almond tree, the lemon tree, and ‘useless’ trees, which are symbolic of the righteous and sinners, as shown in the following commentary on the Psalms:

“ይኸቺም ዕፅ በሀገራቸው ለውዝ ገውዝ፤ በሀገራችን ሎሚ ትርጉህ ናት ለጊዜው ሲተክሏት፤ ሲያርሟት፤ ሲከተኩቷት ታፅራለች ታግራለች፤ ዕሮ ግሮ ካረሟት በኋላ ግን የለመደችውን ምሳምሷን ካላስቀሩባት በዐሥራ ኸለቱ አውራጎ ከልምላሜ፤ ከጸጌ፤ ከፍሬ አትለይም፤ ጎጥአንስ እንዲኸ አይደለም ምሳሌያቸው እንደ ለውዝ እንደ ገውዝ አይደለም ነፋስ ከምድር ነቅሎ እንደሚጥለው እንደ ዕፅ ከንቱ ምሳሌ ነው እንጂ፤ ዕፅ ከንቱን መሬት አላት በኋላ ግብሯ፤ በነግሀ ትብቅላለች፤ በሠለስት ታብባለች፤ በቀትር ታፈራለች፤ በተሳት ትደርቃለች፤ በሠርክ ኳኩርኳ ብላ ትወድቃለች ከዚህ ደረሰች አትባልም፤ ይኸም ምሳሌ ነው በነግሀ መብቀሏ ሰው የመወለዱ፤ በሠለስት ማበቧ የማደጉ፤ በቀትር ማፍራቷ ሚስት አግብቶ ሕፃናት ወልዶ ቤት ንብረት አበጅቶ የመኖሩ፤ በተሳት መድረቁ የማርጀቱ፤ በሠርክ ተነቃቅላ ወድቃ ከዚህ ደረሰች አለመባሏ ሰው ሙቶ መቃብር ከወረደ በኋላ ከዚህ ደረሰ አይባልምና የዚህ ምሳሌ”

(That tree is the almond tree and it is the nut tree. It is the lemon tree and the citron in our country. When he has planted it and cut it and kept it, without though leaving in it the extra growth to which it has become used, for twelve months, and then it shall not lose its leaves, its flowers, and its fruit. So the sinners are not so – they are not like the almond and the nut. (-but like dust which the wind sweepeth away from the face of the earth)- which the winds blows away from the earth. That is a likeness of a useless tree which the wind uproots and throws down. He called the useless tree dust because of its latter state. In the morning it sprouts, at three o’clock (=9 a.m) it dries up, in the evening it falls with a cracking sound. It is not said of it, “This is where it was.” That is a parable: Like it sprouted in the morning – that is the man when he is born; like it blossomed at three o’clock, he grew; as it brought forth fruit at noon – he shall live after having married a wife and

begotten children and obtained for himself a house and property; as it dried up at nine o'clock he shall become old; and as in the evening it was uprooted and fell and it was not said of it, "This is where it was," - a man, when he is dead and has gone down in the grave, it shall not be said, "This is where he was." It is a parable about that.)⁹³

This mention of the almond tree in the andəmta, shows how the andəmta uses a detailed knowledge of plant biology to develop physical and spiritual symbolism, used for communicating a clear message.

The rich understanding of plant biology found in the andəmta, as discussed above, is complemented by the appreciation of animal biology, discussed in the following section.

3.3 Animal Biology

The Genesis chapters 1 & 2 andəmta interprets the significance of the acts of the creation of animals, the nature of animals, and birds, who created them, and from what, and when they were created, and also gives symbolic spiritual meanings for them, as discussed in the following quotations:-

“በዚህም ቀን ሦስት ፍጥረት ፈጥሯል በልባቸው የሚሳቡ እለ ሸረራትን እለ እንሸላሊትን በእግራቸው የሚሸከረከሩትን እለ ቆቅ እለ ሻግራን በክፋቸው የሚበሩ እለ ጆፍን። ከዚያውም የቀሩ አሉ ወጥተው ወጥተው በረው በረው የሄዱም አሉ። አንድ ጊዜ ወደ ባሕር አንድ ጊዜ ወደ የብስ የሚሉም አሉ። በዚያው ጸንተው የቀሩ በሕገ ክርስትና ጸንተው የሚኖሩ ምእመናን ምሳሌ። ወጥተው ወጥተው በረው በረው የሄዱ ሕገ ክርስትናን ነቅረው በሕገ እርምና የሚኖሩ የአረማውያን ምሳሌ አንድ ጊዜ ወደ ባሕር አንድ ጊዜ ወደ የብስ የሚሉ አንድ ጊዜ ወደ ክርስትና አንድ ጊዜ ወደ ሕገ እርምና የሚሉ ሰዎች ምሳሌ ነው። ይህስ አይደለም ወባረኮሙ ለኩሎሙ በከሐተ፣ በረከት ይላል ብሎ በዚያው ጸንተው የቀሩት በዚህ ዓለም ሚስት አግብተው በሕግ ጸንተው እንግዳ

