

# **Contrastive Analysis of Lexical Standardization in Amharic and Hadiyya**

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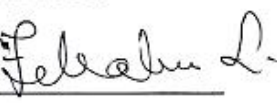
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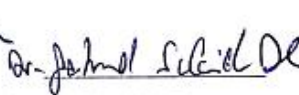
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## **ABSTRACT**

This dissertation compares lexical standardization in Amharic and Hadiyya. The selected research sites were Addis Ababa and the Hadiyya Zone. Language data were gathered from textbooks and dictionaries, which were supplemented by semi-structured interview and focus group discussions.

The study found that the overrepresentation of sounds, i.e. /h/, /s/, /s'/ and vowels, became a problem of standardization of Amharic spelling. When the writing system for Amharic developed from the Ge'ez script, it retained unnecessary symbols which caused spelling variation. In Amharic, spelling variation is attested in compounds and loanwords. Regarding orthography reform, the addition of graphemes was successful for Amharic and Hadiyya. However, the proposal for the reduction of extra symbols for Amharic was unsuccessful. The Roman-based Hadiyya orthography violates the principle of economy and transfer. The gemination of digraphs reduces economy while the assignment of different phonetic values to some of the Hadiyya and English sounds negatively affects the transfer of reading and writing skills. In Hadiyya, the graphemes <zh> /ʒ/ and <ny> /ɲ/ are overrepresentations.

As regards lexical elaboration strategies, language internal and external resources were extensively used. The strategies of semantic transfer and compounding are predominantly used methods for lexical elaboration in both languages, while abbreviation and blending are less common. Comparatively, Hadiyya is more active than Amharic in extensively employing semantic transfer method. Borrowing and loan translations are identified as the most productive language external means of lexical elaboration in both Amharic and Hadiyya. Amharic and Hadiyya borrowed words mainly with modifications; unmodified borrowing was rarely found in Amharic, but not attested in Hadiyya. In relation to source languages, Amharic and Hadiyya depend more on foreign languages, such as English, Arabic, French and Italian, than on Ethiopian languages. Amharic exploited the genetically related language Ge'ez to enrich its vocabulary, whereas Hadiyya does not exploit related Cushitic languages. Most of the European loanwords entered Hadiyya via Amharic. English is used as a source language of loan translations for Amharic while English and Amharic are used as source languages for Hadiyya.

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## LIST OF ABBREVIATIONS, ACRONYMS AND SYMBOLS

1	first person singular	Ma.	Mathematics
3	third person singular	MoE	Ministry of Education
A	adjective	MT	mother tongue
ADJR	adjectiviser	N	noun
ADP	adposition	NMZR	nominalizer
Aest	Aesthetics	PL	plural
AGT	agentive	Py.	Physics
Amh.	Amharic	PS	passive
Bio.	Biology	PV	perfective
CNJ	conjunction	REL	relative
CS	causative	SG	singular
CSA	Central Statistical Agency	SNNPR	Southern Nations, Nationalities and Peoples Region
DF	definiteness	SP	simple past
E.C.	Ethiopian Calendar	V	verb
Edu.	education	VNM	verbal noun maker
ELRC	Ethiopian Languages Research Center	vs	versus
Env.Sc.	Environmental Science	→	becomes, is realized as
EPRDF	Ethiopian Peoples Revolutionary Democratic Front	//	phonemic transcription or representation
FDRE	Federal Democratic Republic of Ethiopia	[ ]	phonetic transcription or representation
FGD	focus group discussion	< >	grapheme
FRQ	frequentative	*	ill formed (ungrammatical)
GN	genitive	<	results to
Ideo.	ideophone		
IPV	imperfective		
LP	language planning		
m	masculine		

# CHAPTER ONE: INTRODUCTION

## *1.1 Background of the study*

Lexical standardization and elaboration are essential components of language planning, particularly corpus planning. According to Ferguson (1996:43), language standardization is a process in which one variety of a language becomes widely accepted throughout a speech community as a supra-dialectal norm. This kind of standardization, as a mono-centric selection, is rare as compared to composite dialect standardization (Deumert, 2004:2). Composite dialect, which Deumert (2004) calls polycentric, standardization is characterized by a complex recombination of features from different dialects. A language without distinctive geographical dialects can also be standardized since standardization comprises activities such as orthography development and reform, lexical and terminological modernization, etc. Such activities upgrade a language to the status of expressing modern and scientific discourses. As to Deumert (2004:2), the need of language standardization arises from the desirability of uniformity and correctness in language use. Hence, the intention of standardization is to solve communication problems and to facilitate communication across speech communities.

According to Cooper (1989:149), lexical elaboration (also called modernization) refers to the extension of vocabulary of languages for new functions and topics in order to meet new demands. The practice of elaboration is not limited to the languages of developing, or modernizing societies but occurs in the languages of developed societies as well. With regard to the African context, Abdulaziz (1987:44) expresses the significance and direction of elaboration (modernization) of African languages as follows:

Language modernization must be sensitive to national planning and development activities in other areas like agriculture, industry, appropriate technology, education, health and other fields of economic and welfare planning. Such a relation would ensure that the fruits of language planning in fact serve the goals of development by providing adequate means of language communication.

The activity of language development or modernization is not a one round task. As to Sager & Nkwenti-Azeh (1989:9), the need for new and improved designations changes in the fixation of societal values, models for clearer and common expressions for complex scientific concept is

usually regular. The motivation for change arises from both communicative and cognitive needs. A language is also expected to express the cognitive and communicative needs of its society through modernizing its internal structure; for instance, by expanding its vocabulary using different linguistic strategies. In order to address the needs of a society regarding language development or modernization, the presence of conducive language policy and planning is imperative.

In Ethiopia, the issue of language policy and planning is usually related to the political ideology of a government of a particular time. Even though Ethiopia is a multilingual<sup>1</sup> and multiethnic country, the language policy and planning activities were not encouraging the existing linguistic diversity for a number of decades. Language policy model in a country plays a huge role in the promotion or demotion of language development practices. Ethiopia had different language policy paradigms across its history. Thus, the language policies that were in place during different governments shall be discussed to highlight the national context regarding language policy, which has strong relationship with language development. The Ethiopian language policies have usually been described in relation to three eras: the Imperial system (the Haile Sellasie regime (1930-1974)), the Socialist system (the Derg regime (1974-1991)) and the Federal system (the EPRDF regime (1991- to date)) (Bekale, 2012:136-176; Zelealem, 2012:1).

The covert language policy which had promoted one language, namely Amharic, was employed before the Haile Sellasie regime. During the reign of Tewodros II, Amharic was a literary language as the Royal Chronicles were written in it by the order of the king himself (Cooper, 1976b:290). This was the first instance where Amharic was assigned a new function as a written language replacing Ge'ez, the then *lissanə s'ihuf* 'language of writing' (cf. Meyer, 2006:119). Cooper (1976b:290) argues that Tewodros's "promotion of Amharic literature was part of his campaign to reunify Ethiopia". The subsequent emperors Yohannes IV and Menelik II followed

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<sup>1</sup>Bekale (2012:372) mentions that, based on different documents, there are 87 recognized language varieties in Ethiopia including Ge'ez and Gafat with no native speakers. As to Bekale's (2012) finding, however, there are 67 distinct languages in Ethiopia, some of them with recognized regional dialects.

the footsteps of Tewodros II in promoting a monolingual policy that focuses on the promotion of Amharic (Getachew & Derib, 2006:43-44).

The Haile Sellasie regime (1930-1974) assured the continuation of the assimilation-oriented nation-building process of the predecessors. The 1931 constitution was intended as a tool for national integration under strong central government (Bahru, 2002:141). Cohen (2000:80) argues that, "In pursuance of a policy of national unification, the government sought to establish a national religion, culture and language for all Ethiopians". In relation to this, Cohen (2000:81) more specifically states, "government policies were intended to encourage Ethiopians to embrace the Orthodox Church, the culture of the northern Highlands and the Amharic language". The official status of Amharic was entrenched for the first time in the revised constitution of 1955, which states that, "the official language of the Empire is Amharic" (Cooper, 1976a:188). The language policy difference observed between Haile Sellasie and his predecessors was that the *de facto* national status of Amharic was confirmed by *de jure* as enshrined in the Haile Sellasie's constitution. The role of Amharic has also been manifested in educational domains as it was used as a medium of instruction during the Imperial period. Hence, in 1958/59 Amharic became medium of instruction for primary education throughout the country by replacing English (Tesfaye & Taylor, 1976:373). It had also been continued as a medium of instruction until 1993 in Ethiopia (Zealealem, 2012:9).

After the 1974 revolution the *Derg* (literally 'committee'), took power adopting the socialist (Marxist-Leninist) ideology. The Marxist-Leninist government of Mengistu Haile Mariam (1974-1991) was identical with Emperor Haile Sellasie's government in the sense that both were keen on establishing a central government in the country. In order to attain this goal, the *Derg* continued to promote only one language, Amharic, for official purposes.

The slight difference observed during *Derg* regime was the introduction of 15 local languages (including Amharic) for a literacy campaign.<sup>2</sup> As stated in McNab (1989:85), the fifteen languages which were selected for the literacy campaign were: Amharic, Oromo, Tigrinya,

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<sup>2</sup> The adult literacy campaign was launched in July 1979 (Cohen, 2000:89).

Wolayta, Somali, Hadiyya, Kambaata, Gedeo, Kunama, Tigre, Sidaama, Silti, Afar, Saho and Kafa-Mocha. These languages cover 90% of the population. Cohen (2000:90) states that the languages selected for the literacy campaign were reduced to writing in the Ethiopic (also called Ge'ez) script commonly used for Amharic and Tigrinya. Cohen further mentions, "the use of a common script, it was hoped, would encourage mutual intelligibility and promote the ability of Ethiopians to achieve literacy in more than one language". McNab (1989:85) argues that the use of a single script has an advantage of transfer of skills from regional languages to the official language. During the literacy campaign, there were no further language development activities for the local languages, with the exception of orthography (mainly graphization) and lexicography for few languages. The language development work in Ethiopia has been focused on lexication and terminological development of Amharic (McNab, 1990:73).

Even though the literacy program was officially promoted by the Derg, the medium of instruction for the primary education was Amharic (Cohen, 2000:93). In other words, there was no attempt to introduce the local languages except Amharic in formal education. Generally, Cohen (2000:94-95) assessed the language policy and use situation of Derg in the following way:

No attempt was made under the Derg to alter the official status of Amharic, which remained the officially designated national language in the new constitution. Early attempts to stimulate the use of local languages were largely employed as a political device, a visible manifestation of the national policy ... The net effect of the Derg's language and education policies was to strengthen the position of Amharic.

The above quote shows that there was no significant change regarding language policy during the Derg regime since the position of Amharic was not challenged. Moreover, there were no post-literacy activities that encourage the use and development of local languages, for instance, as a medium of instruction.

The trend of Ethiopian language policy has significantly been changed after the fall of the Derg regime in 1991. Following the political changes, attempts have been made to consolidate various local languages in Ethiopia. From the onset of transitional period, the EPRDF government has

pronounced that all ethnolinguistic groups of the country have rights to preserve and develop their respective languages. Accordingly, the Transitional Period Charter of Ethiopia (see FDRE, 1991:2), stated the linguistic rights of nations, nationalities and peoples of Ethiopia as follows:

The right of nations, nationalities and peoples to self-determination is affirmed. To this end, each nation, nationality and people is granted the right to: preserve its identity and have it respected, promote its culture and history and use and develop its language.

The geopolitical restructuring, which introduced the federal system and the ratification of the 1995 constitution, has changed the history of the country's language policy. In relation to this, in the ratified 1995 constitution (FDRE, 1995) article 5 reads: 1) All Ethiopian languages shall enjoy equal state of recognition; 2) Amharic shall be the working language of the federal government; and 3) Members of the federation may determine their respective languages. As regards language choice, based on the constitutional provision, relatively homogenous regions have opted for the dominant language of the area for the purpose of regional working language, as exercised in Oromiya, Tigray and Somali regions. Linguistically diverse regions such as Southern Nations, Nationalities and Peoples Region (henceforth SNNPR) and Benishangul Gumuz opted for Amharic as the language of regional communication (Cohen, 2007:66).

Following the recognition of various Ethiopian languages in the constitution, The Ministries of Education and of Youth, Sport and Culture have promoted the use and development of languages in their policy documents. Accordingly, the Ministry of Education (MoE, 1994:23), in its Education and Training policy states, "Cognizant of the pedagogical advantage of the child in learning in mother tongue and the rights of nationalities to promote the use of their languages, primary education will be given in nationality languages". The provision of the right to use different mother tongues in formal education is the major point of departure for the EPRDF language policy, compared to its predecessors.

In the culture policy document, on the other hand, language related issues have been suggested particularly in relation to the language planning activities. For instance, Section 1.4 of the policy document (the Ministry of Youth, Sports and Culture, 1995 E.C) states that: "All the languages

and dialects of the country shall be identified, inventoried and classified in accordance with their geographical distribution and standards”. Such kind of activity is the base for further status and corpus planning activities. In other words, dialect surveys and identifications of languages and dialects are the bases for the choice of a certain dialect in the course of the language standardization and terminological development. Furthermore, guidelines to initiate corpus and status planning activities have been stated in Section 6.1-6.6 of the National Culture Policy document (the Ministry of Youth, Sports and Culture, 1995 E.C):

- 6.1 A language distribution map of the country shall be prepared;
- 6.2 Alphabets shall be developed to those languages that do not have script and put them into service taking into account the psychological attitude of the speakers;
- 6.3 Up-grading measures shall be taken to solve the problems of written languages in accordance with the principles and methods of the science of orthography;
- 6.4 In order to promote the literary tradition of the peoples of the country, an enabling environment shall be created for the preparation of dictionaries, encyclopedia and grammar texts in the languages of the various nations and nationalities;
- 6.5 The peoples of the country shall be provided with professional assistance in deciding the languages of instruction, mass communication and for official use at the federal, regional, zonal and when necessary, at district levels;
- 6.6 Scientific and technological terminologies that could help in promoting the capacity of the languages of the country shall be developed; translation works that could assist in sharing the experience and knowledge of the world shall be widely practiced.

In the policy statements, the points mentioned from 6.2-6.4 are related to the process of codification (i.e., graphization, lexication and grammatication). The statement in 6.5 refers to status planning which comprises language choice for particular purpose such as education, administration and mass communication. Moreover, the activity of lexical or terminology elaboration which is vital aspect of language development is suggested in Section 6.6 of the policy document. Hence, the present study has strong relationship with the codification (or



standardization) and elaboration (lexical and terminological development) aspects of the policy statements (see Table 3).

Due to the new language-in-education policy, 25 different Ethiopian languages have become media of instruction and are offered as a subject at primary school level (Seidel & Moritz, 2009:1125). The new role of these Ethiopian languages as medium of instruction will inevitably call for the elaboration of new lexical items, and solving problems of standardization in language development activities. This study is a comparative comparison of Amharic and Hadiyya in relation to their script standardization, and their methods to designate new concepts from science and technology.

## *1.2 The languages*

### *1.2.1 Amharic*

Amharic belongs to the South Ethio-Semitic language group (Hetzron & Bender, 1976:33). It is spoken in the central and northern parts of Ethiopia (i. e, Gojjam, Gondar, Western Wollo and Shewa) and in all towns of the country. According to the Central Statistics Authority, Amharic is spoken by 19.8 million people as a first language and by more than 5 million people as a second language (CSA, 1994). This figure makes it the most widely used language in the country. Amharic is functioning as lingua franca in almost all Ethiopian towns (Meyer, 2006:117).

Hailu, Getachew & Cowley (1976:90-98) identified four regional varieties of Amharic. These varieties are: Addis Ababa, Gojjam, Shoa and Wollo. In this survey, the Gondar dialect was excluded from the list of Amharic dialects since it was considered as part of Addis Ababa variety. Later, Zelealem (2007:449) identified the Gondar variety of Amharic as the fifth independent regional dialect. From those dialects of Amharic, the variety spoken in Addis Ababa has been accepted as standard variety. Hence, it is used in education, mass media and various governmental and non-governmental services which requires formal communication (Zelealem, 2007:449; Abraham, 1991:2). The current work focuses on the variety of Amharic spoken in Addis Ababa.

Amharic is being used as a medium of instruction in Addis Ababa from grade 1-6 and as a subject from grade 1-12. It is also being given as an area of specialization at the level of BA, MA and PhD in some of Ethiopian universities, for example, Addis Ababa University. In addition to its role as a working language of the federal government, Amharic is also the working language of SNNPR<sup>3</sup> government and most of its zonal administration including Hadiyya zone.

### 1.2.2 Hadiyya

The majority of the Hadiyya speaking people live in the Hadiyya zone of the SNNPR State. The Hadiyya zone is located to the west of the Rift Valley. The zone comprises of ten *woredas*<sup>4</sup> ('districts'): Anleemo, Duuna, Gibe, Gombora, Leemo, Misha, Shaashoogo, Sooro, Misrak Badawwacho and Merab Badawwacho. The zonal capital *Hosa'ina* is situated to the south of Addis Ababa in the Leemo *woreda*.

The Hadiyya zone is geographically bordered by Gurage and Silti in the north, Wolayta in the south, Kambaata in the south east, Tambaaro in the south west and the Omo River in the west which separates the zone from Yem special woreda and Oromia region. The Misrak and Merab Badawwacho woredas are enclaves separated from the rest of the zone by Halaaba special woreda and Kambaata-Tambaaro zone.

Hadiyya belongs to the Highland East Cushitic language family which also includes Sidaama, Kambaata, Gedeo and Burji. Scholars usually refer to both the people and the language as Hadiyya. The people, however, call themselves Hadiyya and their language *Hadiyyisa*, which literally means 'Hadiyya language'. According to the information of the CSA (1994), 1,284,366 people speak the language as a mother tongue. There are also enclaves of Hadiyya population out of the current administrative zone; particularly, in Bale and Arsi zones. According to Alebachew & Samuel (2002 E.C), these groups are reported to have shifted to the surrounding Oromo

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<sup>3</sup> Amharic is also a working language in Beneshangul-Gumuz and Gambella regional states just like the Amhara Regional state (Bekale, 2012:265).

<sup>4</sup> *Woreda* refers to the administrative unit under zone.

language. There is also a considerable number of Hadiyya speakers in Dawro due to a resettlement program where the children have been learning in their mother tongue, Hadiyya.<sup>5</sup> This study, however, only focuses on the Hadiyya language spoken in Hadiyya zone.

Haile (1973:10) states that Hadiyya comprises of four dialects: *Leemo*, *Shashogo*, *Badawwacho*, and *Sooro*. As to my experience as native speaker of the language, the linguistic distance among these dialects is insignificant. However, the Hadiyya variety which is spoken in the *Badawwacho* area exhibits unique vocabulary compared to the other varieties. The reason for the peculiarity of *Badawwacho* is explained in Samuel (2009:2) by extensive language contact with different linguistic groups, particularly Wolayta and other Ethiopian languages. Even though it has been reported that the dialectal difference is minor, lexical items that refer to the same concept in different varieties are included in a glossary of textbooks. The one with the wider use preferred as the first priority in vocabulary selection and the less common to the majority of the other varieties is also introduced as a synonym in the textbooks.

Since 1993, Hadiyya has become a medium of instruction in formal education from grade 1-6 (currently from 1-4) and is given as a subject up to grade 12. It is also being given as a subject in the Teachers Training College found in Hosa'ina. Moreover, the department of Hadiyya language has been launched in Wachemo University in the 2014/2015 academic year. There is also community radio and educational mass media in Hadiyya. Even though decision had been made to use Hadiyya as a working language in the zonal administration, it is not practical yet. As a result, Amharic is still functioning as a working language of zonal administration particularly in written communication. Hadiyya is also allowed to be used for oral communication in administration, court etc.