⁹³ Ps 1:3

አስተናግደው አሥራት በኩራት ቀዳምያት አውጥተው ሥጋውን ደሙን ተቀብለው የሚኖሩ ምእመናን ምሳሌ። አንድ ጊዜ ወደ ባሕር አንድ ጊዜ ወደ የብስ የሚሉ ዕዕባ ገዳም ሲጸናባቸው ወደ ተድላ ዓለም ተድላ ዓለም ሲበላባቸው ወደ ገዳም የሚሉ የምእመናን፤ በረው በረው የሄዱ ጎድግዎ ወመንንዎ ለዝ ዓለም ብለው ይህን ዓለም መንነው ንቀው የሄዱ ባሕታውያን ምሳሌ ነው” ሐሙስ ማታ ለዐርብ አጥቢያ የእንስሳት ወገን የሚኾን ፍጥረታትን ኹሉ ይፈጠሩ አለ፤ በልባቸው የሚሳቡ በእግራቸው የሚሸከረከሩ ፍጥረታትን ኹሉ ምድር ታስገኝ አለ፤ በዚህ ዓለም የሚኖሩ ፍጥረታትን ኹሉ ታስገኝ አለ፤ ጌታ እንስሳትን በየወገናቸው ፈጠረ፤ በክንፋቸው የሚበሩ ፍጥረታትን ፈጠረ፤ በልባቸው የሚሸከረከሩትን በየወገናቸው ፈጠረ የምድር አራዊትንም በየወገናቸው ፈጠረ፤ በዚህ ቀን ሦስት ፍጥረታት ፈጥሯል፤ በልባቸው የሚሳቡ ተንቀሳቃሾችን እንደ ሸረሪት እንደ እንሸላሊት ያሉትን ኹሉ አንድ ወገን ወገን በእግራቸው የሚሸከረከሩት አራዊት እንስሳትን አንድ ወገን በክንፋቸው የሚበሩ አንስርት አዕዋፍን አንድ ወገን አድርጎ ፈጠሯል፤ እነዚህንም መገኛቸው ከየብስ ስለኾነ ተፈጥሯቸው ከአራቱ ባሕርያት ነው”

(On this day he created three created things-ones which crawl on their belly like spider and lizard. The ones which run on their feet like the partridge and guinea fowl and the ones which fly with their wings as [small] birds. [From among these] there are some which have remained there, and there were also some which fly away. There are some which go at one time to dry land and at another to the sea. The ones which remain leaving in the sea are a likeness of the people who stand firm in their chrstian baptism. The ones which fly away are a likeness of the people who have gone off to apostasy. The ones which go to and from, at one time to the sea, and at another to the dry land, are a likeness of the people who go to and from, from being Chrstian to being non-Chrstian, and from being a Muslim to being a Chrstian. If it is objected that it says, “And he blessed the two of them with one blessing,” then it is all

[an example] of good – the sea is a likeness of the people of this world. The ones that remained in the sea are the likeness of the people of the world remains with their wives, receive the Eucharist [with them], are righteous, stay strong keeping the law, welcoming guests, give tithes and first fruits. Those who wander from the sea to the earth are a likeness of people who, when the pleasure of the world weigh upon them go to the privations of a coenobitic life, and when the privations of the monastic life weigh upon them, go back to the pleasures of the world. Those who remain flying are the symbols of the hermits who left [the world], saying ‘*leave this world, and renounce it.*’⁹⁴

The three kinds that are recorded in the *andəmta* means: ones which crawl on their belly, ones which run on their legs, and ones which fly with their wings. What this demonstrates is the scholars classify creatures in a similar way to contemporary science, showing that such wisdom was already part of the traditional scholars’ knowledge.

The *andəmta* gives specific significance to the senses of animals, namely taste, touch, hearing, sight, smell, with particular reference to six animals; the owl, river cat, mule, horse, zebra, and apes, and discusses the peculiar qualities of these in contrast to other animals, as illustrated in the following quotation:

“የፒውም እንስሳዊት ናት በርሷም ማየት ይገኛል፤ ማየት በኸሉም አለ፡-
ይልቁንም ጉጉት የባሕር ድመት በሌሊት ያያሉ”

(She is like an animal, and this is found in her seeing. To see is in all things, the owl, the river cat, sees in the night.)

“መስማት በኸሉም አለ፡- ይልቁንም በቅሎ ንቁሕ ነው”

(Hearing is in all things. For instance, the mule is alert.)

⁹⁴ Mersha Alehegne, 2011, p. 399

“ጣዕም በኸሉም አለ፡- ይልቁንም ፈረስ እክልና አፈር ቢሰጡት የሰጡት እንደኾነ አፈሩን እየተወ እክሉን ይተዋል”

(All things have taste. The horse, if he is given a morsel of food mixed with soil, he leaves the soil and eats the morsel.)

“አጼንዎ (ማሽተት) በኸሉ አለ፡- ይልቁንም የሜዳ አሀያ ከተራራ ላይ ወጥቶ አፍንጫውን ከፈት ከፈት ያደረገ እንደኾነ የሣር የውሃ ጣዕም ይመጣለታል የሦስት ቀን መንገድ ገሥግሦ ሼዶ ሣሩን በልቶ ውሃውን ጠጥቶ ዕለቱን ተመልሶ ከቦታው ገብቶ ያድራል”

(All things have smell. The Zebra climbs a mountain and sniffs, the smell of grass and water comes to him by the wind, and he will rush for three days and he eats the grass and drinks the water, and returns that day to his place to sleep.)