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<sup>5</sup> Interview with Expert E, 20/09/2013.

### *1.3 Statement of the problem*

Corpus planning, standardization of script, and elaboration of vocabulary are central aspects of language modernization (Cooper, 1989:125). Due to historical advantages, Amharic has attained a better level of development as compared to other Ethiopian languages including Hadiyya (see Section 1.1). Some aspects of script standardization or reform of Amharic, however, are under discussion for many years and are not resolved yet. With regard to the growth of vocabulary, Amharic has been enriched for various scientific and technological concepts. Even though, the lexical expansion or modernization has been relatively well done in Amharic, still orthographic inconsistencies and usage of parallel terms exist.

Hadiyya, on the other hand, has been used in formal education since 1993.<sup>6</sup> A new orthography was introduced, and the development of new terms started to enrich its vocabulary to express scientific and technological concepts. Since the introduction of Hadiyya in formal education is a recent phenomenon, lexical elaboration is still an ongoing process demanding huge efforts from language planners. The description of previous efforts can provide valuable data in relation to the gaps and best practices of the previous efforts of lexical expansion.

There are relatively more works on the standardization of Amharic than on Hadiyya. Even the works on Amharic, particularly Abraham (1974, 1991) and Richter (1988), focused on the description of terminology during the Derg regime. The work of Takkele (2000) is not exhaustive in description of the current practices of lexical elaboration in the educational domain, which the present work emphasizes. Takkele's work was mainly based on the data taken from the Science and Technological Terms Translation Project (STTTP) and terms coined during the Derg regime. The present study uses textbooks from educational domains as main sources. As far as my knowledge is concerned, there is no study on lexical standardization and elaboration of Hadiyya. The present study describes major aspects of corpus planning of the two languages, i.e. lexical standardization and elaboration based on contemporary data from the educational domain.

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<sup>6</sup> There was an effort to use Hadiyya in the literacy campaign during the Derg regime. The New Testament was also translated in 1983 E.C.; the gospel of Matthew already in 1927 E.C (Tesfaye, 1986 E.C:6).

Amharic and Hadiyya are on different levels of lexical standardization and elaboration. However, both languages are used in the first cycle of primary education (grade 1-4) as a medium of instruction. Hence, first cycle subjects are basic sources to investigate the mechanisms of lexical elaboration.

The two languages, though they are not closely related,<sup>7</sup> use a number of common lexical elaboration processes which make a comparison between the languages possible. Since Hadiyya is younger than Amharic in its level of standardization and elaboration, lessons can be taken from the experience of the development of Amharic that could help in the process of developing Hadiyya.

The following basic questions are central to the study:

1. How was the historical development and standardization of Amharic and Hadiyya orthographies?
2. How can the standardization of orthographies of Amharic and Hadiyya be evaluated against the principle of orthography standardization?
3. What are the most commonly used linguistic strategies for lexical elaboration in Hadiyya as compared to Amharic?
  - 3.1 Which sources do Amharic and Hadiyya most commonly use for lexical enrichment?
  - 3.2 How do they adjust foreign lexical items during lexical elaboration?
4. Which efforts of lexical standardization have been made in Amharic and Hadiyya?
5. How can lexical standardization related problems be minimized in both languages?

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<sup>7</sup> Both Amharic and Hadiyya are distantly related as they share Afro-asiatic super family.

### *1.4 Objectives of the study*

The main objective of this research is to describe and compare standardization of Amharic and Hadiyya. The specific objectives are to:

1. Describe the historical development of orthographies and their standardization in Amharic and Hadiyya
2. Examine the orthographies against the principle of orthography standardization in Amharic and Hadiyya
3. Discover the most commonly used linguistic strategies for lexical elaboration in Amharic and Hadiyya
4. Indicate the experiences that Hadiyya can share from the development of Amharic for further standardization and elaboration

### *1.5 Significance of the study*

The findings of this study could have practical importance in language modernization or elaboration processes. In developing countries, corpus planning activities are often done by non-professionals. For Hadiyya, the study could be instrumental in the standardization of the orthography and modernization of its lexicon to express newly emerging concepts of science and technology. It may also provide important facts to language planners involved at local, regional or national levels. More specifically, practitioners who are engaged in textbook development, orthography development or standardization, translation, lexicography, terminology designation, media, etc. might find the work very useful.

Most of the Ethiopian languages, including Hadiyya, are used only in the educational domains when they were reduced to writing. For Hadiyya, the study on lexical standardization and elaboration is crucial to promote its use in domains such as administration, press, mass media, and judiciary. Hence, this study has more contribution for the promotion of Hadiyya since it is still in a younger stage of standardization.

The study also has an academic contribution to knowledge, which might be of interest for students and instructors of colleges and higher institutions in the area of linguistics, language teaching, sociolinguistics, sociology and anthropology.

## 1.6 Methodology

The present work largely employed qualitative research design to describe lexical standardization and elaboration in Amharic and Hadiyya though frequency count and percentages were used for the analysis of spelling variation (in Amharic). In the following sub-sections, sampling techniques, data gathering tools and data analysis techniques are described.

### 1.6.1 Sampling

The selected research sites are Addis Ababa city for Amharic and Hadiyya Zone for Hadiyya. Accordingly, two sub-cities and two *woredas* were randomly selected from the ten sub-cities in Addis Ababa and the ten *woredas* in the Hadiyya Zone. From those two sub-cities and two *woredas*, four government schools were randomly selected (i.e., one school from each sub-city and each *woreda*), in which the lower primary grades 1-4 were investigated.

In addition, four focus group discussions (FGDs) were conducted of which two in Addis Ababa, and two in Hadiyya zone. The FGDs comprising of (FGD 1, 6 teachers; FGD 2, 6 teachers; FGD 3, 7 teachers; and FGD 4, 5 teachers) were selected randomly to take part in focus group discussions. The participants were drawn from Amharic, Mathematics, Social Studies and Aesthetics departments of the target schools.

### 1.6.2 Data collection tools and sources

Textbooks and official documents were used as data sources, which were complemented by data gathered through interviews and FGDs. From the school subjects, Environmental Science, Mathematics, and Aesthetics were in focus because they have been taught through the medium of Amharic and Hadiyya. Amharic and Hadiyya as subjects were also included to examine how linguistic terms are developed to express meta-language concepts. The intention of using

textbooks is to collect scientific and technological terms which were employed to enrich the vocabulary of the languages in educational domains. The *Dictionary of English-Amharic Science and Technology* (Ethiopian Language Academy, 1996) and the *Hadiyya-English Dictionary* (Hadiyya Zone Education Desk, 1996) were also consulted to collect and/or crosscheck newly coined terms or words. For the additional data on Amharic, an official document of the Ministry of Finance and Economic Development (MOFED, 2010) written in English and Amharic was included.

Semi-structured key informant interviews were conducted with officials or department heads from the Education Bureaus of the Hadiyya Zone and Addis Ababa City Administration since they have responsibilities of developing textbooks for primary education. This was done to identify the techniques that the textbook developers used to standardize and elaborate scientific and modern concepts during textbook preparation or translation.

FGDs were conducted with teachers of different subjects in Amharic and Hadiyya. The discussions were made in order to obtain ideas about the status of standardized and elaborated lexical items, i.e. to get feedback about the acceptance of newly coined terms and to identify problem areas in the lexical standardization and elaboration processes.

### 1.6.3 Data analysis and presentation

The method of data analysis employed in this research was qualitative description. The multiple-case analysis approach suggested by Merriam (2009:204) and Yin (2009:187) was used to analyze the comparative data in the study. This approach requires applying two stages of analysis: within-case analysis and between-case analysis. For the first level analysis, the data were analyzed separately case by case to understand general features of each case. And then, cross-case analysis was applied to make comparison between the two cases. Therefore, based on this approach, the methods of lexical elaboration for Amharic and Hadiyya are contrastively compared.



The linguistic presentation of data is of two types: orthographic and phonemic. As the study focuses on aspects of standardization, the orthographic transcription has been used for both languages. Since Amharic is written in the Ethiopic script, a phonemic transliteration in IPA is provided. For Hadiyya, the data are presented in the official Hadiyya orthography, whose IPA transliteration is given in the following table:

*Table 1: Transliteration of the Hadiyya orthography*

a = /a/	p = /p/
b = /b/	ph = /pʰ/
c = /tʃʱ/	q = /kʰ/
ch = /tʃ/	r = /r/
d = /d/	s = /s/
e = /e/	sh = /ʃ/
f = /f/	t = /t/
g = /g/	ts = /sʰ/
h = /h/	u = /u/
i = /i/	v = /v/
j = /dʒ/	w = /w/
k = /k/	x = /tʰ/
l = /l/	y = /j/
m = /m/	z = /z/
n = /n/	zh = /ʒ/
ny = /ɲ/	ʹ = /ʔ/
o = /o/	

Geminated consonants and long vowels are indicated by doubling the symbols.

### *1.7 Ethical considerations*

This study is bound to ethical issues in research which include human subjects. The researcher first secured the required permission from authorities in the study areas to conduct the study after presenting a letter of cooperation written by the Department of Linguistics and Philology. Prior to collecting data from each participants or a group of participants, the researcher explained them the purpose of the study to obtain their consent. The researcher also guaranteed that the participants were free to withdraw from the research process at any point they feel uncomfortable. The researcher used voice recorder during data collection after securing the consent of the participants. The participants were also guaranteed that their names will not be printed in any materials and to use pseudonym for participants.

### *1.8 Organization of the dissertation*

The remaining part of the dissertation is divided into five chapters. Chapter 2 presents the conceptual framework and the review of related literature. Chapter 3 describes orthography development and standardization in Amharic and Hadiyya. The methods of lexical elaboration were organized in light of the usage of language resources for the purpose of lexical expansion. Hence, Chapters 4 and 5 describe lexical elaboration using language internal resources (i.e., semantic extension, compounding, abbreviation and blending), and language external resources (borrowing and loan translation). Finally, Chapter 6 provides the summary and recommendations.

## CHAPTER TWO: CONCEPTUAL FRAMEWORK AND REVIEW OF RELATED LITERATURE

### 2.1 Conceptual framework

The framework of this study is based on concepts of language planning, particularly corpus planning, and methods of word formation. Haugen (1966a:933) proposed four activities in language planning: selection of norm, codification of form, elaboration of function, and acceptance by the community. Haugen (1966b:17) defines the terms *form* as “the linguistic structure in its ramifications” and *function* as “the variety of the uses to which the structure is put”. *Selection* and *acceptance* are described as societal aspects of language development, but *codification* and *elaboration* as linguistic aspects.

Table 2: Language planning matrix

	<i>Form</i>	<i>Function</i>
<i>Society</i>	Selection	Acceptance
<i>Language</i>	Codification	Elaboration

(Source: Haugen, 1966a:933)

Haugen’s (1966) model for language planning is centered on the standardization and functional elaboration of languages within a national speech community. This model aims at reducing linguistic variation through codification and functional extension of the codified variety through elaboration. According to Haugen (1966a:931-932), these two goals can be achieved if “the community can agree on the selection of some kind of a model from which the norm can be derived.”

In Haugen’s (1983) revised model, the term acceptance is substituted by implementation. The reason for this modification is that in a democratic language planning model, the community’s acceptance or rejection is an integral component of the process. As shown in Table 3, in the new

model, the societal dimension is specified as *status planning*, but the language dimension as *corpus planning*:

*Table 3: Revised language planning model*

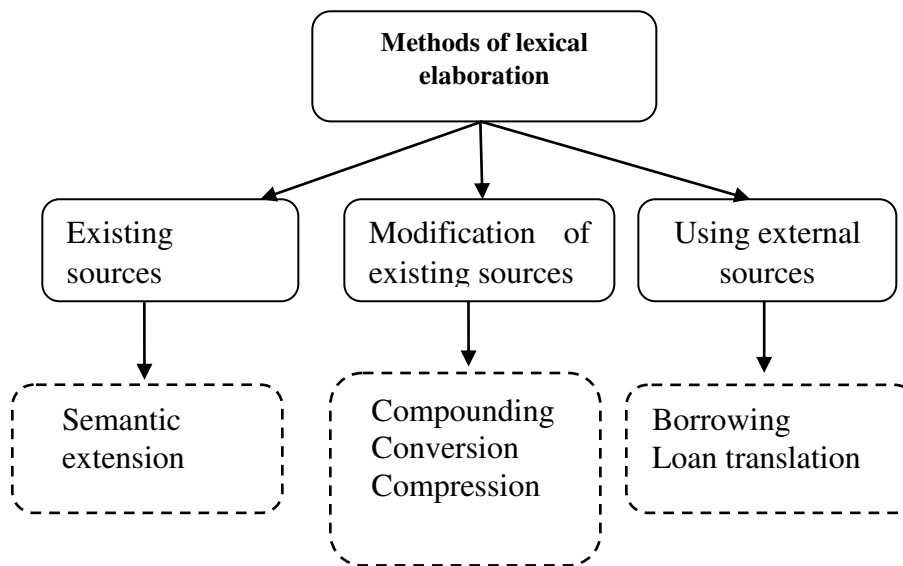
	<b>Form</b>	<b>Function</b>
	(Policy planning)	(Language cultivation)
<b>Society</b>	<b>1. Selection</b>	<b>3. Implementation</b>
<b>(Status planning)</b>	(Decision procedures)	(Educational spread)
	a. Identification of problem	a. Correction procedures
	b. Allocation of norms	b. Evaluation
<b>Language</b>	<b>2. Codification</b>	<b>4. Elaboration</b>
<b>(Corpus planning)</b>	(Standardization procedures)	(Functional development)
	a. Graphization	a. Terminological modernization
	b. Grammatication	b. Stylistic development
	c. Lexication	

(Source: Haugen, 1983:275)

Haugen (1983) came up with the following typology. The decision processes indicated under *selection* are political, having to do with social rather than linguistic norms, and with the relative status of languages. The *codification* processes are purely linguistic in nature, and typically result in a prescriptive orthography, grammar, and dictionary. *Implementation* refers to the processes of spreading the new norm, “which are more consciously applied in school by teachers and textbooks, and eventually become self-administered through reading and general social acculturation” (Haugen, 1983:274), and their evaluation as an important feedback mechanism in the implementation process to assess the success. *Elaboration* refers to “the continued implementation of a norm to meet the functions of a modern world” (Haugen, 1983:272-274).

In this dissertation, Haugen (1983) is taken as conceptual framework since it shows the language planning and standardization process in a comprehensive way. In order to describe the mechanisms of lexical elaboration, Sager's (1990) word or term formation strategies are adopted. Sager (1990:71) states that methods of lexical elaboration are conceptualized into three basic types, as shown in Figure 1: (i) use of existing sources, (ii) modification of existing sources, and (iii) use of external sources. While (i) and (ii) comprise language internal resources, (iii) represents language external resources.

*Figure 1: Methods of lexical elaboration*



(Source: Modified based on Sager (1990:71))

In this dissertation, the description for lexical elaboration is based on this categorization.

## *2.2 Review of related literature on theoretical issues in language planning*

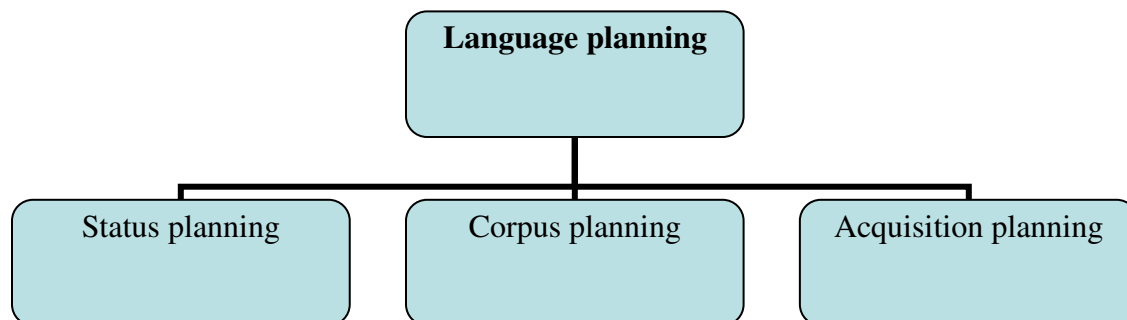
The concept of lexical standardization and elaboration is based on the general framework of language planning. In this chapter, general concepts of language planning and its components are discussed. Moreover, different components of language development particularly the expansion and standardization of vocabulary for modern concepts are discussed as a base for data analysis in the study. Finally, dimensions of terminology will be conceptualized.

### 2.2.1 Concept and type of language planning

Language planning refers to “deliberate efforts to influence the behavior of others with respect to acquisition, structure or functional allocation of their language codes” (Cooper, 1989:45). The activities of language planning focus on intentional effort to solve language-related communication problems. This effort could be manifested in language external activities, like decision making in relation to the status of a language, or language internal activities, such as shaping the structure or vocabulary of a language.

Deumert (2009:372) mentions two basic types of language planning: status planning and corpus planning. Cooper (1989:157) added a third component of language planning, namely acquisition planning (see Figure 2 ).

*Figure 2: Types of language planning*



#### 2.2.1.1 Status planning

Status planning refers to “deliberate efforts to influence the allocation of functions among a community’s languages” (Cooper, 1989:99). It is also referred to as ‘social’ or ‘external’ planning as opposed to corpus planning. Status planning is concerned with the provision of new functions to a language. Making a language a medium of instruction or an official language, for instance, has practical implications on its role in a given society (Deumert, 2009:372; Wolff, 2000:333). Similarly, Wiley (1996:108) states that status planning involves the choice of a language as medium of instruction in a bilingual community. In this case, the main concern of status planning is the relationship between languages rather than changes within them. In

addition, the position of different varieties of a single language is also a concern of status planning.

According to Magwa (2008:41), status planning involves the extension or restriction of functional uses of a language for a specific purpose, which is commonly carried out by politicians with no linguistic orientations and so the decisions are usually political rather than linguistic. The status of languages might be explicitly written in the constitution of a country (Wolff, 2000:333).

#### 2.2.1.2 Corpus planning

According to Cooper (1989:31), corpus planning refers to “activities such as coining new terms, reforming spellings, and adopting a new script.” Similarly, Magwa (2008:41) states that corpus planning is concerned with the change of language structure that involves expanding of vocabulary, devising orthography, indicating ways of pronunciation, and style of language use. In other words, corpus planning involves the development of new forms, the reform of old ones, or the selection from alternative forms in a spoken or written code.

Corpus planning stands for deliberate changes to the internal structure of a language so that it may meet specific requirements in official domains and in domains of higher education for scientific and technical discourse (Nakin, 2009:27). According to Wolff (2000:333) and Kaplan & Baldauf (1997:38), corpus planning can be described as linguistic or internal planning that is geared towards establishing spelling norms, setting norms of grammar, and expanding the lexicon. Furthermore, Kaplan & Baldauf (1997:38) mention different aspects of corpus planning: “(1) orthographic innovation, including design, harmonization, script changes, and spelling reforms; (2) pronunciation; (3) changes in language structure; (4) vocabulary expansion; (5) simplification of registers; (6) style; and (7) the preparation of language material.” For Hornberger (2006:30), corpus planning comprises lexical modernization, purification, reform, stylistic simplification, and terminology unification.

Cooper (1989:125) mentions graphization, standardization, and modernization as traditional primary categories of corpus planning. He argues that the concepts of codification and elaboration are often mentioned in corpus planning and these concepts can be subsumed under the sections of standardization and modernization, respectively. In addition, Cooper (1989:154) suggested *renovation* as the fourth major category, while modernization focuses on the ways of established language forms to serve new functions whereas renovation aims at finding new forms to serve the existing functions in innovative ways.

In Haugen (1983:275), which is followed in this study, codification and elaboration are part of corpus planning. Graphization, grammatication, and lexication belong to codification, whereas terminological modernization and stylistic development are categorized under elaboration.

#### 2.2.1.2.1 Codification

Codification is a precondition for the standardization of a language. Codification can be defined as minimizing variation in form to reduce misunderstanding during the communication process (Haugen, 1966:931). Codification refers to an explicit statement of the standard language form via dictionaries, grammars, and punctuation and pronunciation guides (Appel & Muysken, 1987:51). Codification typically develops and formalizes a set of linguistic norms for written language (Kaplan & Baldauf, 1997:39). Haugen (1983:271) suggests that codification comprises three parts: graphization, grammatication, and lexication.

Graphization is the first step in standardization or codification of a language. Graphization refers to the development of a writing system or devising of graphic symbols for a previously unwritten language (Cooper, 1989:125; Appel & Muysken, 1987:52). It is also concerned with the creation or unification of a standard orthography, which usually begins with a phonetic description of the language. Hence, the first decision in the process of graphization is the choice of alphabet or script (Appel & Muysken, 1987:52).

The decision that will be made with regard to the script or writing system should follow some procedures in order to be effective. In relation to graphization, Cooper (1989:126) stresses that



there are principles and criteria for judging the adequacy of writing systems. He classifies them into two major categories: (a) technical or psycholinguistic, and (b) sociolinguistic criteria. Technical principles and criteria are concerned with the extent to which the writing system is easy to learn, read, write, carry over to another language, and easy to reproduce by modern printing techniques. In practice, however, these criteria may contradict each other. For instance, what is easy to read may not be easy to write or print and similarly what is easy to learn may not be easy to use.

Cooper (1989:128-129) argues that sociolinguistic considerations are very important in judging the adequacy of a writing system. Religious or political affiliations have huge impact on the acceptance of a writing system by a certain linguistic group. The sociolinguistic considerations typically outweigh technical factors in determining acceptance. Therefore, Cooper (1989:131) suggests that it is more useful to consult anthropologists, political scientists and sociologists than linguists and psychologists on issues related to extralinguistic factors of script choice to determine the acceptance of a writing system.

Smalley (1963:34) assesses the adequacy of a writing system by the following criteria: maximum motivation for the learner and acceptance by the community, maximum representation of speech, maximum ease of learning, maximum transfer, and maximum ease of reproduction. Moreover, linguistic criteria such as accuracy, economy, and consistency are mentioned in Fishman (1977:XII) as benchmarks to the creation of writing system. Fishman's accuracy is related to Smalley's criteria of maximum representation.

An efficient writing system represents each of the sound distinctions with a single symbol. It does not represent non-distinctive differences, i.e. allophones of a sound (Smalley, 1963:37). Stark (2010:11-12) states the need of sound and grapheme correspondence for a good orthography design, which requires a phonemic inventory, and a description of the major phonological processes existing in a language.

According to Cahill & Karan (2008:7), the mismatch between spoken and written language creates difficulties in reading and writing. The creation of unnecessary graphemes reduces the simplicity of orthography and puts unnecessary burden on the learners. Stark (2010:12) asserts that the reduction of ambiguity and keeping simplicity of a writing system is important to enhance its clarity. This could be facilitated by a syntactic description of the language which is necessary to utilize word breaks in a way that enhances clarity. Cahill & Karan (2008:6) discuss a variety of cases where decision must be made with regard to word breaks, namely compounds, clitics, pronouns, and prepositions. Their key criterion for word breaks is whether a linguistic unit can stand alone as an utterance. Essential elements for word spacing are: the conveying of meaning principle, the preference for independent words principle, the stable forms principle, the limited ambiguity principle, and the consistency principle (Stark, 2010:110). In addition, the maximum transfer principle states that the skill to read a vernacular language should also enable reading the language of wider communication, or foreign languages with as little difficulty as possible. Only if a symbol is used with the same value in other languages, the reading skills can be transferred (Smalley, 1963:34-44).

Lexication refers to the choice and enrichment of appropriate words for a language to make it capable of expressing new concepts. Studies in the area of lexication examine issues related to lexical usage and expansion, which involve specifying how words are used in particular social, political, and cultural domains in a society (Kaplan & Baldauf, 1997:42-43).

Grammatication is an aspect of language standardization which refers to the normative formulation of grammar rules. In this process, the forms that fit to the new standard will be decided in order to reduce morphological and syntactic variation (Deumert, 2009:378). Kaplan & Baldauf (1997:41) describe the essence of grammatication as follows:

Grammatication involves the extraction and formulation of rules that describe how a language is structured. Most of the grammars developed have been prescriptive and based on the standardised variety of the language, especially those used in schooling or for literacy development.

Hence, grammatication focuses on the reduction of morphological and syntactic variation, particularly in the form of writing.

#### 2.2.1.2.2 Elaboration

Elaboration (also referred to as modernization) is a way of making a language capable of expressing modern new concepts. According to Deumert (2009:379), elaboration involves the terminological and stylistic development of a codified language to meet the ongoing communicative demands of modern life and technology. Elaboration, as explained by Cooper (1989:125-126), is the development of inter-translatability of a language with other languages in a range of topics and forms of discourse characteristics of industrialized, secularized, structurally differentiated, 'modern' societies. Wolff (2000:337) stresses the need for elaboration of vocabulary for commercial, professional, and scientific domains as knowledge and technology progress. Similarly, Ferguson (1996:46) highlights that elaboration enriches languages with the specialized vocabularies, and forms of discourse in relation to various functions the language must accomplish in a modern society.

Lexical innovation is related to lexical elaboration. According to Wolff (2000:337), lexical innovation refers to continuous and unplanned activity of vocabulary expansion in order to meet speakers' communicative needs. For instance, speakers employ different strategies such as creating new terms and/or borrowing from other languages. Hence, the term lexical innovation shows unplanned process whereas lexical elaboration, modernization, and development are the terms employed for planned process of language development.

Kaplan & Baldauf (1997:44) summarize the nature and need of language elaboration as follows:

Elaboration is a complex and ongoing process. All languages have some mechanism for elaboration. Language change; they take on new functions as new technologies emerge; they lose functions as older technologies are abandoned; they develop contact with new groups of speakers of other languages through immigration or through the expansion of commercial activities, and any of these changes require further elaboration of the official language. In the world in which we live language change and development is

both rapid and continuing. Language communities need, therefore, to have mechanisms to modernize their language so that it continues to meet their needs.

This quotation implies that the process of language elaboration is continuous and follows the technological advancement and socioeconomic changes in a given society. Hence, in order to fulfill the new demands and functions, languages should be modernized.

In relation to the method of lexical elaboration, Sager (1990:71) identified three main approaches to the development of new designation so as to represent concepts: (1) using existing resources, (2) modifying existing resources and (3) creating new linguistic elements or neologisms (cf. Section 2.1).

As elaborated by Sager (1990), term formation by *using existing resources* implies an extension of existing terms to express new concept; for instance, the use of simile or naming of concept in analogy to another, is familiar one. The re-use of a special designation in one field to another can also be used for the naming of different concepts. Moreover, terms can be formed by *modifying existing resources*. According to the same author, derivation (or affixation), compounding, conversion and compression are the most common method of designation of new concepts by modifying existing resources.

Derivation refers to the addition of affixes to the stem or root whereas compounding refers to the combination of existing lexical items into new ones. Conversion states syntagmatically varied use of the same form without morphological alternation of word. Compression, on the other hand, is the method of term formation by shortening of long forms by means of abbreviation, clipping, acronyms, etc. (Sager, 1990:72).

Neologism is another way of term formation. It results from the need for naming of new concepts, particularly in science and technology. Although special languages need some absolutely new designation, this kind of invention is rare. With regard to its form, neologism is

basically of two types: it is totally new creation or a borrowing from other languages (Sager, 1990:79; Sager & Nkwenti-Azeh, 1989:13).

Cabré (1999:94) also mentions borrowing and loan-translation as productive ways of creating new terms. Both methods are considered as language external source for the expansion of vocabulary in a language (Temmerman, 2000:169).

Borrowing is defined as incorporating an item or words from one language (the *donor language*) into another (the *recipient language*) (Mesthrie & Leap, 2009:243; Myers-Scotton, 2006:211). Myers-Scotton (2006:212-215) classifies borrowing broadly as cultural and core borrowing. Cultural borrowings refer to “words that fill gaps in the recipient language’s store of words because they stand for objects or concepts new to the language’s culture” (Myers-Scotton, 2006:212) whereas core borrowings refer to “words that duplicate elements that the recipient language already has in its word store” (Myers-Scotton, 2006:215). As stated in Myers-Scotton (2006), in core borrowing the recipient language always has sustainable equivalents so as to express concepts; however, it borrows redundantly because of cultural pressure or the wider function of a donor language. This kind of borrowing is sometimes called superfluous borrowing.

Borrowing can be categorized as unmodified (direct) and modified (indirect) borrowing. Unmodified borrowing is a less frequent type of borrowing as compared to modified borrowing. Hence, generally speaking, borrowing usually involves the adaptation of a word into the phonetic and grammatical system of the recipient language. In relation to this, Cabré (1999:209) mentions three ways of adapting borrowed linguistic items. These are changing one or more elements, deletion of an element and addition of an element to the borrowed forms.

Myers-Scotton (2006:220) describes the way borrowed words are integrated into the language both phonologically and morphologically. Phonological integration mainly considers the phonotactics or the arrangement of sounds of the recipient language. In other words, integration follows the rule of what is permissible or impermissible in syllable structure of a recipient

language. Furthermore, the difference between the phonemic inventories of the donor and recipient language matter in the integration since the existence or nonexistence of sounds in the recipient language affects mode of adjustment. Morphological integration, on the other hand, is another aspect of integration that affects borrowing. Myers-Scotton (2006:224) stresses that borrowed words are almost always adjusted to the morphology of recipient language which refers to adaptation in form.

Borrowing can be distinguished as transdisciplinary and translingual (ISO 704, 1999). Transdisciplinary borrowing (also called internal borrowing) refers to an adoption of a term from one subject field and using it for the designation of concept in another subject field within the same language. In the contrary, during translingual borrowing there is an adoption of concepts or terms from one (donor) language to another (recipient) language. In ISO 704 (1999), direct loan (borrowing) and loan translation are stated as an example under translingual borrowing.

Loan translation or *calque* is another productive way of term/word formation for the vocabulary expansion of a language. According to Dorleijn (2009:75), loan translation is defined as “words or phrases that are reproduced as literal translations from one language into another”. Myers-Scotton (2006:218) argues that loan translation is indirect type of borrowing. She identifies the major difference between single word borrowings and loan translations as follows:

[L]oans differ from other borrowings in two ways. First, many calques consist of more than one word. Second, the actual word (i.e. phonological shape) from the donor language is not borrowed; instead, how that language conveys a particular notion is borrowed. What happens, then, is that the recipient language replaces the words that the donor language uses to convey the desired notion with its own. So what is “loaned” is a translation, not words (Myers-Scotton, 2006:218).

In other cases, as mentioned in Myers-Scotton (2006:219), the vocabulary of a language can be enriched by loan blends which consist of two or more parts, with input from both the donor and the recipient languages. For instance, in English *grandfather* is a blend of English *father* and French *grand* from the French word for ‘grandfather’ *grandpere*.

### 2.2.1.3 Acquisition planning

Cooper (1989:157) considers acquisition planning as organized efforts to promote the learning of a language. It is an attempt to increase the number of language uses; for instance, by publishing newspapers, using news broadcasts, developing simplified literatures for second language learners, etc. Therefore, acquisition planning is directed toward language spread, i.e. an increase in the users or the uses of a language (Cooper, 1989:33). Myers-Scotton (2006:396) sees acquisition planning as the term that describes policies regarding media of instructions in schools and languages permitted as school subjects while in Cooper's (1989) description acquisition planning goes beyond school domains.

## 2.2.2 Lexical standardization: Principles and methods

According to Hudson (1980:32), standardization is a direct and deliberate intervention by society to create a standard language from non-standard varieties. As noted by Haugen (1966:252), standardization involves selection, codification, acceptance and elaboration of a standard (cf. Section 2.1). In the following subsections, principles and methods of standardization are discussed.

### 2.2.2.1 Principles of standardization

The necessity of standardization is related to the fact that people usually switch from one style of language to another in a communicative event. Likewise, they may switch from one variety to another or move from an oral to a written form of language in order to achieve certain communicative goals. As emphasized by Cooper (1989:144-145), the primary focus of standardization or codification is on written rules of a language. The existence of written dictionaries, grammars, spellers, and style manuals is often taken as a vital feature of the standardization of written languages.

Terminological standardization, as described in Cabré (1999:200), is “a concern of all special fields, i.e. humanities and social sciences as well as scientific-technical subjects, both in

technical or scientific contexts and in activities such as commerce where it has been practised the most.” As to Cabré (1999:200), proposals for standardization of terms should consider sociolinguistic factors (usage, language policy, user needs, etc.), psycholinguistic factors (customs, morals, aesthetics, etc.) and formal linguistic criteria (well-formedness, possibilities for derivation, morphological motivation, etc.).

In the process of designation of new terms for the newly emerging concepts, there are principles that guide the processes of term or word formation. ISO 704 (1999) and Felber (1984:179-186) suggest principles for creating new terms or standardizing existing terminologies. In fact, some of these principles are mentioned in Sager (1990:115) as principles of standardization to achieve effective communication. These principles are summarized as: transparency, consistency, appropriateness, linguistic economy, derivability, linguistic correctness and preference for native language.

Transparency refers to the visibility of meaning in the morphology of a language, thus according to ISO 704 (1999:23), “A *term* is considered transparent when the *concept* it designates can be inferred, at least partially, without a *definition*.” According to the principle of consistency, terminology development for any field of study should not be an arbitrary or random collection of terms. The terminological system needs to be coherent to the concept system. Integration and consistency of the existing terms and new terms with the concept system is very crucial in the development of terms (ISO 704, 1999:23).

Proposed terms should follow established patterns of meaning within a language community so as to maintain its appropriateness. Term formations that cause ambiguities shall be avoided (ISO 704, 1999). Felber (1984:179) argues that in special languages the ultimate efforts are directed towards avoidance of ambiguities. This kind of efforts should guarantee the communication between subject specialists and transfer of knowledge in education. On the other hand, communication can be achieved when a term is permanently assigned to a concept in unambiguous way.



Linguistic economy is another important point in the principle of term formation or standardization. According to ISO 704 (1999), a term shall be as concise as possible. Excessive length is a serious drawback because it violates the principle of linguistic economy and this frequently leads to ellipsis or omission of that term. As indicated in ISO 704 (1999:24), “the requirement for conciseness often conflicts with that for accuracy. The greater the number of *characteristics* included in a *term*, the greater the precision and transparency of the term. However, increasing the number of characteristics often makes a term too long and inconvenient to use.” In the case of scientific publication, however, complex terms even made up of five or six words, are tolerable. Hence, ISO 704 (1999:24) suggests that “practicality should govern any decision to give preference to one pattern of term formation over another.”

Sager (1990:108) describes the cognitive and psycholinguistic advantage of using short expressions or linguistic economy of terms as follows:

The concentration of complex relationships into short expression forms increases our cognitive capacity; from psycholinguistic experiments we know that the capacity of short term memory, the scope of distinction of absolute judgement, and the span of attention, oscillate at about seven items. Economy in the vocabulary is achieved by compression, through such procedures as acronymy, blending, derivation and compounding, especially when the compound represents the concentration of a whole phrase or even clause. The use of acronyms, symbols and other abbreviations is the most obvious example of economy.

This implies that the principle of economy in the designation of a concept facilitates learning process and increases the space for the storage of information in a memory. Hence, it has pedagogical and psycholinguistic advantage.

Moreover, a term which is to be developed should be the source for generating other forms. As to Felber (1998:180), when the need for designation of new concept arises, it should, whenever possible, be constructed in open manner for further derivation. Similarly, ISO 704 (1999:24) strengthens that in the process of term development, productive term formations that permit derivatives shall be preferred.

In the formation of new terms or standardization of existing terms, the linguistic correctness and preference to native language need to be considered. In relation to linguistic correctness, a term shall conform to the morphological, morphosyntactic and phonological norms of the language in question. With regard to preference to native language even though borrowing from other languages is an accepted method of term formation, the priority should be given to native expressions rather than direct borrowings (ISO 704, 1999:24).

In general, as stated in Cabré (1999:49), well preparation or elaboration of terminology is not enough to be successful in achieving goals of language planning. The product needs to be adapted to each situation to encourage their use. Hence, the dissemination of newly developed special vocabulary or terminology must go along with effective actions to promote usage.

#### 2.2.2.2 Methods of standardization

In some countries, the process of standardization is systematically organized at national level. In this situation, countries facilitate the creation of terms through guidelines devised for standardization policy of languages. For the purpose of undertaking this process, specialized commissions of experts and terminologists are usually formed based on subject fields. The members of commission coordinate their work by following guidelines or written criteria which are usually suggested by a central standardization body, which mainly aim at maintaining consistency of the existing designations and creating new words. They usually follow written criteria for the formation of terms and the treatment of borrowings and loan translations from other languages (Cabré, 1999:201). The central standardization body should also comprise different subject specialists and linguists or language experts so as to facilitate the language standardization process. The inclusion of a linguist in the standardization committee is essential to suggest the relevant linguistic strategies or methods in the designation of concepts.

Sager (1990:120-121) suggests different methods of standardization for the identification and naming of new concept in a language, namely redefinition of words, redefinition of existing terms, derivation, composition, borrowing and compression.

Standardization by redefinition of words involves a restriction of the range of denotation, which is economical, but may lack precision because of parallel reference to general language until the term is subsequently standardized. Redefinition of existing terms is often used in relatively new area of study where the conceptual system itself may be unstable. Standardization is also possible by exploiting the derivational nature of the language, i.e. general or special language. Though this method is economical, precision is negatively affected by the instability of conceptual structure, which can be fixed by the standardization process (Sager, 1990:120). Moreover, complex terms can be developed by composition or juxtaposition of existing words, special terms and borrowed terms from other language or special languages. The special case of redefinition i.e. borrowing is also the method of terminology standardization. Finally, terms can be standardized by reducing an existing complex terms to a more compact form by creating acronyms (Sager, 1990:121).

### 2.2.3 Term formation rules

Speakers have innate capacity to create words and terms by using their own linguistic competence. They usually perceive the real world and they can propose new designation for their perception or even they can propose alternative names for previously designated concepts. To achieve this goal, they are guided by linguistic rules which are lexical component of the language's grammar (Cabr  , 1999). Hence, Cabr   (1999:94) suggests different types of rules for term formation:

- |  |   |
|--|---|
| <p>a. derivational rules using a prefix<br/>[prefix + [base]x ] (x)(y)</p> | <p>c. compounding rules<br/>[[base]x # [base]y](x)(y)</p> |
| <p>b. derivational rules using a suffix<br/>[[base]x + suffix] (x)(y)</p>  | <p>d. conversion rules<br/>[base]x → [base]y</p>          |

Moreover, as Cabr   (1999:94) elaborates, in the process of a new word and/or term formation, speakers usually follow a process that demands less effort. For instance, they prefer to recombine

the existing morphological elements than to create new items. Hence, the techniques leading to the creation of new words and/or terms, as opposed to those that lead to borrowing, are governed by linguistic rules. The knowledge of word formation process of a language is very fundamental for terminologists. The proposal for the designation of new concept must be based on the knowledge of all the resources a language offers. The proposal works in the situation of first designation of an original concept and/or in the replacement of inefficient existing term (Cabr , 1999:95).