“ገሣሥ (መዳሰስ) በኸሉ አለ፡- ይልቁንም ዝንጀሮ በትር ቁርጦ እስከ መማታት ይደርሳል”

(All things sense touch. For instance apes cut sticks, to the extent of strike.)

The andəmta contains further detailed discussion of how the body movement of animals, and their sexual desire, and their characteristics, how long they live, illustrated by the following quotations:

“ተንሥኦ ነቢር መቀመጥ ያለበት መነሣት ይገኛል ውሻና ድመት በኋላ እግራቸው ይቀመጣሉ በፊት እግራቸው ይቆማሉ”

(Standing and sitting, one who lies down can also stand, dogs and cats sit on their hind legs, and stand on their front legs.)

“ኅድአት በኸሉ አለ ይልቁንም አንበሳ፣ በሬ”

(All things stand, for instance the lion, and the ox.)

“ፍትወት በኹሉም አለ ይልቁንም ሰገኖ። ሰገኖ ታበዘኅ ፍትወተ ወእምከመ ኢፀንሰት ኢትበልዕ ሣዕረ (ሰገኖ ፍትወትን ታበዛለች፤ ካልፀነሰችም ሣርን አትበላም) እንዲል”

(Sexual desire is in all, for instance the ostrich. The ostrich has strong sexual desires, and unless she conceives she does not eat grass.)

“መፀት በኹሉ አለ፡- ይልቁን ግሥላ ታንቆ ይመታባሽ ያሏት እንደኾነ ታንቃ ትሞታለችና”

(Anger is in all things. For instance gesela when you curse her saying, ‘may your father be hanged!’ she will hang herself.)

“ሣሕል (ቸርነት) በኹሉ አለ፡- ይልቁን በዝኖን፤ ዝኖን ሆይ ዝኖን ሆይ ያሉት እንደኾነ መንገድ ይመራል”

(Mercy is in all things, for instance the elephant, when someone say, ‘O Elephant, O Elephant!’ he shows the way.)

“ሕማም በኹሉ አለ፡- ይልቁንም ነብር ዐይን ሕመም ይጸናበታል”

(Sickness is in all things, for instance the tiger suffers strongly in his eyes.)

“ተበቅሎ በኹሉ አለ፡- ይልቁንም ግመል አጥብቆ የመታትን እስከ ሰደሰትና ሰባት ዓመት ድረስ አትረሳውም ሥፍራ ሲመቻት ገደል ገፍታ ትጥለዋለች፤ ባጥ ብላ ትረግጠዋለች”

(Revenge is in all things, the camel, when someone kicks them, they will not forget for six or seven years, and if the place is suitable, she will kick the person into a valley, stand up and tread on them.)

“ተፈሥሐ (ደስታ) በኹሉ አለ፡- ይልቁንም ቀበሮ፤ ድሮ ዘመን ቀበሮ ጣዝማ ያገኘ እንደኾነ ሲዘል ቦታው ይጠፋው ነበር ዛሬ ግን እጁን ጭኖ የሚዘል ኸኗል የጊዜውን ክፋት መናገር ነው”

(Happiness is in all things, the wolf, in ancient times when he found honey, he loses his place because of his jumping with joy, but today first he takes honey and then jumps, which is a sign of the evil times.)

“ሐዘን በኹሉ አለ፡- ይልቁንም ያፊ መንጢጥ ባሏ የሞተ እንደኾነ “ወበጸፍራ ትሴጽር ልሣና” ፊቷን ጸፍታ አንደበቷን ሠንጥቃ ትኖራለች ሌላ መጥቶ ልድረስብሽ ያላት እንደኾነ ያን ታሳዋሰች፤ በመለስ ይመለሳል የተጋፋት እንደኾነ ከወገኖቿ ትጠጋለች ያድኗታል”

(Sadness is in all things, the bird called *māntit*, when her mate dies, she slaps her face and she splits her beak by claw, when another mate comes to mate with her, she shows him that; if he returns he returns but if he forces her, she goes to her family and they keep her.)

“ነዊም (መተኛት) በኹሉ አለ፡- ይልቁን አዞ የያዘውን ከመጣል ይደርሳል”

(Sleeping is in all things, the crocodile will drop the thing that he has when it comes.)

“መንቃት በኹሉ አለ፡- ይልቁንም ቆቅ”

Wakening is in all things, for instance partridge.

“አይወት በኹሉ አለ፡- ይልቁንም ያፊ ፊንክስ የሚባል ያፍ አለ በአምስት መቶ ዓመት ይታደሳል፤ ይኸስ የታወቀ ነው ብሎ እንደ ፎገራ አሞራ ጥርሱ የተላለፈ እንደኾነ ጭሮ መብላት አይኾንለትም፤ ከዕንጨት ከድንጋይም የመታወቅ እንደኾነ ይተካክልለታልና ጭሮ ይበላል”

(Life is in all things, for *Phoenix* bird renews itself every five hundred years, if it is said this is known, the *Fogära Cormorant's* beak crosses over, and can't eat by scratching in the dirt, he hits his beak with wood or a stone, and then the beak becomes even, and he can scratch and eat.)

“ሞት በኸሉ አለ፡- ይልቁንም አይጥና ድንበጥ ጭላት የበልጉ ለመኸር፤ የመኸሩ ለበልግ አይገኙም”⁹⁵

(Death is in all things, the mouse and the little bird and the vulture in the rainy season and the harvesting season are not found [because they are already dead]).

This classification of animals, found in the *andəmta*, shows that the scholars of the *andəmta* had a broad knowledge of animal biology and it is useful as a source of research for the scientific researchers of different animal behaviors in our time.

Furthermore, the *andəmta* gives interpretative significance to the behavior of animals. For instance the creature known as the *ጦ'əm*, which has a long horn, and is difficult to hunt, but can be lured by attractive women. This creature is known to produce beautiful perfume from its body (possibly the musk deer). All these aspects are discussed in the *andəmta*, including the following quotations:

“ቀንድ ካላቸው ከአራዊት ተለይቶ ባንድ ቀንዱ ከሚመካ ከርዳም አድነኝ፤ ርዳም ፅዳም ከርከንድ ይለዋል፤ አካሉ ትንሽ ነው፤ ቀንዱ ሰባ ሰማንያ ክንድ ይኸናል፤ ነፍጥ አይመታውም፤ ቀስት አይወጋውም፤ ላዳኞች አይመችም ሲመጡበት ክትት ብሎ ከቀንዱ ይገባል አንድም በቀንዱ ተተክሎ ይቆማል፤ እንደምን አድርገው ይገድሉታል ቢሉ ዝሙት ይጸናበታል ሴት አስጊጠው ኩለው ቀብተው አርቀው ያቆማሉ፤ ሴቲቱን ሲመለከት በነፍጥ በቀስት መትተው ይገድሉታል፤ ሽታው ነፍስ ከሥጋ የሚለይ ነው ዕለቱን አይቀርቡትም ብዙ ፀሓይ ብዙ ክረምት

⁹⁵ Mäkdəmə Wängel Tərgwame no. 14-15

ካለፈበት በጎላ ቀርበው እያጣፈጡ ይወስዱታል፤ ወዴት ይገኛል ቢሉ ዛሬ እንጂ ነጋዴያን ቁርበተ ክሪም እያሉ የሚያመጡት ርሱ ነው፤ ይኸውም ለገዢ ነገር በዳርዮስ ዐደባባይ ፳ ክንድ ወድቆ ይኖር ነበር”

(The animals with one horn are different, save me from that having one horn, who is proud, the *rə'em*, *ፃጎ'im*, *kärdänd*, his body is small, his horn is seventy or eighty cubits, a gun does not touch him, an arrow does not pierce him, he does not suit the hunter, [because] when the hunters come they disappear into their horns, or they stand on their horn [in the ground]. If it is asked how then do they kill them, they are active in adultery, so if a woman decorates herself, covers herself with ointments, and stands far off, when they see the woman, the hunters can strike them and kill them with a bullet or an arrow. Smell can separate the soul from the flesh, so on that day does not approach him, after much sun and rain, and then they approach him. If it is asked where today do we find this, the merchants bring *qwarbata karim*. In memory of this, in King Darius' square he fell sixty cubits and lived.)⁹⁶

This animal that is mentioned in the *andämta* helps us to know about extinct animals and their names and behaviors moreover it helps the researcher to investigate whether those animals have become extinct or not.

Birds show very different characteristics when they are born. The *andämta* discusses different kinds of birds, for instance the raven, which eats worms for its first forty days, because the parents leave them because of their appearance, clearly discussed in the Psalms *andämta* following:

“ጳጳ (ቁራ) ሲወለድ ፍራጎም መስሎ ይወለዳል እናት አባቱ ምን ጉድ ተወለደብን ብለው ጥለውት ይኼዳሉ፤ ሲርበው ጧ ጧ እያደረገ አፋን ይከፍተዋል፤ ተሐዋስያን ርጥበት ሲሹ ይገባሉ፤ ግጥም አድርጎ ይዞ ይመገባቸዋል፤ አንድም

⁹⁶ Ps 21:21

ተሐዋስያን ሲያልፉ በእስትንፋሱ እየሳበ እስከ ፵ ቀን ድረስ ይመገባቸዋል፤ ከ፵ ቀን በኋላ ጸጉር ያበቅላል፤ በመልክ ይመስላቸዋል ተመልሰው ይረዱታል”
 (When the raven is born he resembles red hot coals, and his mother and father will say what kind of thing has been born to us, and they leave him. When he is hungry he cries out, and opens his mouth, and the worms enter his mouth to find moisture, he closes his mouth and eats them. One says as the worms crawl by, they are attracted by his breathing and he will eat them for forty days. After forty days his feathers are grown, and he resembles his mother and father, and they will return and protect him.)⁹⁷

Whenever we read the andəmta about raven birth and his feeding we can understand that andəmta has been written by scholars with depth knowledge on birds.