#### 2.2.4 Terminology and neology

Neology is a method of creating new designations that is essential in special subject fields. In some situations, creating new designations require specific interventions. The first intervention is required when there are different designations for a concept since these results in communication barrier. Secondly, intervention is required when a special language has a lexical gap of expressing a concept (Cabr , 1999:204). Cabr  (1999) further suggests the intervention mechanisms: “in the former case, the various designations must be reduced so that only one remains for the benefit of accurate communication. In the latter case a new designation must be created to express the new concept” (Cabr , 1999:204).

With regard to the classification of neologisms, Cabr  (1999:206) identified two broad categories of lexical neologisms: (a) those present in the general language (true neologisms) and (b) those present in special languages (also called neonyms). According to this author, lexical neologisms in the general language differ from terminological neologisms or neonyms in the following features. Lexical neologisms are usually more spontaneous and short-lived whereas neonyms arise for the reason that there is a need for a designation and are often more stable. Lexical neologisms usually coexist with synonyms, i.e. they are not affected by synonymy. Neonyms, on the other hand, discard synonymy since it can disrupt communication. Furthermore, lexical neologisms are inclined toward formal conciseness, while the majority of neonyms are phrases. Lexical neologisms are narrow in their scopes or do not often spread beyond the language, whereas neonyms are designed to be international. Finally, lexical neologisms are mainly appeal

to borrowing and old and dialectal forms of language instead of compounds based on neoclassical languages.

Cabré (1999:205) proposes possible parameters to determine whether a unit constitutes a neologism or not:

- a. diachrony: a unit is a neologism if it has arisen recently
- b. lexicography: a unit is a neologism if it is not in dictionaries
- c. systematic instability: a unit is a neologism if it exhibits signs of formal instability (e.g. morphological, graphic, phonetic) or semantic instability
- d. psychology: a unit is a neologism if speakers perceive it as a new unit

From the point of view of formation, neologisms can be achieved by four basic ways (Cabré, 1999:207). These comprise of formal neologisms, functional neologisms, semantic neologisms and borrowed neologisms. Neologisms in form include compounding, phrases and shortenings (i.e. initialisms, acronyms, clippings). Functional neologisms refer to lexicalization of form and syntactic conversion. Semantic neologisms, on the other hand, include the processes of broadening or narrowing or change of the meaning of the base form. Moreover, borrowed neologisms indicate true borrowing and loan translations.

Pavel & Nolet (2001:20-21) describe the formation of neologisms in terms of two major mechanisms: semantic neologisms and morphological neologisms. In semantic neologisms, they include expansion (that refers to the meaning extension by providing new meaning), metaphor, conversion of grammatical category and adoption from another subject field. In the case of morphological neologisms; derivation, compounding, blending, acronymy and borrowing mentioned as processes of creation of new words.

The motivation for creating neologism could be stylistic, social (e.g., gender-neutral position titles) and technological advancement. The acceptance of neologisms depends on factors such as brevity, handleability, ease of retention, potential for derivation (productivity) and reflecting characteristics of the concept it designates (Pavel & Nolet, 2001:20-21).

### 2.2.5 Dimensions of terminology

Terminology can be described in three dimensions: cognitive, linguistic and communicative (Cabr , 1999:41; Sager, 1990:13).

The cognitive dimension examines the way conceptual contents relate to linguistic forms; or the representation of concepts by terms and definitions (Sager, 1990:13-14). Establishing the structure of concepts that condense the knowledge of a subject field is the initial activity in cognitive approach to terminology. Establishing the structure of concept, on the other hand, is followed by the search for the designations of each concept in the structure (Cabr , 1999:43).

The linguistic dimension examines the existing linguistic forms and potential forms so as to designate new concept (Sager, 1990:13). It suggests different methods of term formation by using existing resources, modifying existing resources and/or creation of new lexical entities (Sager, 1990:71). From linguistic point of view, terminology is an aspect of special lexicon which is distinguished by subject field and pragmatic criteria (Cabr , 1999:33).

The communicative dimension focuses on the use of terms as a vehicle of knowledge transfer to various audiences in a speech act. This process includes the activities of compilation, processing and dissemination of terminology by using specialized dictionaries and glossaries (Cabr , 1999:12). From the users' perspective, terminology is a set of important communicative units that can be evaluated by the parameter of economy, accuracy and appropriateness of expressions (Cabr , 1999:33). This implies that the communicative dimension is equivalent to terminology standardization.

Generally, the conceptual organization of thought portrays the cognitive aspect of terminology whereas the representation of concept by terms refers to the linguistic dimension of terminology. The transfer of knowledge, on the other hand, implies the communicative aspect terminology. Of the three dimensions of terminology, the cognitive dimension is the most complex to describe since cognition is the output of a mental process that leads to knowledge. Hence, terminologists

do not give much attention to the theoretical aspect of cognition but they are interested in its applications (Cabr , 1999).

### *2.3 Review of previous works*

Previous studies related to the present work are reviewed in this section. The review has been made by selecting relevant works which are done in the African and the Ethiopian context and which are related to the languages under study.

Van Huyssteen (2003) has conducted a PhD research to provide a practical methodological approach to the standardization and elaboration of Zulu as a technical language. He uncovered that even though African languages including Zulu possess the basic tools that are vital for their development, for instance, orthographical standards, terminological lists, dictionaries and grammar, there are deficiencies in achieving effective technical elaboration and standardization. The main cause for the lack of terminology in African languages and Zulu could be attributed to the poor implementation of language policy and inefficient coordination of corpus planning initiatives. More specifically, Van Huyssteen's (2003) study identified that there are serious inconsistencies in the formation and interpretation of orthographical rules in Zulu, and a lack of documentation of word formation methods for the terminologists which could be used as a model.

Nakin (2009) examines and analyzes the aspects of status, corpus and acquisition planning in Sesotho and isiXhosa. The findings showed that both languages have been given the official status; however, they were not fully elaborated. The effort that has been done was very minimal in developing, promoting and elevating the status of Sesotho as compared to isiXhosa. With regard to the use of African languages in formal domains like education, they were relegated to lower position while ex-colonial languages have assumed greatest status in Africa.

Zealelem (2012) describes the Ethiopian language policy from the historical and typological perspectives. He has undertaken typological comparisons of language policy of the Imperial, Derg and EPRDF governments. The finding has shown that the language treatment efforts were poor during the imperial period since no due attention was given to other Ethiopian languages

except Amharic. Even though the three governments appear to be similar in their interest to maintain national unity, they followed different approach to maintain and strengthen national integration. During imperial regime, it was believed that national unity can only be strengthened by promoting one language (Amharic). Promoting diversity and ethnic languages had been perceived by imperial language policy as a source of problem; as a result, assimilationist policy was encouraged. Contrary to this, the Derg and EPRDF have assumed that diversity is a norm. This perception has been reflected in the constitution of both governments, which pronounced the rights of ethno-linguistic groups to use their languages and promote their cultural heritages. Moreover, the introduction of mother tongue education, the use of Afaan Oromo, Tigrinya and Somali (in addition to Amharic) on the Ethiopian television and the use of a number of languages in the Ethiopian radio and other local radio broadcasts were examples of the most remarkable changes in relation to language development activities during EPRDF.

Bekale (2012) examines the strengths and weaknesses as well as the challenges and problems of language planning (LP) in present day Ethiopia. The research has shown that the LP in current Ethiopia is better off in its achievements compared to the LP experiences of the preceding periods, i.e., the Imperial and the Derg periods. The study has also identified that there are two key problems which struggle the LP efforts of the current period. These are: a) lack of systematic, theoretically sound, coherent, consistent and sustainable LP and b) language planners are using unprofessional approach (trial and error methods) due to lack of knowledge and skills that language planning and policy studies offer. In order to tackle such problems, Bekale (2012) has proposed long-term and short-term solutions in his study. Firstly, providing professional development program through training in the area of LP is proposed as long-term solution. Secondly, providing language planners with a simple and friendly outline of a LP model based on the descriptive framework is suggested as the short-term solutions. The outlining of a LP model is believed to assist the planners as guideline in their job. Accordingly, the author outlined the guideline on the basis of a descriptive framework of LP that he calls the Modified Descriptive Framework of LP which is supposed to suit the growing needs of a multilingual developing country.



There are also studies which have been done on Amharic and Hadiyya or on the related languages. Takkele (2000) discussed methodological and conceptual principles in developing new words and technical terms in Amharic. He has identified methods such as compounding, semantic shift, loan translation, clipping, hybridization, borrowing and derivation as the ways of elaboration of technical vocabulary in the language. He has also suggested that further research needs to be conducted for the exhaustive description, addition and modifications on the issues raised. The present work is wider in its scope since it includes the corpus planning issues such as orthography development and standardization and lexical elaboration by focusing mainly on the educational domain.

Abraham (1991; 1974) deals with the modernization of Amharic. Abraham (1991) focused on the new terminologies that carry the Marxist-Leninist ideology in Amharic based on the Marxist Leninist Dictionary which was published during the Derg regime. The result has shown that different sources from European languages (e.g., English) and from Ethiopian languages (e.g. Ge'ez) were employed in the lexical innovation of Amharic. Abraham (1974) analyzed the problem of terminology by taking two government documents. The documents were Third Five Year Development Plan (1961-1965) and Ethiopia, Statistical Abstract (1967-1968). The findings showed that foreign terminology exhibited serious lack of standardization, were full with erroneous renderings and functionally overloaded words. In other words, most terms were not important since most of the monolingual Amharic speakers cannot get much out of the document, particularly for the Development Plan.

Richter (1988) described the modern scientific vocabulary by taking data mainly from Amharic, Oromo and to some extent Tigrinya. The finding of the study indicated that neologisms and changes of meaning are the main sources for the Amharic and vocabulary of other Ethiopian languages. Moreover, vocabulary development was based on using the languages' own material and word-formation patterns. The focus of this article was also the description of modern terminology of Derg regime of Ethiopia.

The other most relevant work to this study is English-Amharic Science and Technology Dictionary (1996) which was compiled and published by the Academy of Ethiopian Languages. The dictionary production was aimed at developing technical terms for junior and secondary levels of education in order to help the preparation of textbooks in Amharic. In this work, 15,087 English terms were given Amharic equivalent in the fields of science and technology. The dictionary comprised thirteen disciplines. These are: Agriculture, Botany, Building Construction, Chemistry, Electro-Mechanics, Geography, Geology, Mathematics, Medicine, Nutrition, Physics, Statistics, and Zoology. Hence, this dictionary together with educational textbooks has been consulted as data sources for the present study.

Zealelem (2009) described mechanisms that have been employed in the lexical elaboration of Tigrinya so as to expand its lexicon. The findings showed that borrowing, semantic extension, loan translation, compounding and rarely blending and acronymy are identified as the principal lexical or terminological development mechanisms. Superfluous borrowings are identified and their replacement by a genuine or native words is recommended in the article. It has also been discovered that the involvement of linguists, educators and elderly speakers of the language (rural and urban) seems to be minimal. Accordingly, a wider involvement of different sects of people and experts was recommended for the successful lexical elaboration activities, in the future.

With regard to Hadiyya, two works are of relevance. The Hadiyya-English Dictionary (1996) compiled by the Hadiyya Zone Education Desk was primarily intended for primary school students and teachers. The dictionary was designed mainly for expressing technical and scientific concepts rather than serving the general purpose vocabulary although there are some general purpose vocabularies in it. This dictionary has been consulted as data sources for the present study.

Tadesse (2015) provides a comprehensive documentation and grammatical description (phonology, morphology and syntax) of the Hadiyya language. In this study, the grammatical description has been provided based on the documentation of some cultural aspects which were

important for the analysis of linguistic features. Hence, the present work will benefit a lot from this work particularly for the analysis of word formation pattern in Hadiyya.

Related works on languages closely related to Hadiyya (i.e., Sidaama and Gedeo) were also reviewed. Birhanu (2011) showed that semantic transfer, derivation, compounding, borrowing, loan translation, abbreviation, blending and reduplication were the most common methods attested in the terminology development of the Gedeo language. Birhanu (2011) appraised that many synonyms and polysemes were created in the process of transfer of scientific and technical knowledge to the target population. Moreover, some terms lack transparency and were difficult to comprehend for the reason that they were created without being given clear definition. It has also been reported that borrowing was commonly used term creation strategy in the language. Amharic and English are primary sources of Gedeo loanwords. In the contrary, the contribution of neighboring languages is very insignificant as sources of loanwords.

Zealelem (2008) has described the efforts that were so far taken in Sidaama lexical development and terminology. The finding showed that borrowing was the most frequently occurring mechanism followed by compounding, loan translation, semantic extension and paraphrasing. It has also been suggested in the article to look for suitable words in different dialects as means of exploiting language internal resources. Moreover, some word forms that exist in parallel to the same concept are recommended to be standardized in the language.

There are also studies in Oromo lexical development or standardization which is a related language to Hadiyya. Mekonnen (2002) has conducted his MA study on the lexical standardization in Oromo. Accordingly, his results showed that for the selection of the base dialect, the Oromo language employed Mecca, Hararge, Borana, Tulama and Arsi-Bale dialects in the dictionaries which were compiled before 1990. Materials which were published after 1991 such as dictionaries, textbooks, newspapers, and electronic mass media (TV and radio) use all Oromo dialects except Rayya. Codification as a component of standardization was also described in line with criteria such as number of speakers, frequency of occurrence, productivity, originality, economy, etc. Based on such criteria, the author analyzed some words and suggested

a word or words as standard. Furthermore, semantic extension, derivation, compounding, blending and borrowing were identified as primary methods of lexical elaboration in Oromo. With regard to implementation, government institutions (e.g., education bureau, mass media, language academy or committee), a non-governmental organization like missionaries, individuals and speech community are identified as possible entities that can implement the proposed standard form.

Baye (1994) provides an account of what was being done in the lexical modernization and standardization of Oromo and also to suggest some other ways that could be employed in the creation of the desired technical terms. The finding showed that various mechanisms such as borrowing, loan-translation, compounding and derivation are employed for the lexical enrichment in Oromo. Baye (1994) suggested that even though it was natural to incorporate many loanwords of foreign origin, from the point of view of Cushitic identity, it seemed vital to look into the dialectal resources. Moreover, Baye has suggested that a systematic set of procedures of word-formation which was descriptively adequate and intuitively appealing needs to be followed.

In general, there are more studies on Amharic than on Hadiyya. The studies conducted on Amharic were more focused on the development of terminology. Moreover, the studies were mainly analyzed by taking data outside the educational domain and from terminology used before 1991. These works do not give exhaustive and contemporary description of language development and standardization on post 1991 documents or textbooks which are currently in use. The post 1991 change in political ideology has triggered the need of development of Ethiopian languages. In regard to Hadiyya, the absence of a study on the topic of lexical standardization and elaboration triggered the urgent requirement of the present study.

Even though the present study has similarities with Bekale (2012) and Mekonnen (2002) there are clear differences on focus. The main focus of Bekale's (2012) study was in the status planning issues though corpus planning aspect was also slightly discussed in the Ethiopian context in general. Mekonnen's (2002) study describes the standardization process following

Haugen (1966; 1969) conceptual model of language planning, i.e., selection, codification, elaboration and implementation. The present study mainly focused on the corpus planning aspects which included standardization (codification) and elaboration of lexicon in the selected languages.

## CHAPTER THREE: ORTHOGRAPHY DEVELOPMENT AND STANDARDIZATION

### 3.1 *Orthography development and standardization in Amharic*

Orthography development is an essential element of language planning, particularly, corpus planning (see 2.2.1.2). In the following section, the historical development of Ethiopic script, and the evaluation of the Amharic orthography on the basis of the principles of orthography development, and reform efforts will be presented.

#### 3.1.1 Amharic phonology

##### 3.1.1.1 Phoneme inventory

Amharic has 30 consonants that can be classified as stops, fricatives, nasals, liquids and glides (semi-vowels) in relation to manner of articulation. It also includes labialized velars /g<sup>w</sup>/, /k<sup>w</sup>/ and /q<sup>w</sup>/ which are in opposition to the plain velars /k/, /g/, and /q/.<sup>8</sup> Based on manner of articulation, voicing and point of articulation, Amharic phonemes are categorized as follows (Baye, 2000 E.C:7):

*Table 4: Consonants of Amharic*

Manner of Articulation		Point of articulation				
		Labial	Alveolar	Palatal	Velar	Glottal
<b>Stop</b>	Voiced	b	d		g	
	Labialized				g <sup>w</sup>	
	Voiceless	p	t		k	ʔ
	Labialized				k <sup>w</sup>	
	Ejectives	p'	t'		q	
	Labialized				q <sup>w</sup>	
<b>Fricative</b>	Voiced		z	ʒ		
	Voiceless	f	s	ʃ		h
	Ejective		s'			
<b>Affricate</b>	Voiced			ʤ		

<sup>8</sup> For the transliteration of Amharic phonemes see Appendix II, A.

Manner of Articulation		Point of articulation				
		Labial	Alveolar	Palatal	Velar	Glottal
Nasal	Voiceless			č		
	Ejective			č'		
		m	n	ñ		
Liquid	Laterals		l			
	Flap		r			
Glide		w		y		

(Adapted from Baye, 2000E.C:7)

The occurrence of *p*, *v* and *p'* is limited to loanwords from European languages: *p* for instance, in *polis* 'police', or *posta* 'mail', and *v* in *visa* 'visa' or *vitamin* 'vitamin'. The ejective *p'* also appears in very small number of loanwords from Greek, as in *t'ərəpp'eza* 'table' (Anbessa and Hudson, 2007:30). The consonants *ñ*, *ʔ* and *ž* are less frequent phonemes in Amharic. The nasal *ñ* does not appear in the initial position of a syllable and the glottal stop *ʔ* never in the coda of a syllable (Meyer, 2011:1184).

The labialization of velars is regarded as a typical features of Ethiosemitic languages. Their phonemic status, however, is controversially discussed (Meyer, 2011:1185). The labialized velars ([g<sup>w</sup>], [k<sup>w</sup>] and [q<sup>w</sup>]) are not considered basic consonant phoneme and are not included in the phonemic inventory (Mulugeta, 2001:10). On the contrary, minimal pairs are provided to show their phonemic status, as in *gəddələ* 'kill' vs *g<sup>w</sup>əddələ* 'lack' or *qətt'ərə* 'employ' vs. *q<sup>w</sup>ətt'ərə* 'count' (Leslau, 1995:8). In this study, the labialized velars are not considered as a sequence of two consonants, but a single consonant phoneme, as in, *q<sup>w</sup>anq<sup>w</sup>a* 'language' which is not *\*q<sup>i</sup>wanq<sup>i</sup>wa*. The same applies to initial labialized labial and alveolar consonants, as in *m<sup>w</sup>am<sup>w</sup>a* 'dissolve', *b<sup>w</sup>amb<sup>w</sup>a* 'pipe', or *t<sup>w</sup>at* 'morning' (cf. Meyer, 2011:1185).

Amharic has seven vowels: *ə*, *u*, *i*, *a*, *e*, *ɨ*, and *o*. The central vowel *ɨ* is used primarily as epenthetic vowel during syllabification. Based on the position and movement of tongue, the Amharic vowels are shown in Table 5:

*Table 5: Amharic vowels*

	Front	central	back
High	i	ɨ	u
Mid	e	ə	o
Low		a	

(Source: Baye, 2000 E.C:15)

The vowel *i* in addition to its function as an epenthetic splitting impermissible consonant cluster can also be treated as a basic vowel (Mulugeta, 2001:8). From vowel phonemes, *ə* does not occur word-initially, except in the interjection *əɾə* ‘yeah, really!’ and *i* not word-finally (cf. Meyer, 2011:1186; Anbessa & Hudson, 2007:36).