The andəmta gives specific significance to the sense of animal, namely taste, touch, hearing, sight, smell, with particular reference to one animal; zebra, and discusses the peculiar quality of these in contrast to other animals, as illustrated in the following quotation:

“ይኸ የበዳ አህያ ቀጥቦት ስህ ነው፤ አራዊት ኸሉ ይጣሉታል ቀን ከቦታው አይወጣም ሌሊት ከተራራ ላይ ወጥቶ ፊቱን ወደ ነፋስ መልሶ አፉን ክፍት ክድን ያደርገዋል፤ “ከልስትዮታት ይቀውሙ ማዕከላ አድባር ወያበቅዉ አንፎሙ መንገሳ ነፋስ” እንዲል መልአኩ የሣር የውሃ መዐዛ አምጥቶ ያሸተዋል የሦስት ቀን መንገድ ኸይ ሣሩን በልቶ ውሃውን ጠጥቶ ተሐዋስያን ሳይወጡ ዕለቱን ከቦታው ገብቶ ያድራል”

(This zebra has thin skin, all animals hate them, so he does not come out in the day time, but during the night he climbs up a mountain, and he turns his face towards the wind, and he opens and closes his nose. The wind brings the smell of grass and water,

⁹⁷ Ps 147:9

and Re.]: Addis Ababa

- ◆ Mersha Alehegne. (2011) The Ethiopian Commentary on the Book of Genesis
Critical Edition and Translation: Harrassowitz Verlag. Wiesbaden.
- ◆ Ralph Lee. (2011). Symbolic Interpretations in Ethiopic and Literature,
Departement Of the Study of Religion School of Oriental and African
studies university: London, PHD unpublished thesis.
- ◆ Säyfä Səllse Yohannəs. (2000) Yä-ityoppya orthodox täwaḥədo krəstyān tarik
kā-ləddätä Krəstos əskä 2000 AD, 'The Ethiopian Orthodox Täwaḥədo
Church from the Birth of Christ upto 2000 E.C', Addis Ababa.
- ◆ Tewoflos, [abba] [ed.], Məzmurä Dawit, (1950 E.C). [AC on Psalms]: Addis
Ababa.
- ◆ Wäldä Rufa'el [Mämḥər] and Gäbrä Mädhən [alaqä] [eds.], (1916). Wängel
qəddus, Addis Ababa.

and he travels three days eats the grass and drinks the water, and before the worms come out he returns to his place.)⁹⁸

Another aspect of the *andəmta* is a further discussion of birds, and in its various explanations of the nature of the Phoenix, for instance why they live five hundred years, and how they renew themselves through fire. Further details of how birds and snakes rejuvenate themselves are also discussed in the following quotation:

“ዖፊ ፊንክስ እርጅና ያገኘው እንደ ኸነ ከቆላ ወርዶ ከሁለት ከሦስት ላይ ዕንጨት ይሰበስባል፤ ተራራ ያህል ሲሆን ከውቅያኖስ አብዶ የሚባል ድኝነት ያለው ጭቃ አለ፤ ከዚያ ኸዶ ተቀብቶ መጥቶ ከተቆለለው ዕንጨት ላይ ኸኖ ኸላት ክንፉን ያማታዋል “ወይወጽዕ እሳት እሚእክለ ክነፊሁ” ይላል እሳት ከክንፉ ወጥቶ ያቃጥለዋል፤ በዚያ ሀገር ዝናብ አይዘንብም በዐምስት መቶ በአምስት መቶ ዘመን ለተሐድሶ ንስር ካፊያ ያካፋል በነጋው ትል ያክል ኸኖ ተፈጥሮ ያድራል፤ በኸላተኛው ቀን ዖፊ ድንቢጥ ያክላል፤ በሦስተኛው ቀን ቡላል ያክል ኸኖ ያድራል፤ በአራተኛው ቀን አካለ መጠን አድርሶ ይኼዳል”

(The Phoenix, when it is old, goes to a warm place gathers wood from two or three places, like a mountain, he takes mud called “*abdo*” from the ocean and covers himself, lies on top of the great pile of wood, and flaps his wings, and the fire comes out from his wings, and burns him. In that place there is no rain, after five hundred years it will rain a little to renew him, on the next day he becomes like a small worm, on the second day like a small bird, and on the third day like a larger bird, and on the fourth day he is full size and he goes away.)

“አንድም ሰውነትኸን እንደ እርከም የሚያድሳት ጌትነቱ ነው (ታሪክ) እርከም እርባ ቀን ከመብል ተከልክሎ አፋን ከደንግያ ላይ ያጠራጠሰው እንደኸነ እንደ ዋንጫ ውልቅ ብሎ ይወድቅለታል ይታደሳል”

⁹⁸ Ps 111:2

(A: that his authority will renew your body like a bird, this bird will not eat for forty days, and he breaks his beak on a stone, like a cup he will fall over, and be renewed.)