### 3.1.1.2 Syllable structure

Amharic syllable structure comprises an onset, nucleus and coda. In Amharic, consonant gemination is distinctive while vowel length is not. According to Baye (2000 E.C:22), all consonants except /h/ and /ʔ/ can be geminated. The consonant gemination occurs either in word medial or word final position. The possible syllable structure of Amharic described in Baye (2000 E.C:21-23) is summarized in Table 6 .

*Table 6: Amharic syllable structure*

	Syllable type	Amharic	Gloss
i.	CV	/na/ ነ	‘come!’
	VC	/af/ ለፍ	‘mouth’
ii.	VC <sub>1</sub> C <sub>2</sub>	/and/ አንድ	‘one’
		/amd/ አምድ	‘pillar’
iii.	VCC	/att’/ አጥ	‘one who needy’
		/akk/ አክ	‘clearing one’s throat’
	CVC	/bat/ ባት	‘calf (of leg)’
		/sar/ ሳር	‘grass’
iv.	CVC <sub>1</sub> C <sub>2</sub>	/kərs/ ከርስ	‘belly’



Syllable type	Amharic	Gloss
CVC <sub>1</sub> C <sub>1</sub>	/sərk/	ሰርክ ‘frequently’
	/səqq/	ሰቅ ‘belt’
	/dəgg/	ደግ ‘kind’

In Amharic, the minimal syllable is either V or CV based on the status of *ʔ*, as in (*ʔ*)*a* (*ʔ*)*a.lə* ‘start to speak, yawn’ or (*ʔ*)*a.hun* ‘now’ (cf. Meyer, 2011:1186). Glottal stop *ʔ* generally nondistinctive word-initially. For instance, words like *iwnət* ‘true’ may be understood as *ʔiwnət* or *iwnət* (Anbessa & Hudson, 2007:36). Generally, in Amharic there are three principal syllable types (i.e., CV, CVC, CVCC) and another three onset-less ones (V, VC, VCC). The onset-less syllable types are output of the loss of initial guttural consonant through time (\**ʕa.sa* ‘fish’, \**ʔaf* ‘mouth’, \**ʕayn* ‘eye’, etc.) (Shimelis, 2014:5). Mulugeta (2001:40), summarizes the overall Amharic syllable template as: CV(C) (C) based on principal syllable types. The vowel *ə* becomes *a* after glottal fricative *h* and glottal stop *ʔ* due to gutturalization,<sup>9</sup> as in *həgər* → *hagər* ‘country’ (Mulugeta, 2001:32).

Baye (2000 E.C:22) mentions word medial gemination, as in *θʔ s’əgga* ‘grace’, *ደሴት dəsset* ‘island’ and *አባት ʔabbat* ‘father’. The maximum consonant cluster in word medial position is two, which is either in consonant gemination or sequence of two different consonants. If there are three consonants, the epenthetic vowel [i] will be inserted in word medial position. Generally, in word initial position, a two consonant cluster is not permissible. When Amharic speakers pronounce loanwords such as ‘sport’ or ‘stadium’ [i] will be inserted word initially, as in [iʃport] and [iʃtɛdiyem], respectively, to adjust to the phonological system. The word-initial \*CC cluster can also be adjusted as CiV, as in [diʔraft] ‘draft’.

A syllable initial consonant sequences (CCV) are generally limited to labial or velar + *r* or *l*. Though the vowel *i* is usually inaudible, the *Cr* or *Cl* may be understood as *Cir*, *Cil*, as in *grum*

<sup>9</sup> As to Bender (1976:79), both of the gutturals (/h/ and /ʔ/) seem to be growing less frequent. The phoneme /h/ is fairly common as compared to /ʔ/ in Amharic. The glottal /ʔ/ is just barely functional in the sounds system because words can be uttered with it or without it.

‘amazing’, or *blen* ‘pupil of eye’ (Anbessa & Hudson, 2007:36). The labialized consonants such as  $k^w$ ,  $g^w$ ,  $q^w$ ,  $h^w$ ,  $b^w$ ,  $l^w$ ) are not the sequence of two consonants, but a single consonant phoneme (see 3.1.1.1 ).

### 3.1.2 Development of Amharic to a written language: historical overview

Amharic script is related to the Ethiopic script (also called *fidel*<sup>10</sup> or Ge’ez script). The script is closely related to the Ethiopian Orthodox Church and was considered as symbol of unity<sup>11</sup> in Ethiopia especially during the reign of Haile Selassie I. The Amharic script developed from the Ethiopic script which was at first used for writing the classical Ethio-Semitic language, Ge’ez<sup>12</sup> (cf. Azeb, 2010:179). When Amharic adopted the Ethiopic script, it created graphemes that were not part of Ethiopic script but which were essential to write Amharic (see Table 9).

There are different views on the origin of Ethiopic script (Azeb, 2010:179-180). Some scholars argue that Ethiopic script has been developed as a result of the gradual transformation of the Sabaean script. Others view that Ethiopic script has been originated in Ethiopia while still other scholars, taking a middle position, state that the Sabaean writing system and Ethiopic have rather developed independently. According to Azeb (2010:179-180), the question of origin is still unresolved.

Ethiopic and Sabaean share 24 symbols in common and in Ethiopic there are two additional symbols, i.e.  $\aleph$  <p’ə> and  $\tau$  <pə>,<sup>13</sup> since these sounds were acquired through Greek loanwords (Bender, Head, & Cowley 1976:120; Baye 1992 E.C:21). Table 7 shows Sabaean characters with their Ethiopic equivalents. Note that the Ethiopic grapheme consists of a consonant followed by the vowel ə.

<sup>10</sup> *Fidel* is the local name of the writing system widely used in Ethiopia and Eritrea. Scholars refer to the term *fidel* by names such as the Ethiopic, Ge’ez, Abyssinian, Ethiopian or Amharic writing system (Azeb, 2010:179). In the present study the term Ethiopic script is used.

<sup>11</sup> The Amharic language itself was used as a tool for national unification (see 1.1)

<sup>12</sup> The Ge’ez language ceased to be used as a mother tongue since the ninth century. However, it is still used as a liturgical language in the Ethiopian Orthodox Tewahido Church (Azeb, 2010:179).

<sup>13</sup> The base for creation of  $\aleph$  is  $\aleph$  whereas  $\tau$  is adopted from the Greek letter  $\pi$  (Yonas et.al, 1966 E.C:66)

*Table 7: Sabean and Ethiopic scripts*

Sabean	ሀ	ገ	ሠ	፩	ቀ	ወ	ሠ	ረ	በ	ተ	ሰ	ከ	ነ	ገ	ጸ
Ethiopic	ሀ	ለ	ሐ	መ	ቀ	ወ	ሠ	ረ	በ	ተ	ሰ	ከ	ነ	ገ	ጸ
	h	l	h	m	q	w	ś	r	b	t	s	k	n	x	s'

Sabean	ጸ	፩	ሐ	ወ	ቀ	ገ	፩	፩	፩	፩	፩	፩	፩	፩	-	-
Ethiopic	-	፩	ከ	ወ	፩	ገ	፩	-	፩	፩ <sup>14</sup>	-	የ	-	-	ጸ	፩
	-	f	ገ	፩	z'	g	d	-	t'	z		y	-	-	p'	p

(Adapted from Girma, 2009:171; Yonas et.al 1966 E.C)

As shown in Table 7, when Ethiopic is compared to the Sabaen symbols, ጸ, ፩, ፩, ፩ and ፩ are not existent in the Ethiopic scripts. Though there are similarities in the shape of both Sabean and Ethiopic symbols, there are slight differences on the shape of some symbols<sup>15</sup>. The direction of writing in Ethiopic script is from left to right that distinguished it from other Semitic scripts (Coulmas, 1996:10).

Sabaen and initial Ethiopic scripts were consonantal; later the Ethiopic script vocalized. This vowel modification mechanism offers another feature that makes the Ethiopic script unique among the Semitic scripts (cf. Azeb 2010:180-181). Coulmas (1996:228) claims that the Ethiopic script developed its vowel modification mechanism due to the motivation from the Indian scripts like Brahmi. As elaborated in Getachew (1996:571), the introduction of vowel signs appeared in the writing system with the advent of Christianity in Ethiopia, about 350 A.D. Seven vowels in the Ge'ez script are indicated by the addition of diacritics to the basic consonant, which

<sup>14</sup> The letter ፩ is not counterpart to the letter indicated (ጸ) but to the following (፩) although the sound representation is correct.

<sup>15</sup> See also Yonas et al, 1966 E.C:96-97 for detail description of the change.

consequently occurs in seven vowel combinations called *first, second, etc. order* in Ge'ez and Amharic (see Frantsouzoff, 2010:583), as in:

- 1<sup>st</sup> order (C + ə, base consonant): ግዕዝ *gi'iz*
- 2<sup>nd</sup> order (C + u): ካዕብ *kaʔib* (lit. '2<sup>nd</sup>')
  - 3<sup>rd</sup> order (C + i): ሣልስ *salis* (lit. '3<sup>rd</sup>')
    - 4<sup>th</sup> order (C + a): ራብዕ *rabiʔ* (lit. '4<sup>th</sup>')
      - 5<sup>th</sup> order (C + e): ኃምስ *hamis* (lit. '5<sup>th</sup>')
        - 6<sup>th</sup> order (C + i): ሳድስ *sadis* (lit. 6<sup>th</sup>')
          - 7<sup>th</sup> order (C + o): ሳብዕ *sabiʔ* (lit. 7<sup>th</sup>')

The seven vowel forms have names such as ግዕዝ *gi'iz*, ካዕብ *kaʔib*, ሣልስ *salis*, ራብዕ *rabiʔ*, ኃምስ *hamis*, ሳድስ *sadis* and ሳብዕ *sabiʔ*. These vowel forms are named by adopting the name of Ge'ez numbers which stands for *first, second, third, fourth, fifth, sixth* and *seventh*, respectively (cf. Meheretu, 2006:26). The combination of “consonant + vowels” produces syllabic graphemes. Though there is no overt marker for the base form (first order) graphemes, it is indicated without attaching diacritics i.e., it has default C+ə in its base form.

Getachew (1996:571-572) explains the vowel marking in Ethiopic characters as follows:

- i. The base character (called *gi'iz*) is always uttered with the vowel, ə. Hence, the character has lost its ability to represent all the other possible readings.
- ii. The second order vowel *u* is marked by attaching small horizontal line to the middle of the right side of the character, with the exception of symbols such as ፉ <fu>, ዉ <wu>, ሥ <ru>. The horizontal lines are bend down at the end after being attached to the first order.
- iii. The third order vowel *i* is marked by attaching to the lowest part of the right side of the character. For instance, ለ <la>, becomes ሊ <li> by attaching the diacritic. The pattern or system is violated by the following characters: ሪ <ri>, ዩ <yi>, ፊ <fi>, ሚ <mi>, ኪ <hi>, ሢ <si>, ቢ <fi>.
- iv. If the character has more than one leg, a vertical line is attached to the bottom of the character to represent the vowel *a*. The system is violated in the case of ራ <ra>, ና <na>, and ኧ <ña>.

- v. The fifth order vowel *e* is represented by attaching a ring or half ring to the lower part of the right side of the character. In the cases of symbols ኄ <he>, ሜ <me>, ሚ <še>, ዌ <we>, ዬ <ŋe> one leg carries the diacritics whereas in ዩ <ye> and ጪዩ <č'e> the ring is attached at middle of the characters with a short horizontal line.
- vi. The rule for marking the sixth order vowel *i* is not generalized since the addition pattern of diacritic is not regular. In the case of ር <ri>, ው <wi>, ደ <di>, ጀ <gi>, አ <p'i>, ፍ <fi> and ጽ <s'i> a short horizontal line is added on the right side. But in the cases of ህ <hi>, ቅ <k'i>, ተ <ti>, ን <ni> and እ <?i> it is added on the head of the characters. The vowel marks for ለ <li>, ሰ <si>, ገ <xi>, ይ <yi> and ግ <gi> follow no rule. Hence, this column has to be learned individually because of its irregularity.
- vii. The vowel *o* is marked in two different ways. According to Getachew (1996:572), the rule for the distribution of *o* is not clear. The first way of vowel *o* marking is addition of a circle to top of the character, for example, ቆ <qo>, and ቶ <to>. Another way of marking vowel *o* is adding vertical line to the end of the left leg or to the middle bottom of the character.

Amharic employs syllabic writing system based on Ethiopic script. As explained earlier, in this writing system each consonant graph is formed by the addition of diacritics to a base form<sup>16</sup> to form a set of 231 consonant-plus-vowel graphemes (Mountford, 1990:384). Coulmas (2003:154) uses the term alphasyllabic to refer to the Amharic writing system while Ullendorff (1973:127) calls it quasi-syllabic because each character consists of one consonant followed by a vowel (see 3.1.3).

Ayele (1997:91) calls the sound designation in Ethiopic writing system syllographs that distinguish from all alphabetic systems of writing. In Ethiopic syllography, consonants and vowels are not separated; they have seven distinct syllabic sounds. The Ethiopic writing system follows the principle of repetition since each graph repeats itself seven times. Each level of repetition

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<sup>16</sup> There is no overt vowel marker for the base form in the Ethiopic script. For instance, for the first order grapheme ለ <b>, there is consonant /b/ and the vowel /ə/ fused together. Therefore, there is no diacritic to mark the first order vowel /ə/ orthographically.

shows a unique style permits autonomy, and yet it is an integral part of the system (Ayele, 1997:99).

### 3.1.3 Amharic orthography

The script which Amharic inherited from Ge'ez was already fully vocalized (Abraham, 1983:393). The Amharic orthography has 33 base forms in 7 orders for vowels. This combination of characters provides 231 simple syllabic characters (Bender, Head & Cowley, 1976:121). In the orthography each symbol is a combination of consonant and vowel; for instance, consider /l/ and /m/ graphemes.

*Table 8: The seven orders of /l/ and /m/ graphemes*

Orders	1	2	3	4	5	6	7
	<i>gi'iz</i>	<i>ka'ib</i>	<i>salis</i>	<i>rabi?</i>	<i>hamis</i>	<i>sadis</i>	<i>sabi?</i>
Character	ለ	ሉ	ሊ	ላ	ሌ	ል	ሎ
Transcription	lə	lu	li	la	le	li	lo
Character	መ	ሙ	ሚ	ማ	ሜ	ም	ሞ
Transcription	mə	mu	mi	ma	me	mi	mo

The present day Ethiopic has passed through essential steps during the process of development of Amharic orthography. In order to write Amharic, 26 Ge'ez characters were directly adopted. The first orders of those symbols were provided with its consonant value, as in (1):

(1)	ሀ	ለ	ሐ	መ	ሠ	ረ	ሰ	ቀ	በ	ተ	ኀ	ነ	አ
	h	l	ħ	m	ś	r	s	q	b	t	x	n	ʔ
	ከ	ወ	ዐ	ዘ	የ	ደ	ገ	ጠ	ጰ	ጸ	ፀ	ፈ	ፒ
	k	w	ʃ	z	y	d	g	t'	p'	s'	z'	f	p

The Ethiopic script lacks symbols to represent palatal sounds except ʔ <y> that existed in Amharic when it was employed for wrting Ge'ez. In order to represent Amharic palatal sounds,

new symbols were devised by the addition of small horizontal lines on the top of symbols for corresponding non-palatal stop except for the ejective palatal stop /č'/. The ejective palatal ጠ /č'/' was created by the addition of small rings to the legs of the non-palatal stop ጠ (Abraham, 1983:397). The creation of new symbols (such as ጀ <ğ>, ቸ <č>, ጠ <č'> etc.) undertaken probably in the 14<sup>th</sup> -15<sup>th</sup> century when Amharic was a court language of the Solomonic dynasty. Hence, these symbols were used for writing in Amharic using Ethiopic syllabary and, later, they were used in Tigrinya (see Frantsouzoff, 2010:583). Table 9 shows the seven basic graphemes for palatalized or palatal sounds in Amharic:

*Table 9: Graphemes for palatalized/palatal consonants*

Consonant	ə	u	i	a	e	ɨ	o
š	ሸ	ሸ፡	ሸ፡	ሸ፡	ሸ፡	ሸ፡	ሸ፡
č	ቸ	ቸ፡	ቸ፡	ቸ፡	ቸ፡	ቸ፡	ቸ፡
ñ	ኸ	ኸ፡	ኸ፡	ኸ፡	ኸ፡	ኸ፡	ኸ፡
ž	ዸ	ዸ፡	ዸ፡	ዸ፡	ዸ፡	ዸ፡	ዸ፡
ğ	ጀ	ጀ፡	ጀ፡	ጀ፡	ጀ፡	ጀ፡	ጀ፡
č'	ጠ	ጠ፡	ጠ፡	ጠ፡	ጠ፡	ጠ፡	ጠ፡

In addition to the creation of Amharic palatal symbols, the grapheme for ኸ <hə> is invented from the velar consonant ከ <kə> symbol by the addition of horizontal line above the grapheme. In the list of Amharic graphemes, ኸ is often treated as marginally listed in a separate box and it is combined with vowels following the same pattern of other graphemes, as in ኸ <və>, ኸ፡ <vu>, ኸ፡ <vi>, etc. (cf. Azeb, 2010:185). It was devised by adding a horizontal line to the grapheme ስ <b>. It is recently used in loanwords such as ኸይረስ *vayrəs* ‘virus’ and ኸዛ *visa* ‘visa’ (cf. Azeb, 2010:185). The currently used Amharic graphemes are indicated in Table 10:

*Table 10: The Amharic characters (fidel)*

Consonant	Order						
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>
	ə	u	i	a	e	ɨ	o
h	ሀ /ha/	ሀ፡	ሀ፡	ሀ፡	ሀ፡	ሀ፡	ሀ፡
l	ለ	ለ፡	ለ፡	ለ፡	ለ፡	ለ፡	ለ፡

Consonant	Order						
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>
	ə	u	i	a	e	ɪ	o
h	ሐ /ha/	ሑ	ሒ	ሓ	ሔ	ሕ	ሖ
m	መ	ሙ	ሚ	ማ	ሜ	ም	ሞ
s	ሠ	ሡ	ሢ	ሣ	ሤ	ሥ	ሦ
r	ረ	ሩ	ሪ	ራ	ሪ	ር	ሮ
s	ሰ	ሱ	ሲ	ሳ	ሴ	ሰ	ሶ
ʃ	ሸ	ሹ	ሺ	ሻ	ሼ	ሸ	ሼ
k'	ቀ	ቁ	ቂ	ቃ	ቄ	ቅ	ቆ
b	በ	ቡ	ቢ	ባ	ቤ	ብ	ቦ
t	ተ	ቱ	ቲ	ታ	ቲ	ት	ቶ
ʈ	ቸ	ቹ	ቺ	ቻ	ቼ	ቸ	ቼ
h	ሳ /ha/	ሑ	ሒ	ሓ	ሔ	ሕ	ሖ
n	ነ	ኑ	ኒ	ና	ኔ	ን	ኖ
ɲ	ኸ	ኹ	ኺ	ኻ	ኼ	ኸ	ኼ
a	አ /ʔa/	ሑ	ሒ	ሓ	ሔ	ሕ	ሖ
k	ከ	ከ	ከ	ካ	ኬ	ከ	ኮ
h	ኸ	ኸ	ኸ	ኹ	ኺ	ኸ	ኹ
w	ወ	ወ	ወ	ወ	ወ	ወ	ወ
ʔ	ዐ /ʔa/	ዑ	ዒ	ዓ	ዔ	ዐ	ዑ
z	ዘ	ዘ	ዘ	ዘ	ዘ	ዘ	ዘ
ʒ	ዝ	ዝ	ዝ	ዝ	ዝ	ዝ	ዝ
y	የ	የ	የ	የ	የ	የ	የ
d	ደ	ደ	ደ	ደ	ደ	ደ	ደ
dʒ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ
g	ገ	ገ	ገ	ገ	ገ	ገ	ገ
t'	ጠ	ጠ	ጠ	ጠ	ጠ	ጠ	ጠ
tʃ	ጪ	ጪ	ጪ	ጪ	ጪ	ጪ	ጪ
p'	ጸ	ጸ	ጸ	ጸ	ጸ	ጸ	ጸ
s'	ጸ	ጸ	ጸ	ጸ	ጸ	ጸ	ጸ
s'	ፀ	ፀ	ፀ	ፀ	ፀ	ፀ	ፀ
f	ፈ	ፈ	ፈ	ፈ	ፈ	ፈ	ፈ
p	ፐ	ፐ	ፐ	ፐ	ፐ	ፐ	ፐ

(Source: Bender et al, 1976:122)



The grapheme *ሀ* <ha> as opposed to other base forms, lost [hə] sound and pronounced in the fourth order [ha] for historical reasons. The first order graphemes for *ሐ* <h> and *ኀ* <x> also have the same reading with the fourth order [ha]. Hence, the graphemes *ሀ*, *ሃ*, *ሐ*, *ሐ*, *ኀ*, *ኀ* and *ኸ* are used alternatively to represent the sound [ha]. In Amharic, a symbol *ኸ* is the only grapheme to represent glottal fricative *h* + *ə* order, as in *ይኸው yihəw* ‘here it is’. The other orders (i.e., 2<sup>nd</sup> – 7<sup>th</sup>) are pronounced like other variants of /h/ are uttered. The grapheme for *ኸ* <hə> is invented from the velar consonant *ከ* <kə> symbol by the addition of horizontal line above the grapheme.

Historically the graphemes *ሀ* [h], *ሐ* [h] and *ኀ* [x] had different phonetic values. They are merged as [h] in the present day Amharic. Special names<sup>17</sup> are used to identify the graphemes (Leslau, 1995:2-3):

*ሃሌታው ሀ halletaw ha* (*ሃሌታ halleta* ‘chanting hallelujah’ in Ge’ez)

*ሐመሩ ሐ haməru ha* (*ሐመር ሐmər* ‘boat’ in Ge’ez)

*ብዙኅኑ ኀ bizuhanu ha* (*ብዙኀን bizuxan* ‘many’ in Ge’ez)

In the present Amharic, the first order of a vowel grapheme (i.e. *አ* <ʔ>) and a glottal stop *ዐ* <ʔ> are read as [ʔa] not as [ʔə]. The symbols *አ* and *ዐ* originally represented different consonants, *ʔ* and *ʕ*, respectively. These graphemes lost their consonantal value and represented a vowels in Amharic (Leslau, 1995:2). Both *አ* and *ዐ* graphemes, which stands for Amharic vowels without meaning distinction, are distinguished by their traditional names *አሌፉ አ alefu ʔa* (*አሌፍ alef*, Hebrew name of the letter) and *ዓይኑ ዐ aynu ʔa* (*ዓይን ayn*, Hebrew name of the letter) (cf. Anbessa & Hudson, 2007:103; Leslau, 1995:2-3).

The symbols *ሠ* <śə> and *ሰ* <sə> which represent homophones in Amharic are distinguished by names: *ንጉሡ ሠ nigusū sə* (*ሠ ś* as in, *ንጉሥ nigus* ‘king’) and *እሳቱ ሰ isatu sə* (as in, *እሳት isat* ‘fire’ is written). From the set of spellings which includes homophonous symbols, Amharic prefers the spelling of cognate word in Ge’ez (Anbesse & Hudson, 2007:105).

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<sup>17</sup> The grapheme *ኸ* <hə> has no standard name in Amharic.

There are also two ways of writing the alveolar ejective *s'*. As to Anbesse & Hudson (2007:105), in old Amharic the alveolar ejective *s'* and retroflex *d* were different consonants. In the present day Amharic, both are identically pronounced as *s'*. The two symbols (i.e.,  $\text{ጸ} <s'\text{ə}>$  and  $\text{ፀ} <z'\text{ə}>$ ) are identified as:  $\text{ጸ ሎጥ} \text{ ጸ } s'\text{əlotu } s'\text{ə}$  (as in *s'əlot* ‘prayer’) and  $\text{ፀ ሐይ} \text{ ፀ } s'\text{əhayu } s'\text{ə}$  (as in *s'əhay* ‘sun’ is written).

In addition to the syllabic consonants (as indicated in Table 10 ), there are also a labialized consonant graphemes in the Amharic orthography (see Table 11).

*Table 11: Graphemes for labialized consonants*

$c + ^{w+}\text{ə}$	$c + ^{w+}\text{i}$	$c + ^{w+}\text{a}$	$c + ^{w+}\text{e}$	$c + ^{w+}\text{i}$	Bare consonants
$\text{ፄ}$	$\text{ፄ፡}$	$\text{ፄ}$	$\text{ፄ፡}$	$\text{ፄ፡}$	$q^w$
$\text{ፅ}$	$\text{ፅ፡}$	$\text{ፅ}$	$\text{ፅ፡}$	$\text{ፅ፡}$	$h^w$
$\text{ፆ}$	$\text{ፆ፡}$	$\text{ፆ}$	$\text{ፆ፡}$	$\text{ፆ፡}$	$k^w$
$\text{ፈ}$	$\text{ፈ፡}$	$\text{ፈ}$	$\text{ፈ፡}$	$\text{ፈ፡}$	$g^w$

(Getachew, 1996:570; Girma, 2009:244)

As can be see from Table 11, the labio-velar ( $/k^w/$ ,  $/q^w/$ ,  $/g^w/$ ) and the labialized glottal fricative ( $/h^w/$ ) combine with the vowels *ə*, *i*, *a*, *e* and *i* to form complex labialized consonants. The glottal fricative *h* included in this category since it was formed as a result of historical ‘weakening’ of velar fricative *x* to glottal *h* (Anbessa & Hudson, 2007:31). In addition to the labialized symbols shown in Table 11 there are also special symbols that are formed by the addition of a horizontal bar either on the top or on the bottom of the first or fourth order character. The Amharic characters with *wa* symbols are:

(2)	$l^w\text{a}$	$m^w\text{a}$	$s^w\text{a}$	$r^w\text{a}$	$s^w\text{a}$	$\text{፳}^w\text{a}$	$b^w\text{a}$	$t^w\text{a}$	$\text{፳}^w\text{a}$	$n^w\text{a}$
	$\text{፳}$	$\text{፳፡}$	$\text{፳}$	$\text{፳፡}$	$\text{፳}$	$\text{፳፡}$	$\text{፳}$	$\text{፳፡}$	$\text{፳፡}$	$\text{፳}$
	$\text{፳}^w\text{a}$	$z^w\text{a}$	$\text{፳}^w\text{a}$	$d^w\text{a}$	$\text{፳}^w\text{a}$	$t'^w\text{a}$	$\text{፳}'^w\text{a}$	$s'^w\text{a}$	$f^w\text{a}$	
	$\text{፳}$	$\text{፳}$	$\text{፳}$	$\text{፳}$	$\text{፳}$	$\text{፳}$	$\text{፳}$	$\text{፳}$	$\text{፳}/\text{፳}$	

In the labialized symbols such as ረ <r<sup>w</sup>a> and ሸ <f<sup>w</sup>a> the horizontal line is added on the top of the character whereas in ለ <l<sup>w</sup>a>, ሷ <s<sup>w</sup>a>, ተ <t<sup>w</sup>a>, etc. the line is added under the foot of the character. As indicated in (2), the majority of labialized *wa* symbols are formed by the addition of a horizontal bar to the bottom of the symbols.

### 3.1.4 Punctuation

The Ethiopic script has punctuations with distinct functions. The followings are the most frequently used punctuation marks in Amharic.

*Table 12: The Amharic punctuations and their Latin equivalents*

Amharic symbol	Name of symbol	Latin equivalent	Gloss
:	<i>hulət nət'ib</i>	[space]	‘word-divider’
፥	<i>nət'āla sərəz</i>	,	‘comma’
፤	<i>dirrib sərəz</i>	;	‘semicolon’
::	<i>arat nət'ib</i>	.	‘full stop’
?	<i>t'iyak'e milikkīt</i>	?	‘question mark’
!	<i>tiḥimmirtə ankiro</i>	!	‘exclamation mark’
<< >>	<i>tiḥimmirtə t'iqs</i>	“ ”	‘quotation mark’
()	<i>qinnif</i>	()	‘parentheses’

(Source: Bender et al, 1976a:122)

In Amharic punctuation, word space was indicated by a vertical line in inscriptions. Later on in published books and manuscripts it has been replaced with two dots <:> (Getachew, 1996:575). However, following the introduction of computer or printing technology this sign <:> has been replaced by space between words. The symbol for comma in Ethiopic punctuation was indicated by <፥> particularly in old<sup>18</sup> Amharic, but in modern Amharic, the most frequently used symbol

<sup>18</sup> Comma <፥> is frequently used in old literatures, for instance, in Amharic Holy Bible (1962). However, at present time Amharic corpus such as in school text-books (e.g., grade 2-4) and official documents, etc. the most recurring symbol for comma is <፥>.

for comma is <፤>. As indicated in Bender et al, (1976a:122), the old form of question mark in Ethiopic script was <፤?> which is no longer used in the modern Amharic. It has been replaced by <?> mark. There is also Amharic punctuation called *yizəṭ* (lit.‘content’) which is similarly represented by the English full stop <.>. Its function is to write abbreviated words and to separate Ethiopian birr and cents in writing.

### 3.1.5 Ethiopic numerals

Scholars claim that the Ethiopic numerals are derived from Greek letters with some modifications (cf. Bender et. al, 1976:124; Getachew, 1996:574). Though some numerals indicate similarity in shape with Greek numerals, there are no evidences for the remaining ones to conclude that all the Ethiopian numerals are adopted from Greek. The majority (over 90%) of the Ethiopic numerals can be directly linked to the Ethiopic writing system (Ayele, 1997:89-90). Examples of Ethiopic and Arabic numerals are presented side by side as in Table 13.

*Table 13: Ethiopic numerals*

Ethiopic	Arabic	Ethiopic	Arabic
፩	1	፳	20
፪	2	፳፩	30
፫	3	፳፪	40
፬	4	፳፫	50
፭	5	፳፬	60
፮	6	፳፭	70
፯	7	፳፮	80
፰	8	፳፯	90
፱	9	፳፱	100
፲	10	፳፻	10,000

(Source: Bender et al, 1976a:122; Getachew, 1996:574)

As shown in Table 13, the basic Ethiopic numerals are 20; however, the combination of the numerals produce various numerals. For instance, 21 is written as ፳፩, 32 is written as ፳፪, 85 is written as ፳፮፩ etc. However, there is no representation (grapheme) for zero in the Ethiopic

numerals. The Ethiopic numerals are not usually used in writing modern Amharic. As evidenced in educational domain or in academic books such as grade 2-4 Mathematics, Environmental science and Amharic<sup>19</sup> textbooks, Arabic numerals are usually used.

### 3.1.6 Writing compounds

In Amharic, compound words are formed either in Amharic or Ge'ez pattern (see 4.2.1.1.1). Amharic type compounds are not usually marked by hyphen, but are written like two words separated by a space. In some instances of the Ge'ez pattern Amharic compounds, hyphen is attested. There are also instances of writing compounds without leaving word space. Table 14 comprises the spelling variation of compounds in Amharic based on the data from school textbooks (i.e., grade 2-4 Amharic, Environmental science, Mathematics and Aesthetics subjects (see Appendix III, B).

*Table 14: Spelling variation of Amharic compounds*

English	Spelling variations of compounds	Frequency	%
'mass'	መጠነ ቁስ <mət'ənə qus> (amount+material)	23	65.7%
	መጠነቁስ <mət'ənəqus>	12	34.3%
	Total	35	100%
'flag'	ሰንደቅ ዓላማ <səndəq ʕalama> (flag stand + purpose)	5	83.3%
	ሰንደቅዓላማ <səndəqʕalama>	1	16.7%
	Total	6	100%
'psychology'	ሥነ ልቦና <sinə libbona> (study+ conscience)	4	36.4%
	ሥነልቦና <sinəlibbona> (study+ conscience)	1	9%
	ስነ ልቦና <sinə libbona>	1	9%
	ስነ-ልቦና <sinə-libbona>	5	45.5
	Total	11	100%
'ethics'	ሥነ ምግባር <sinə miḡbar> (study + virtue)	7	20%
	ሥነ-ምግባር <sinə-miḡbar>	2	5.7%
	ሥነምግባር <sinəmiḡbar>	17	48.5%

<sup>19</sup> Ethiopic numerals are given in parallel with the Arabic numerals in assigning page numbers in grade 2-4 Amharic textbooks (Ministry of Education, 2007 E.C).

English	Spelling variations of compounds	Frequency	%
	ስነምግባር <sinəmiǵbar>	9	25.7%
	Total	35	100%
‘discipline’	ሥነ ሥርዓት <sinə širʕat> (study + order)	8	38.1%
	ሥነ-ሥርዓት <sinə-širʕat>	1	4.7%
	ሥነሥርዓት <sinəširʕat>	9	42.6%
	ስነ-ሥርዓት <sinə-širʕat>	1	4.7%
	ሥነስርዓት <sinəširʕat>	1	4.7%
	ስነስርዓት <sin-əširʕat>	1	4.7%
	Total	21	100%
‘international’	ዓለም አቀፍ <ʕaləm ʔaqqəf> (world+ embracer)	9	69.2%
	አለም አቀፍ <ʔaləm ʔaqqəf>	1	7.7%
	ዓለምአቀፍ <ʕaləmʔaqqəf>	3	23.1%
	Total	13	100%
‘farmer’	አርሶ አደር <ʔarso ʔaddər> (plough+spent night)	3	30%
	አርሶአደር <ʔarsoʔaddər>	7	70%
	Total	10	100%

As shown in Table 14, in the Amharic type compounds such as ስንደቅ ዓላማ *səndəq ʕalama* ‘flag’, ዓለም አቀፍ *ʕaləm ʔaqqəf* ‘international’, and አርሶ አደር *ʔarso ʔaddər* ‘farmer’ hyphen is not used between the constituents. However, these compounds are written alternatively without leaving word space, as in ስንደቅዓላማ *səndəqʕalama*, ዓለምአቀፍ *ʕaləmʔaqqəf*, አርሶአደር *ʔarsoʔaddər*, respectively. From the two kinds of spelling, compounds written like two words separated by a space are more recurrent than that of compounds written without a space. As in Table 14, recurrently attested form of compound word for ስንደቅ ዓላማ *səndəq ʕalama* ‘flag’ account for 83.3% compared to the fused one. Similarly, ዓለም አቀፍ *ʕaləm ʔaqqəf* (world+ embrace) ‘international’ which is written by leaving word space accounts for 69.2%.<sup>20</sup> The compound word አርሶ አደር *ʔarso ʔaddər* ‘farmer’, however, seems deviated from this scenario. It (i.e., አርሶ አደር *ʔarso ʔaddər* ‘farmer’) occurred 30% compared to the fused compound (አርሶአደር *ʔarsoʔaddər* ‘farmer’). The reason for this is that the fused form is only attested in the recently developed grade 1-4 Amharic textbooks in which consensus has been reached by the

<sup>20</sup> See Appendix II (4) for additional examples.

development team to write compound words without leaving word space. See Expert A's argument below.

The Ge'ez type Amharic compounds are written optionally in three ways. The first one is those written like two separate words, as in *ሥነ ምግባር* *śinā migbar* 'ethics', and *ሥነ ሥርዓት* *śinā śirfat* 'discipline'. The same compounds are also written using hyphen as in, *ሥነ-ምግባር* *śinā-migbar* 'ethics', and *ሥነ-ሥርዓት* *śinā-śirfat* 'discipline', respectively. As the third option, Ge'ez type Amharic compounds are written as single lexical items or without leaving word space, as in *ሥነምግባር* *śināmigbar* 'ethics', and *ሥነሥርዓት* *śināśirfat* 'discipline'. Using hyphen serves as an overt orthography marker for Amharic compounds. Moreover, compounds formed in Ge'ez grammatical pattern (which is written with a linker /-ə/ and written like two separate words) could express that the constituents are compounds though there are no overt orthography markers in such compounds.

Moreover, as a result of some Amharic extra symbols, the spelling variation of compounds increased. For example, the Amharic equivalent for the English term 'discipline' is written in six different ways: *ሥነ ሥርዓት* *śinā śirfat* or *ሥነ-ሥርዓት* *śinā-śirfat* or *ሥነሥርዓት* *śināśirfat* or *ስነ-ሥርዓት* *śinā-śirfat* or *ስነስርዓት* *śināśirfat* or *ስነስርዓት* *śināśirfat* as shown in Table 14.

In Amharic, few compounds are written in a fused form as a result of coalescence, as in *ወዝ አደር* *wəz + ʔaddər* 'proletariat' → *ወዝደር* *wəzaddər*, *ልብ ወለድ* *libb + wəlləd* → *ልቦለድ* *libbolləd* 'fiction' (Amh. grade 4, p. 106, 110). Sometimes it is not easier to identify such words as compound for they occur in a fused form. Amharic compound for the English term 'fiction' is indicated optionally in ELRC (1993:35) as *ልብ ወለድ* *libb wəlləd* or *ልቦለድ* *libbolləd*.

In general, various ways of writing compounds are demonstrated in the discussion above. From the analysis, it is possible to understand that there is lack of standardization in writing compounds in Amharic. Recognizing the writing problem of Amharic compounds, Takkele (2000) put forward the way to regularize the spelling variation of compounds. Takkele (2000:59) suggests that all compound words should be written as a single unit or without using

hyphen or the use of any marker between the constituents. This mode of writing avoids confusion that might occur between compound words and consecutive but independently occurring words.

In consistent with Takkele's (2000:59) recommendation, in recently published grade 1-4 Amharic textbooks, compounds are written without leaving word space between constituents. Regarding this change, the Amharic Expert provided the following argument.

We made some changes in writing compound words. Previously compounds were written either using space or using hyphen. In the materials [grade 1-4 Amharic textbooks], however, we have decided to write consistently without space. For instance, previously ትምህርት ቤት *timihirt bet* (lesson+house) 'school' was written as two separate words. Now it is written without leaving word space. The reason for this change is to clearly indicate that the two constituents stand for a single concept or to show that they are compound. (Interview with Expert A, February 17, 2015).

Expert A's argument indicates that previously there were inconsistencies in writing compound words in Amharic, and it has been decided to keep consistency of the spelling by writing without space at least in those textbooks. Though this was the convention regarding the Amharic textbooks, some compounds are still written inconsistently. For example, the Amharic equivalent term for 'farmer' was written in grade 3 Amharic textbook as አርሶ አደር <?arso ?addər> and አርሶአደር <?arso?addər> on p. 78 and p. 76, respectively. This indicates that even though there is a convention, there is still the problem of consistency in writing compounds in Amharic textbooks.

Expert A was asked to express teachers' reaction to the change that has been made in writing compounds in the Amharic textbooks. Accordingly, she said the following.

During training which was organized about newly developed textbooks, some teachers have expressed their dissatisfaction with regard to the new way that compounds are written. Particularly, they asked why the traditional way of writing compounds was changed. They said it should not have been changed. Thus, for such dissatisfactions we tried to give explanations. We assumed that since students of this level [Grade 1-4] focus on learning to read without getting worried about the rules. We accepted the teachers' comments to



consider for a future revision of the textbooks. Through discussions, we may change what should be changed regarding spelling conventions (for example, including the way of writing compounds) in the future. (Interview with Expert A, February 17, 2015).