“አንድም እንደ እባብ ሰውነትኸን የሚያድሳት ጌትነቱ ነው (ታሪክ) እባብ እርጅና ያገኘው እንደኾነ አርባ ቀን ከምግብ ተከልክሎ በሥቁረተ ዕዕም በሥቁረተ ዕብንም ቢሉ ሲያልፍ ተገፍፎ ይወድቅለታል”

(A: his authority will renew your body like a snake; when a snake becomes old he will not eat for forty days, he will then enter a narrow opening in a tree or stone, and his skin will peel off, and he will be renewed.)⁹⁹

The andəmta describes that Phoenix, Birds and Snake species have a natural mechanism of renewing themselves. This in turn indicates that andəmta has a long time Biological knowledge of animals. Besides the explanation of these natural processes in andəmta helps biologists to have a back ground or initial idea for further researches.

In the andəmta how the animals found in Gomorrah are distinguished in sexual intercourse. The commentary details in the following quotation how the females conceive by taking the sperm of the male in their mouth, and biting off the male genitals, and how they die when they give birth because the opening of their womb is small:

“ትውልደ አራዊተ ምድር ያላት አርዌ ገሞራዊት ናት፤ አፈ ማሕፀኗ ጠባብ ነው፤ ዘሩን ባፏ ትቀበለዋለች፤ አባሉ ዘሩን ቆርጣ ታስቀረዋለች በጽንሰ ጊዜ አባት ይሞታል በሚወለዱበት ጊዜ አፈ ማሕፀኗ ጠባብ ነውና ሥጋዋን በልተው ኸዲን ቀደው ይወጣሉ በዚኽ ጊዜ እናት ትሞታለች”

(The offspring of the creatures of the earth, they are wild, such as the animals found at Gomorrah. The opening of their womb is narrow, so the female takes sperm in her mouth, after sexual

⁹⁹Ps 102:5

intercourse, she bites off the males genitals, so when she conceives the male dies, when she gives birth since the opening of her womb is narrow, her offspring eat her flesh, they tear open her stomach, and at this time the mother dies.)¹⁰⁰

This particular beast mentioned in the *andəmta* which has a narrow womb, can be an evidence of the then scholars and their wide scope knowledge in the nature of animals. Besides, the nature of the beast with its way of reproduction in Gomorrah and the geographical areas of different animals described in *andəmta* shows the forefather' knowledge in Zoology.

The bird called the "*Kāradiyon*" is also discussed in the *andəmta*, and how it makes clear the physical condition of a sick person, turning its head from a sick person, taking the breath from someone who will recover, taking the sickness from them, as clearly discussed in the following quotation:

“ከራድዮን የሚባል ጸዕዳ ወፍ አለ፤ ይዘው ከቤተ መንግሥት ወስደው ያኖሩታል፤ ሰው ሲታመም ወስደው ያቀርቡታል የሚሞት የኾነ እንደኾነ አያየውም ፊቱን ይመልስበታል፤ የሚድን የኾነ እንደኾነ ቀርቦ አፉን ካፋ አድርጎ እስትንፋሱን ይቀበለዋል፤ በእስንፋስ ምክንያት ደዋ ወደ ርሱ ይተላለፋል፤ ነጭ የነበረው ይጠቀራል ብርድ ብርድ ይለዋል ሙቀት ሲሻ ወደ አየር ይወጣል ሙቀት ሲሰማው ከባሕር ይገባል፤ ሦስት መዓልት ሦስት ሌሊት በባሕር ዐድሮ የቀደመ ጠጉሩን መልጦ ይወጣል”

(There is a white bird called *Kāradiyon*, people take them and place them in a palace, when a person is sick, they bring the bird close. If the person is going to die, the bird will turn their face from the sick person; if they are going to recover they will place their mouth in the sick person's mouth, and inhale the sick person's breath. By this breathing the sickness is transferred to the bird. They change from white to black, they become cold.

¹⁰⁰Matt 3:7

When they seek warmth, they fly up into the sky, and when they feel warmth they go into the sea. They spend three days and three nights in the sea, their feathers are renewed, and they come out.)¹⁰¹

The bird called ‘*Käradiyon*’ is mentioned also in the literature works of St. Yared (505-571 e.c) ‘The Deggwa’ and this shows that the bird had been known by Ethiopian scholars before *andəmta* was written. Though the bird’s name was only mentioned by St. Yared, in depth which in return helped us to understand the literature of St. Yared and the birds in detail.