From the above quote one can understand that spelling modification for compounds faced resistance from language users' (teachers in this case). This also implies that before modification of orthographic rule, discussion is vital to secure acceptance from language users. The Amharic department in the Addis Ababa Regional Educational Bureau, on the other hand, has readiness to modify spelling conventions when the need emerges. Even though the language department introduced some orthographic modifications, it has no power to control the spelling convention nor does the Ethiopian Language Academy and Culture.

In addition to the convention of writing compound words, clitics, pronouns, and prepositions have also modes of writing in Amharic orthography. Pronouns (demonstrative, possessive) are written as separate items, as in, ይህ ልጅ *yih liḡ* 'this boy', ያ ልጅ *ya liḡ* 'that boy', የእኔ ቤት *ya-ḥine bet* (GN-1SG-house) 'house of mine'. Prepositions or some conjunctions are written either separately or in fused, as shown in (3).

(3)	Fused writing	Gloss	Separate writing	Gloss
	ከታች = ከታች	'from below'	ወደ ቤት	'to home'
	<i>kə-tač = kətač</i>		<i>wadə bet</i>	
	ሲመጣ = ሲመጣ	'when he comes'	እንደ ሰው	'as human'
	<i>si-mət'a = simət'a</i>		<i>ində səw</i>	
	ቢመጣ = ቢመጣ	'if he comes'	ስለ መጣ	'since he came'
	<i>bi-mət'a = bimət'a</i>		<i>silə-mətt'a</i>	

The morpheme ከ- *kə-* is a preposition which cannot stand as a free morpheme. The prefixes ሲ- *si-* and ቢ- *bi-* are also used as conjunction. ወደ *wadə*, እንደ *ində* and ስለ *silə* are usually written as

independent lexical items even though sometimes they are inconsistently written as prefix.<sup>21</sup> For instance, *wadə bet* ‘to home’ appeared as ወደ ቤት *wadə bet* ‘to home’ and ወደቤት *wadəbet* ‘to home’. Similarly, እንደ *indā* written in two different ways as indicated in phrase *indā səw* ‘as human’ which is appeared as እንደ ሰው *indā səw* ‘as human’ and እንደሰው *indāsəw* ‘as human’. ወደ *wadə*, እንደ *indā* and ስለ *silā* are often written separately. When ወደ *wadə* is joined to the relative complex of the present tense, it is written as ወደሚቀመጡበት *wadəmiqqamət’ubbət* ‘to the place they sit’, however it is often separated from the past complex, ወደ ተቀመጡበት *wadə təqəmmət’ubbət* ‘to the place they sat’ (Cowley, 1967:5).

### 3.1.7 Writing loanwords

Loanwords are adapted into the phonological system of a recipient language. In word initial position, consonant cluster is not permissible in Amharic phonological system (see 3.1.1.2). When foreign words with two or more word initial consonants are borrowed, they are phonologically adjusted by the epenthetic vowel [i].

Though in actual utterance *sp-*, *spr-*, *st-*, and *sk-* clusters are not permissible word initially, epenthetic vowel እ [i] is not used in the orthography or in some instances it is used alternatively (see Appendix III, C). For some of the loanwords, the Amharic dictionary of ELRC (1993 E.C:138-140) put alternative way of writing those words with *sp-*, *st-*, and *sk-* consonant cluster in bracket probably to show its exact pronunciation. However, in the same dictionary for the words such as ስፖርት <sport> ‘sport’, ስፖንዳ <sponda> ‘sponda’, ስፖንጅ <sponḡ><sup>22</sup> ‘sponḡ’ the epenthetic vowel እ [i] is not suggested in the word initial position of those words. Consider the following examples:

<sup>21</sup> In recently developed Amharic textbooks, ወደ *wadə* and እንደ *indā* are written as prefix.

<sup>22</sup> Also written as ስፖንጅ <isponḡ> (see Env.sc. Grade 2: p. 74, p. 77)

(4) Amharic		Gloss
ስቱኮ or እስቱኮ	<stukko> or <istukko>	‘stucco’
ስቴዲየም or እስቴዲየም	<stediym> or <istediym>	‘stadium’
ስቴፕለር or እስቴፕለር	<steppilär> or <isteppilär>	‘stapler’
ስኮላርሺፕ or እስኮላርሺፕ	<skolaršipp> or <iskolaršipp>	‘scholarship’
ስኮችቴፕ or እስኮች ቴፕ	<skočtepp> or <iskoč tepp>	‘scotch tape’
ስፒል or እስፒል	<spil> or <ispil>	‘spill’
ስፓጌቲ or እስፓጌቲ	<spageti> or <ispageti>	‘spaghetti’
ስፖርት	<sport>	‘sport’
ስፖንዳ	<sponda>	‘spondee’
ስፖንጅ	<spongǧ>	‘sponge’

It is also observed in the MOFED (2010) document that the same pattern is followed when loanwords with word initial *st-*, *sp-* consonant cluster are written. For instance, the word ስፔሻልስት <spešalist> ‘specialist’, ስትራቴጂ <stirategi> ‘strategy’, ስታንዳርድ <standard> ‘standard’ were written without adding epenthetic vowel እ [i]. In the Amharic dictionary also the way of writing loanwords with *sp-*, *st-* *sk-* word initial consonant cluster is not consistent since for some words alternative way of writing loanwords with epenthetic vowel is used while not for other words. This shows that there is no standard way of writing loanwords with *sp-*, *st-*, *sk-* word initial consonant cluster.

Apart from the problem of consonant cluster, variations in writing loanwords are also attested due to homophones, word spacing and vowel usage differences. As seen in the discussion of spelling variation (see Appendix III, C (ii)), the extra symbols became cause for spelling variations of loanwords. For instance, the Arabic loanword ሰዓት <səʕat> ‘time, o’clock’ is alternatively written as ሠዓት <śəʕat>. Furthermore, as a result of variations in the use of vowels, the English term ‘second’ was written as ሴኮንድ <sekond>, ሰኮንድ <səkond> or ሠኮንድ <śəkond>.

The first two spelling forms, in this particular example, are differ in their vowel quality (i.e. ሴ <se> and ሴ <sə>) while the second and third spellings are differ in graphemes <s> and <ś>, respectively.

Word spacing or break confusion has also resulted in spelling variations of loanwords in Amharic. For instance, ‘carbohydrate’, which is written as a single word in English, is written as a separate words (i.e., ካርቦ ሃይድሬት <karbo haydiret>). Similarly, the term for ‘kilogram’ is alternatively written as ኪሎግራም <kilogiram> or ኪሎ ግራም <kilo giram>. In contrary to this, separately written words or compound words in English are alternatlively written as a single lexical item, as in ባርግራፍ <bargiraf> or ባር ግራፍ <bar giraf> ‘bar graph’ (see Apendix II, 5b).

In general, variations in writing loanwords due to the problem of consonant cluster adjustment, use of homophones and word break confusions have been unveiled. Thus, such variations have implications for the standardization of writing loanwords in Amharic.

### 3.1.8 Evaluation of the Amharic orthography

The criteria which were employed to assess the adequacy of Amharic orthography were adopted from Smalley (1963:34) and Fishman (1977:XII). These are: motivation for the learner and acceptance by the community, representation of speech, ease of learning, transfer of skills, ease of reproduction and economy (see 2.2.1.2.1).

#### 3.1.8.1 Maximum motivation for the learner and acceptance by the community

Historically, the Amharic script stems from the Ethiopian Orthodox Church contexts and is based on the Ge’ez script. Since it has been developed in the religious contexts, it was smoothly used for the purpose of religious education and literature. The reading and writing skills in Amharic were the outcomes of the church education since the graphemes employed in Ge’ez (with addition of some) are directly used in writing Amharic (Tsfaye & Taylor, 1976:371).

Apart from religious contexts, the script began to function for secular purposes such as education, media and administration. The classical Ethiopic Ge'ez was a language of Ethiopian religious, historical, philosophical, moral and other literary writings until the 19<sup>th</sup> century (Meyer & Richter, 2003:29). Starting from the period of Emperor Thewodros II (1855-1865), Amharic began replacing Ge'ez as a written language for official purposes. However, it took many years to be developed as a standard written language (Girma, 2009:222). Beginning from the end of 19<sup>th</sup> century, Amharic was highly promoted as a written language. It started to replace Ge'ez in the function of written language following the introduction of printed books and newspapers in Ethiopia (Meyer, 2006:122).

Amharic became the sole medium of instruction in all Ethiopian schools in 1956. It was also promoted to be used in all administration, court cases etc. during this period. The establishment of printing press and the emergence of different types of writings helped Amharic to develop as a written language (Girma, 2009:213). Therefore, all these situations indicate that Amharic along with its script, is widely used in Ethiopia as a language of education and administration.

### 3.1.8.2 Maximum representation of speech

#### 3.1.8.2.1 Overrepresentation<sup>23</sup>

One of the principles of good orthography is having one-to-one correspondence between sound and symbol or phoneme and grapheme. In Amharic orthography there is a one-to-one correspondence between the phonemes (sounds) and graphemes (symbols) though there are few sounds which are represented by two or more symbols. In other words, there are graphemes such as ሀ <h>, ሐ <h> and ኀ <x> which do not represent distinct phonemes. They represent a single phoneme /h/. This indicates over-differentiation of Amharic phonemes, i.e. a representation of one phoneme with more than one symbol or grapheme in the orthography (Cahill & Karan, 2008:8). In Ge'ez, the graphemes ሐ <h> and ኀ <x> have phonemic statuses which represent phonemes /h/ and /x/ respectively; however, in Amharic they have lost their statuses of being

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<sup>23</sup> It is also called over-differentiation that refers to a representation of one phoneme with more than one symbol or grapheme in the orthography (Cahill & Karan, 2008:8).

distinctive phonemes through time. With regard to the status of the grapheme ኧ /x/, it is not frequently used in modern Amharic. As explained in Girma (2009:74), “although the use of ኧ /x/ is rare in standard Amharic, it is frequently used in the Mänz dialect as in *yixä* ‘this’ which in standard dialect is *yih*.” Furthermore, the symbols ሰ <s> and ሠ <ś> which stand for single phoneme /s/ were adopted directly to Amharic since Amharic adopted all the Ge’ez characters as they are (Girma, 2009:263).

In Amharic, vowels are represented by two or more symbols. It has two different graphemes for six of its seven vowels (see Table 15).

*Table 15: Overrepresentation of Amharic vowels*

	front	central	back
high	ኢ/ኢ [i]	እ/ዕ [i]	ኡ/ዑ [u]
mid	ኤ/ዩ [e]	ኧ [ə]	ኦ/ዐ [o]
low		አ/ኣ/ዐ/ዓ [a]	

As can be seen from Table 15, Amharic vowel [i] is represented by ኢ and ኢ, [e] by ኤ and ዩ, [i] by እ and ዕ, [o] by ኦ and ዐ, and [a] by አ/ኣ/ዐ/ዓ. For instance, a word *amət* ‘year’ could be written orthographically as አመት, ዓመት, or ዐመት. The existence of extra symbols in Amharic has been the major area of debate for many years. There are still ongoing two party debates for and against the need of script reform. Those who support script reform suggest to drop those extra graphemes. Therefore, from the doubled or tripled graphemes (<ከ ጎ ሀ, ሰ ሠ, ኦ ዐ, እ ፀ>) graphemes such as ከ, ጎ <h>, ሠ <s>, ዐ <a>, ፀ <z’> are considered as extra symbols in Amharic orthography.

### 3.1.8.2.2 Spelling inconsistencies

As a result of the existence of extra graphemes, one can have various ways of spelling for certain words. The existence of extra graphemes became a reason for spelling inconsistencies and problem of standardization in Amharic orthography. The following words are examples of spelling inconsistencies due to over-differentiation (over-representation) of some of the Amharic

phonemes. The examples depicted in Table 16 are taken from Environmental science, Amharic, Mathematics and Aesthetics textbooks (see Appendix III, (A) for detail).

*Table 16: Spelling variation of Amharic homophones*

Amharic homophones	Spelling variation	Frequency	%
ሀ, ሃ; ኃ, ሐ <ha>; <xa>, <ḥa> = [ha]	ውሃ <i>wiḥa</i> ‘water’	561	90.7%
	ውሀ <i>wiḥa</i> ‘water’	17	2.7%
	ውኃ <i>wixā</i> ‘water’	39	6.3%
	ውሐ <i>wiḥa</i> ‘water’	1	0.2%
	Total	619	100%
ሀ, ኃ <ha>, <xa> = [ha]	ኃይል <i>xayl</i> ‘power’	46	92%
	ሀይል <i>hayl</i> ‘power’	4	8%
	Total	50	100%
ሂ, ሐ <hi>, <ḥi> = [hi] ሳ, ሣ <sa>, <śa> = [sa]	ሂሳብ <i>hisab</i> ‘Mathematics’	30	56.6%
	ሐሳብ <i>hisab</i> ‘Mathematics’	17	32.1%
	ሐሣብ <i>ḥisab</i> ‘Mathematics’	5	9.4%
	ሂሣብ <i>hisab</i> ‘Mathematics’	1	1.9%
	Total	53	100%
ዕ, እ <ʕi>, <ʔi> = [ʔi] ዕ, ጸ <z’i>, <s’i> = [s’i]	ዕፅዋት <i>ʕiz</i> ‘wat’ ‘plants’	81	66.4%
	እፅዋት <i>ʔiz</i> ‘wat’ ‘plants’	27	22.1 %
	እጽዋት <i>ʔis</i> ‘wat’ ‘plants’	11	9 %
	ዕጽዋት <i>ʕis</i> ‘wat’ ‘plants’	3	2.5 %
	Total	122	100%

In Amharic, there are commonly seen variants of spellings as in Table 16. The Amharic word ‘water’, for instance, appeared 619 times in the documents and is written in four different ways due to variations of <h> grapheme. The most frequently occurring form is ውሃ *wiḥa* ‘water’ which accounts for 90.7%. The alternative spellings for the same word occurred as ውኃ *wixā* (6.3%), ውሀ *wiḥa* (2.7%) and ውሐ *wiḥa* (0.2%). The word ኃይል *xayl* ‘power’ with its variant ሀይል *hayl* ‘power’ occurred 92% and 8%, respectively. In the same way, the word ብርሃን *birhan* ‘light’ which is most frequently used form (75.9%) in the selected textbooks has also been written as ብርሐን *birḥan* and ብርሀን *birhan* (see Appendix III, (A)).

Double graphemes for the Amharic phonemes /s/, /s'/ and vowel /ɿ/ have also resulted in spelling variations. As shown in Table 16, the term for ‘Mathematics’ is written in four different ways in Mathematics textbooks: ሂሳብ *hisab*, ሒሳብ *hisab*, ሒሳብ *hisab* and ሂሳብ *hisab*. The variation occurred due to the homophones *s*, *s'* = [s] and *h*, *h'* = [h]. As seen in the same Table, due to extra symbols for /s'/ and /ɿ/, the term ‘plants’ is written in four different ways i.e., ዕፅዋት *ʕiz'wat*, እፅዋት *ʕiz'wat*, እጽዋት *ʕis'wat* and ዕጽዋት *ʕis'wat*. Of these spellings, ዕፅዋት *ʕiz'wat* is the most frequently used (66.4%) spelling from 122 occurrences of the word. This form has also been used in (Leslau, 1991:57).

Amharic, thus, is open to use different forms according to language users’ preference since there is no rule that explains which form to use or not to use from various possible options. There is no difference for the extra graphemes in the present day Amharic unless the etymological spelling is followed particularly for the cognate words.

Even though spelling variations have been attested in Amharic writing due to superfluous symbols, experts and teachers argue against dropping those symbols. As asserted during FGDs and experts interview, most of the experts and teachers believe (as shown in the following data) that the Amharic redundant symbols should be kept.

I have different opinion concerning the idea of dropping symbols which are called extra. If there was no purpose, why were the symbols devised? For instance, we use the symbol ኃ <xa> in writing proper name ኃይለ ሥላሴ <xaylə šillase>, or ኃይለ ማርያም <xaylə mariyam>. When those symbols had been devised there could have been good reason as to where and how to use those symbols. Thus, I do not think discarding the symbols is advisable. Their usage should be indicated in books rather being omitting. It is better if a brief guide or explanation is provided. The guide, for example, could indicate that these are the words we use ብዙኀን ኀ *bizuxanu xa*, ሐመሩ ሐ *haməru ha*. In the Orthodox Church contexts, people use those symbols with a great care. If there was no function, they would not be devised. The solution is not dropping the symbols, rather providing guideline of usage in textbooks. I strongly disagree with the idea of dropping the symbols. (FGD, teachers in Hibir primary school, May 02, 2014).



If the redundant graphemes are omitted, children may not have opportunities to learn those symbols. Rather than omitting the redundant symbols it is better to provide the knowledge of where to use the symbols. It is better if proper use of the graphemes is known. For instance, it should be indicated that in which of the words ንገሥት <niguśu śə> or እናቱ ሰ <issatu sə> is used? (FGD, teachers in Basileynos primary school, May 03, 2014).

Teachers, as seen in the above comments, argued against the idea of dropping Amharic redundant symbols. As shown in the first quote, the symbols which are considered extra in Amharic have etymological significance particularly for Ge'ez cognates. The usage of those symbols would be clear when the etymology of words is considered. From the second teacher's argument, it is possible to understand that it is difficult for a new generation to read previously written literatures if those symbols are dropped. As indicated in both of the above quotations, the solution to standardize Amharic spelling is developing a spelling guide that clearly regulates the use of extra symbols.

Another participant in this study explained the relevance of the extra symbols in Amharic in line with etymological importance of words to understand meanings of cognate words as follows.

In Amharic there are some words which bring meaning differences especially when we consider their etymology. For instance, if you take the word ሰረቀ *sərrəqə* it refers to the meaning 'stole' while ሠረቀ *śərrəqə* stands for 'seen, risen'. The term for 'east' would also be spelled by extending the second spelling (ሠረቀ *śərrəqə*) as ምዞራቅ *miśraq*. Its meaning refers to the place where something is risen. Therefore, you can only speak about such kinds of meaning when you take a word from its source as it is. In other words, you can only understand their meaning when you go back to their etymology. (Interview with Expert B, June 10, 2014).

As can be observed from the explanation of Expert B, the symbols which are considered extra in Amharic are not redundant in Ge'ez since they convey distinct meaning in the later. Even though the importance of using the etymological spelling is discussed by Expert B, the spelling variations are attested in Environmental science textbooks that were prepared by his own

supervision (see Appendix III, (A)). In Amharic textbooks also, as to the explanation of Expert A, the use of extra symbols are not standardized. She said:

There is no effort with regard to regularizing the usage of redundant symbols up to grade 4. The only thing we did in this level is making them [pupil] to identify symbols. For instance, using አ <?> or ዐ <?> they can write አይን *ḥayin* or ዐይን *ḥayin* ‘eye’. In this level, we did not explain the difference between አ <?> and ዐ <?>. (Interview with Expert A, February 17, 2015).

The above comment from Expert A suggests that using the Amharic symbols in consistent way has not been focused on during the development of Amharic textbooks. This implies that a given word can be spelled in various ways particularly when words including the Amharic extra symbols are written. As to the expert’s explanation, the spelling variations are not considered problem; they were permissible in grade 1-4. As a result of this assumption, spelling variations are recurrently observed in the Amharic textbooks (see Appendix III, (A)).