The commentaries also discuss the cunning behaviour of wolves, and how they deceive their prey through feigning death, as discussed in the Matthew *andəmta* following:

“ቀበሮን ተንከለኛ ይለዋል፤ ክፉ መዐዛ አለው ያን አውጥቶ የሞተ መስለ”
ከጉንዳ አፍ ወጥቶ ይተኛል፤ ተሐዋሲያን ሲሸታቸው የሞተ መስጧቸው ሲበሉ ይቀርባሉ እያነቀ ከጉድጓድ ይዞ ገብቶ ይመገባል”

(Wolves are cunning, they have a bad smell, and when that smell comes they seem to die, but they come out of their lair, and sleep, when creatures smell them, it seems they are dead and they approach him, he catches them, takes them into his lair, and eats them.)¹⁰²

The fivefold wisdom of the snake is also clearly elucidated in the following quotation from the Matthew *andəmta*:

“የእባብ ብልሃቱ ምንድን ነው ቢሉ ከመንገድ ዳር ሲተኛ ራሱን ቀበሮ ይተኛል አንድም ውሃ ሲጠጣ መርዙን ከየብስ አኑሮ ነው ከውሃው የገባ እንደሽነ ተሰራጭቶ ያጠፋኛል ብሎ፤ አንድም በኖህ ጊዜ አፉን ከፍቶ ሳለ ርግብ ዋሻ መስጧት ገብታ ዕንቁላሏን ጣለች፤ ርጧን የበላኳት እንደሽነ ኖህ አስወጥቶ

¹⁰¹ Matt 8:17

¹⁰² Matt 8:21

ይጥለኛል ብሎ እስክትወጣ አፉን እንደክፈተ ቆይቷል፤ አንድም ዕፀ ዘዌ የሚባል አለ ፍሬውን ይወደዋል ጥላው ሲያርፍበት ያደክመዋል ብልህ ነውና ጧት በምሥራቅ ማታ በምዕራብ ኾኖ ይመገበዋል”

(If it is asked what is the snake’s wisdom: when sleep by the road they burry their head;. A. when he drink water he puts his poison in a dry place, in case when they enter water the poison will spread and destroy them;. A. At the time of Noah, when he opened their mouth to the dove it seemed like a cave, and the dove entered and laid her eggs in the snake’s mouth, thinking that, ‘if I eat the dove, he [Noah] will throw me out [from the Ark]’ so he waited, mouth open, until she went out [of his mouth];. A. The *zäwe* Tree has fruit that the snake likes, but when he rests in the tree’s shadow he becomes tired, so in the morning he comes from the east, and in the evening from the west to eat.)¹⁰³

By explaining the natural ways of snake and wolves and their ways of getting their prey, the *andämta* has put it ‘the cunning behavior of wolves and the snake’s wisdom’. Taking these terms, our culture still give nick name or label people as a wolves or a snake.

Finally, the *andämta* makes a logical argument about the difference in behavior between human offspring and those of dogs, and cats. The nature of their sexual relations, and how it affects the behavior of their young, is discussed, as well as its connection with other biblical events, such as the flood, in the following quotation from the Genesis *andämta*:

“ውሻ ድመት በተወለዱ ጊዜ ዓይናቸው ከርዕይ አለመገኘቱ ስለምን ነው ቢሉ የውሻ ዐይነት ከርዕይ አለመገኘቱ ዘሩ ሲዘሩ ተራክቦ ሲያደርጉ ፊት ለፊት አይተያዩምና ፊጥኖ አለመሄዱ ተራክቦ ሲያደርጉ ፊት ለፊት አይተያዩምና ፊጥኖ አለመሄዱ ተራክቦ ሲያደርግ የፊት እግሩን አጥፎ ነውና”

¹⁰³ Ibid 10:16

(If enquired as to why dogs and cats are born blinded, [it is because] they do not see each other while they have intercourse. A dog does not walk soon after it is born because [a male dog] has intercourse by folding his front feet)¹⁰⁴

“ውሾች ተራክቦ ሲያደርጉ ተያይዘው መቆያታቸው ስለምንድነው ቢሉ ይህስ የፍጥረት አይደለም የመርገም ነው፡- ኖኅ ወደ መርከብ በገባ ጊዜ እንስሳትንም አራዊትንም ንጹሕ እንዲጠብቁ አድርጓቸዋል፤ ከዚህ የተነሣ ውሻ ፈቲው ተነሣበት ተራክበው አድርገው አገኛቸው ረገማቸው ከዚያ በኋላ ሰው ሳያያቸው የማይላቀቁ ሆነዋል”

(If enquired as to why dogs stay clenched to each other, this is not [the nature] of creation [but] of a curse. When Noah entered into the Arc, he prohibited all animals and beasts to keep purity [from any union]. Nevertheless, the dog’s desire aroused; and he found them having intercourse. He cursed them. Since then, [when they come together] they stay clenched unless man see them.)¹⁰⁵

The conjugation of dogs has been explained by different scholars in their own perspectives. However, the scholars in andəmta stated that the lock created due to Noah’s curse during the great flood, for the dogs were found capitulating. To these days, a dog entering to a church is considered as a curse or evil and it is stoned and chased away whenever it is found in a church.

These examples demonstrate the distinctive insight of the andəmta commentaries in areas outside of what might normally be considered ‘theology’, such as plant, animal and human biology, demonstrating the underlying view of the andəmta commentary and the scholars who produced it that all aspects of the Creation can inform us about theology, through a rich understanding of biology.

¹⁰⁴ Mersha Alehegne, 2011 p. 409
¹⁰⁵ Ibid p. 409

Chapter Four

4.1 Conclusion

Many parts in the andəmta contain much information for our biology, plant and animal biology. The Biological world states about human, animal and plant biology using biological terminology which created barrier of understanding for the common people on the other hand, the andəmta clearly and precisely guides people how to keep their health status regardless of their education and age.

In this thesis, the researcher has depicted how the andəmta mentioned the recent biological ideas many years ago.

There has been a tendency to regard the andəmta as an item of ancient literature, which is in contradiction to modern science, or at least has very little relevance as far as scientific knowledge is concerned. Fundamentalist interpretations concerning the issues of evolution and whether the earth is flat, and whether it rotates around the sun, have caused many people to see scientific knowledge and the andəmta of biblical principles to be in opposition to each other. Such attitudes are to a large degree due to modes of interpretation, which have obscured the wealth of genuine scientific knowledge which is actually contained within andəmta.

This study pleads for a more appropriate approach to andəmta studies, which facilitates recognizing the valuable scientific insights to be found in the andəmta, especially with regard to biological issues. Not only do biological precepts resonate to a large degree with scientific principles, but in an uncanny way they seem to be based on an awareness of basic biological ideas, which precedes and coincides with later biological knowledge.

This study seeks to engage in a process of reflection which reveals the remarkable congruence between the ancient precepts outlined in the andāmta and later biological knowledge.

Not only do the andāmta not contradict biological knowledge, but in an amazing way they seem to assume a pre-knowledge, which is inexplicable on the basis of the scientific and technological awareness of the andāmta period.

4.2 Recommendations

This study calls for a reappraisal of our attitudes towards the study of andāmta, and more exploration of the essential harmony between scientific knowledge and commentaries. It pleads for more sensitivity for modes of exegesis which discover the congruence between andāmta and scientific knowledge, especially with regard to Biology, rather than assuming a contradiction.

The andāmta is obviously essentially a book of spiritual and ethical teaching, as well as poetry and history. This study has attempted to show that it has important other dimensions and that it should also be recognized as a repository of valuable knowledge in the realm of the sciences and especially with reference to Biological knowledge.

More over, based on the finding the researcher would present the following recommendations as measures to be taken also

1. The andāmta is not only advantageous for those who attend theological studies but it is also beneficial for any professional who is performing various researches.

2. In addition to the theological knowledge, the andāmta also contains much information for the social and natural sciences with clear and understandable format. Hence, scientist can perform their vast researches using the andāmta

as a comparative source so as to elucidate their findings easily for the common people.

3. Philologist can use the andāmta as a plat form to compare and contrast with that of Astronomy, Biology, chemistry, Mathematics, Meteorology, etc and then present their research to light for philologist are "Textual Archeologist".

4. Biological and Medical experts can incorporate biological thoughts of the andāmta in their efforts to solve various health problems that occur as a result of local and international epidemics.

5. Many conceive that the andāmta and science are contradictory; theirfore philologist must reveal the fact that the andāmta and Science have been used intimately without big contradiction because ancient manuscripts and commentaries are the foundation for current state of science.

Bibliography

- ◆ Cowley, R.W., (1983) The Traditional Interpretation of the Apocalypse of St. John in the Ethiopian Orthodox Church, Cambridge.
- ◆ Dästa ƏŞäte [ed.], (1922 E.C) Arägawi Mänfäsawi, A.A.. [AC on Arägawi Mänfäsawi].
- ◆ _____.(1920 E.C) Mar Yəşhaq, A.A.. [AC on Mar Yəşhaq]
- ◆ Gäbrä Krəstos [abba] [e.d.,]. (1920 E.C). Filəksyus, A.A.. [AC on Filəksyus]
- ◆ _____.Yohannəs afä wärq dərsan. (1923 E.C). [AC on John Chrysostom's Commentary on Hebrew]: Addis Ababa
- ◆ Gärima [Mämhər] [ed.], Məşhafä qəddase. (1918 and 1926 E.C) [AC on the Ethiopic Liturgy]. Addis Ababa
- ◆ Gera wärk Təbäbu [mägabe mişər]. (1999 EC) Məşahəftä bəluwat kəl'ətu, Tenşae Publishing House: Addis Ababa
- ◆ _____.Məşahəftä bəluwat Şäləsətu, (1999). Tenşae Publishing House: Addis Ababa
- ◆ Häbtä Maryam Wärqnäh [liqä Şəlтанat]. (1963 E.C). Yä-ityoppya orthodox təwahədo betä krəstian emnätənnə təmhərt: Addis Ababa
- ◆ Kidanä Wäld Kəfle [alaqa]. (1916 E.C). Məşhafä həzqə'l: Dere Dawa..
- ◆ _____. (1948 E.C). Məşhafä säwasəw wä-gəss wä-məzɡabä qalat həddis: Addis Ababa
- ◆ Kəfle [mələ'akä gännät], (1917 E.C). Məşahətä Solomon wä-Sirak: Addis Ababa
- ◆ Kyle Butt (2009), scientific foreknowledge and Acumen of the Bible, <http://www.apologeticspress.org/articles>
- ◆ Məhari Tərfe [liqä liqawənt], (1948). Yä-qəddus pawlos məşhaf, Addis Ababa
- ◆ _____.Məşahəftä həddisat Şostu, A.A. (1951 E.C) [AC on Acts, Catholic epp.