Teachers themselves have little or no awareness about the consistent use of Amharic spelling particularly regarding the use of extra symbols. In relation to this, one of the research participants describes his challenge as follows:

When a word is written in different forms or symbols, students perceive that those forms have different meanings. For example, while I am teaching, sometimes I use ኃ <xa> to spell the word for ‘water’ using ኃ <xa>, as in ውኃ <wixā>, sometimes ውሐ <wiḥa> or ውሃ <wiha>. I would not be conscious while I am writing such words. One day, one of my students asked me if there is meaning difference among those words. I replied that the symbols have the same sound and there is no meaning difference. My students told me that when the symbols are changed, he perceives that the change brings meaning difference. (FGD, teachers in Hibir primary school, May 02, 2014).

As seen in the above quote, the spelling variations due to superfluous symbols have created confusions in students learning. Teachers are also not consistent in using those symbols. The problem of Amharic spelling is not only the presence of extra symbols but also the inconsistent

way of writing using those symbols. Of course, such spelling variations have also been attested in school textbooks (see, Table 16).

Compared to other public institutions the Amharic extra symbols, however, are consistently used in the Ethiopian Orthodox Church. Regarding this, one of the research participants during FGD states the following.

The use of those symbols is well-known in the Church context and they do not write without their function. In this regard, nothing has been done in public schools. They know why or how to use symbols such as ሀሌታው *ṽ halletaw ha* and ሐመሩ ሐ *ḥaməru ḥa* and they know where or in which of the words the symbols are used. As explained by other colleagues, the problem is lack of guidance in textbooks as to how to use those symbols in writings. We usually write words as we wish. And we do not understand the proper usage of those symbols. It would be better if the usage is indicated or summarized as writing conventions. In fact, there had been writing conventions starting from earlier times. However, they are being forgotten since the use of symbols are not indicated in textbooks. The usage of symbols is becoming out of order. (FGD, teachers in Hibir primary school, May 02, 2014).

As to the participant's assertion, the use of Amharic extra symbols (for example, ṽ <ha> and ḥ <ha>) is clear in the Ethiopian Orthodox Church. The reason which could be attached to this is that the script is developed and used in this religious context. It can also be deduced that the spelling of earlier period of the use of extra symbols in Amharic was consistent compared to the present spelling. However, this trend has not been followed in the public schools and there is no controlling mechanisms for spelling disparities at the present time. Consequently, this became a problem of standardization in Amharic.

In the contrary to the arguments presented above, which support maintaining the extra symbols, one of the participants during FGD argued against preserving those symbols. The participant commented that:

There are redundant symbols in Amharic. In my opinion, it is better if the redundant symbols are dropped. For instance, there are symbols ሰ, ሆ for /s/; ṽ,

ሐ, ኀ for /h/; ጸ, ፀ for /s'/. Therefore, it is not problematic if we use one of the redundant symbols since one symbol serves the function of the other. (FGD, Hibir primary school, May 02, 2014).

As seen in the quote, the participant proposed the removal of extra graphemes to facilitate writing consistencies in Amharic. This argument is also in line with the principle of ‘one symbol for one sound’ that was followed when recommendations were made by the Ethiopian Language Academy for the orthography reform of Amharic. The recommendations, which were made to drop redundant symbols, were not practical (see also Section 3.1.9)

Generally, from the above discussions it is possible to understand that the Amharic extra symbols are the problems of standardization of Amharic spelling. The reason why Amharic includes extra graphemes in its orthography is that when Amharic adopted the writing system from Ge'ez, it took all symbols without modification even though they have no phonemic status in Amharic (see 3.1.3). They maintained their form or spelling when words containing extra symbols were borrowed from Ge'ez to Amharic. To identify meaning differences of such words due to change of symbols, it is necessary to study the etymology of those words in Ge'ez. On the other hand, people who have no exposure to Ge'ez education are not well aware of these differences. As a result, they spell the way it pleases them. In the Ethiopian Orthodox Church, the use of these symbols is well known. However, in other contexts like secular education, print media, and different publications this convention is not followed properly. In other words, there is no developed guideline or readers' and writers' manual for Amharic orthography in relation to which grapheme is used to write which words and their subsequent meaning difference.

Therefore, in the above discussions, it is recommended that developing a guideline or spelling convention functions as a tool to regularize the Amharic spelling. The research participants' recommendation to standardize the Amharic spelling is also consistent with Amsalu's (2006) proposal. Amsalu (2006:23) suggested that instead of dropping graphemes which had been maintained for centuries, it is better to regulate them and indicate users the right way of writing words. As to his proposal, the best way to solve spelling variation is through developing some kind of glossary of orthography. It is also possible to show the language users how to write

words with one of the cognate symbols. According to this recommendation, the knowledge of Ge'ez root word is vital to follow the correct way of spelling.

When the data presented in Table 16 are assessed in light of this recommendation, the form ብርሃን *birhan* 'light' is the appropriate spelling from ብርሐን *birhan* and ብርህን *birhan* variants when the Ge'ez way of writing is followed. The spelling for the term 'plants' were written in the textbooks in four different ways: ዕፅዋት *ʾiz'wat*, እፅዋት *ʾiz'wat*, እጽዋት *ʾis'wat* and ዕጽዋት *ʾis'wat*. From these variants, ዕፅዋት *ʾiz'wat* is the root or Ge'ez form if the etymology is followed to fix the problem of spelling variations according to Amsalu's (2006) recommendation.

In order to write loanwords from non-Semitic Ethiopian languages (e.g., Oromo and Agaw), one of the cognate symbols (i.e., ሀ <ha>, ሰ <sə>, አ <ʔa>, ፀ <z'ə>) should be used because the rest of cognate symbols are not represented in these languages (Amsalu, 2006:24). Similarly, loanwords from Indo-European languages should be written using the symbols which are recommended for the non-Semitic languages (cf. Amsalu, 2006:24; Cowley, 1976:1).

### 3.1.8.2.3 Underrepresentation

In contrast to the overrepresentation of some Amharic sounds, underrepresentation of gemination is also attested. Gemination of consonants is a prominent feature of Amharic phonology. Gemination is phonemic in Amharic because it results in meaning change in words. However, this feature is not marked in the Amharic orthography. Thus, readers are expected to guess the meaning from contexts. Consider the following examples in Table 17.

*Table 17: Minimal pairs with non-geminated vs. geminate consonants*

Status of phoneme	Amharic	Gloss
Non-geminated	ገና [gəna]	'still/yet'
Geminated	ገና [gənnna]	'Christmas'
Non-geminated	ሰፊ [səfi]	'tailor'
Geminated	ሰፊ [səffi]	'wide'

Status of phoneme	Amharic	Gloss
Non-geminated	አለ [alə]	‘(he) said’
Geminated	አለ [allə]	‘(it) exists’
Non-geminated	ይሰማል [yisəmal]	‘he hears’
Geminated	ይሰማል [yissəmmal]	‘it will be heard’

Furthermore, there is no clear representation in Amharic orthography for sixth order consonants which are either followed or not by high central vowel /i/. For instance, in word ልክ *likk* ‘exact’ the grapheme ል <l> has high central vowel /i/ whereas in a word ግልብ *gilb* ‘superficial’ ል <l> is not followed by the central vowel /i/ rather it is a bare consonant /l/ in this context. Thus, sixth order symbols are ambiguous when they are in orthographic form since the presence or absence of the vowel /i/ is not clear in the orthographic form. This could be more confusing particularly for the second language learners. In fact, Amharic native speakers read appropriately by using context clue.

### 3.1.8.3 Maximum ease of learning

The basic graphemes in Amharic script are 33, and their combination with the vowels gives 231 different forms. Even though the total number of graphemes seems numerous, the vowel diacritics are almost regular except for 4<sup>th</sup> and 6<sup>th</sup> order graphemes (see Appendix II, B), which makes the learning of script easy. As shown in Amsalu (1973 E.C:10), however, the inconsistent vocalization pattern of 4<sup>th</sup> and 6<sup>th</sup> order makes difficult to identify the symbols. Though the script has been criticized for such irregularity, the irregularity in the vocalization pattern of Amharic is insignificant compared to the irregularities seen in the spelling of languages such as English and French (Abraham, 1983:408).

Moreover, identifying the forms of the 2<sup>nd</sup> ( $c+^{w+i}$ ) and 5<sup>th</sup> ( $c+^{w+i}$ ) order of the Amharic labialized graphemes is considered to be complex due to strong similarity between the two forms. For instance, the symbols for  $\Phi^* q^w i$  and  $\Phi^* q^w i$  have very similar forms which might be confusing for learners. In order to ease learning and using those graphemes, the Ethiopian Language Research Center (1993E.C:XV) employed the change which was previously suggested by the Ethiopian

Language Academy (1973). Accordingly, it was proposed that symbols like  $\Phi^k q^w i$  be replaced by  $\Phi^k qu$  and  $k^w i$  by  $h^k ku$ , respectively (see also 3.1.9).

#### 3.1.8.4 Maximum transfer

Amharic has become the most predominant and prestigious language in Ethiopia because of its historical advantage (cf. Meyer, 2006:120-121). It had been considered as a tool for national integration during Haile Sellasie regime (Cohen, 2008:81). In Haile Selassie's language policy, the status of Amharic as the national language of Ethiopia was enshrined in the constitution ratified in 1955. Amharic became the sole medium of instruction in primary education since 1956. The status of Amharic was also very strong as the only language of primary education and medium of communication in the administration during Derg regime (Meyer, 2006:120). The literacy campaigns were undergone in fifteen Ethiopian languages (McNab, 1989:85), which had been transcribed in Ethiopic script that was commonly used for Amharic and Tigrinya. The intention of using the Ethiopic or syllabic script was to facilitate the smooth transfer of reading skills in another Ethiopian languages, as stated in Meyer & Richter (2003:37):

During the 1970s and 1980s the syllabic script was used for educational materials for all Ethiopian languages employed in formal education and in various literacy campaigns. This was in order to provide a smooth transition to reading texts in another Ethiopian language.

Transfer in the reading and writing skills is facilitated when literacy is obtained in another language with a similar writing system. Learning the Ethiopic script, which Amharic adopted, enables also learning languages such as Tigrinya and Ge'ez as they are written in the same script. On the contrary, for the languages such as Oromo, Sidaama and Hadiyya that use Roman script, there is no direct relationship that enable transfer of reading and writing skills.

#### 3.1.8.5 Maximum ease of reproduction

When typewriter was introduced into Ethiopia in the early nineteen twenties, the Ethiopic script was not suitable to use in a typewriter due to excessive number of symbols (Abraham, 1983:394-395). Hence, the introduction of typewriter became one of the causes for the script reform

debates during that time. Back then, therefore, writing or typing in Ethiopic script was challenging especially when the extra symbols are used in the typewriter. As a result of the introduction of computer technology, the typing problem has been solved.

Even after the introduction of computer technology, there were also problem of recognizing characters in another computers when it was written using the Ethiopic script. The compatibility problems to read Amharic texts in other computer has been solved due to the development of UNICODE for Ethiopic. Moreover, it became easier to share documents and information written in Amharic via technologies such as e-mail, smart devices and external discs. The Ethiopic script is also used in social media via computers and smart devices. Nowadays, therefore, a number of personal and institutional printings became easier using the Ethiopic script which Amharic and some other Ethiopian languages use.

#### 3.1.8.6 Economy

Amharic orthography employs mainly syllabic writing system in which a grapheme stands for syllable except 6<sup>th</sup> order symbols. There is no problem of economy when words are written by using the Ethiopic script. For example, the word /gəddələ/ ‘killed’ take seven letter spaces when transcribed phonemically whereas in Amharic it takes a space of three symbols, ገደለ *gəddələ*. Thus, such a kind of representation of sounds saves space for writing words and eases word recognition during reading.

The principle of economy, however, may contradict with transparency, as gemination in Amharic is not marked and due to this it can not be identified in the orthography. For instance, in the same example, ገደለ *gəddələ* /d/ is not marked as a geminated grapheme in the Amharic orthography.

#### 3.1.9 Reform and reform efforts in Amharic script

The Ethiopic script initially was consonantal. The introduction of vowel sign appeared in the 4<sup>th</sup> century (see 3.1.2). This reform, in fact, happened during Ge’ez period. A creation of graphemes for Amharic palatal or palatalized consonants such as ጀ <ǧ>, ቸ <č> and ጨ <č’> was another



reform in the syllabic script. This reform possibly undertaken in the 14<sup>th</sup>- 15<sup>th</sup> century when Amharic was a court language during Solomonic dynasty (Frantsouzoff, 2010:583).

As stated in Abraham (1983:399), there were also various reform efforts with the aim of making the Amharic script (a) *simpler to learn* (i.e., by dropping extra symbols, regularizing the vowel diacritics and marking gemination), (b) *simpler to write* (i.e., making it a cursive script) and (c) *simpler to mechanize* (i.e., by reducing the number of symbols to fit the standard keyboard of type writer).

Abraham (1983:399) discusses the reform efforts that are attributed to Emperor Menelik II. In this reform effort, it has been sought to make the syllabary easier to learn by making vowel marking regular and by reducing extra symbols inherited from Ge'ez (ሐ, ኀ <ha>, ሠ <sa>, ዐ <ʔa>, ፀ <s'a>) and labialized consonants (ኸ <k<sup>w</sup>ə>, ኹ <g<sup>w</sup>ə>, ኺ <h<sup>w</sup>ə>, ኻ <q<sup>w</sup>ə>). Moreover, in Menelik's reform efforts, the palatal symbols are derived from non-palatal counterparts via addition of a diacritic mark (i.e., apostrophe) on the top left of the base symbol. Another intention of Menelik was making the letters cursive, i.e. writing each letter with one stroke without lifting the pen. As to Abraham (1983:400), the serious lack of distinctiveness between several parts of the symbols as a result of great similarity between symbols is one of the shortcomings of Menelik's proposal.

Aleka Kidane-Wold Kifle developed a system to adapt the Amharic script to the typewriter (Abraham, 1983:395). He suggested writing Amharic by splitting consonants and vowels by retaining all the basic symbols and numerals in order to solve the problem of using keyboard of type writer. According to this proposal, the first order (*gi'iz*) maintains its form, and the symbols from second to seven order would be written by combining with the vowels (*u, i, a, e, i, o*). However, the six order consonant with or without vowel will not be identified (Yonas et al. 1966 E.C:87-88). Kidane-Wold's proposal requires radical change which suggests the shift from syllabic to alphabetic writing system. Abraham (1983:402) criticizes this reform proposal for its taking nearly double amount of space for any piece of writing. He also adds that due to its radical

change from a syllabic to an alphabetic system, it put the entire literate population in a merely quasi-literate status, at least for a short period. Kidane-Wold's proposal did not get acceptance.

Another major effort in the reform of Amharic script was the contribution made by the group called itself *yətimhirt wədağočč* "Lovers of Learning" (LL). This group consists of individuals who had previous attachment with the question of script reform and were assembled at the initiative of Abbebe Reta in 1946. The group included Ato Abbebe Retta, Ras Immeru Haile Sellasie and Blatta Merse'e Hazen Wolde Kirkos. Dr. Frank Laubach, the American educator and visitor to Ethiopia, provided a few suggestions to the publication of *Fidəl maššašal* ("Improving the script") that appeared in 1948. The proposed recommendations of the group are summarized below in five categories (see Abraham, 1983:402-404; Anonymous, 1970:119-134).

The first proposal was provided by Ras Imiru Haile Sellasie who was a member of Lovers of Learning and submitted to the group through Ato Abbebe Retta. Lovers of Learning (LL-I) has the following features: i) thirty of the first order symbols of the syllabary are to be retained, ii) the redundant symbols (ሐ ኀ ሠ ዐ ዓ) are to be omitted, iii) the first order symbols stand for representing both consonants with vowel *a* or without any vowel, iv) the 2<sup>nd</sup> – 7<sup>th</sup> orders of letter *አ* are to serve as discrete vowel symbols to mark the remaining six vowel phonemes of Amharic. According to this proposal, a word that is previously written in four letters (in syllabic script) is going to be written in eight letters.

Abbebe Retta as one of the member of Lovers of Learning recommended another option (LL-II) which has the following characteristics. He suggested only twenty-one of the first order symbols to be retained. The extra symbols, the palatal symbols and the labialized consonant symbols are to be omitted. As to Abbebe Retta's suggestions, the palatals are to be shown by adding diacritic mark to the non-palatal counterparts. Labialized consonants, on the other hand, suggested to be indicated by the combination of *ወ* <wə> to the non-labialized symbols. The first order symbols represent vowelless consonants with the high central vowel. Geminated sounds are to be shown by doubling of the consonant symbols.

Moreover, Abbebe Retta had provided an alternative recommendation (LL-III) which shared the same characteristics with LL-II except the following differences: i) the first order symbols preserve the value they have in traditional system, i.e., they represent consonant with vowel ə, ii) the remaining six vowels indicated by diacritic markers are regularly applied to all the basic (first order) symbols, as in (see Abraham, 1983:403):

(5)	ሀ	ሁ	ሂ	ሃ	ሄ	ህ	ሆ
	ha	hu	hi	ha	he	hi	ho

The fourth type of recommendation (LL-IV) which was provided by Blatta Merse'e Hazen Wolde Kirkos, who was a member of Lovers of Learning, classifies script into two types. He proposed to retain the Ethiopic script for the general purpose<sup>24</sup> and the adoption of Roman script for “modern” uses.

The fifth (LL-V) proposal was provided by Dr. Laubach. It is basically the same as the recommendation of Abbebe Retta (LL-III) except it keeps all the thirty six first order symbols and slight difference in the way of attaching diacritic markers (attached on the left).

(6)	ሀ	ሁ	ሂ	ሃ	ሄ	ህ	ሆ
	ha	hu	hi	ha	he	hi	ho

After different proposals and discussions about script reform were made within the LL-group, none of the proposals were accepted or implemented due to the critics and resistance from the Ethiopian Orthodox Church clergy (Anonymous, 1970:123). Hence, there was an interruption of discussion for about thirteen years.

A research paper which was written by Zewde Gebremedhin entitled *bəʔaddis sirəʔat yetezegağğə fidal* ‘A script developed in a new way’ initiated discussion on script reform after

<sup>24</sup> The reason for retaining Ethiopic script was in order to reflect Ethiopian identity and it is also believed that the script is part of historical heritage (Anonymous, 1970:122).

thirteen years (Anonymous, 1970:123). Following the proposal submitted by Zewde Gebremedhin, a new committee was set up (by the order of the Ministry of pen) under chairmanship of Abbebe Retta (Abraham, 1983:404). As to Abraham's (1983) assessment, there were minor differences between this proposal and Abbebe Retta's proposal (LL-III) which was only in the vocalization of system. The difference of Zewde Gebremedhin's proposal was that it uses small horizontal line on the right for the fourth order in the contrary to Abbebe Retta's proposal. The committee, having held five lengthy meetings and examined all previously provided and argued reform proposals, final choice that coincides with Abbebe Retta's (LL-III) proposal with the exception of retaining symbols for palatals had been made. Even though the choice had been made, there was no official action to implement their proposals (Abraham, 1983:404).

On the other hand, Addis Alemayehu (1966 E.C), a high government official and a writer, tried to implement his reform idea or proposal in the well-known Amharic novel called *fiqir iskə maqabir* (Love unto the grave). He dropped extra symbols and in order to substitute the labialized sounds he used the combination of non-labialized letters with *wə*. He also employed superscript dot to mark gemination even though he did not use this consistently. Despite his reform effort, no one followed his example. (see Yonas et al., 1966 E.C:88-89; Abraham, 1983:396, 404).

Twenty seven years after the “Lovers of Learning” reform proposals in 1946, the Ethiopian Language Academy made decisions in relation to the Amharic script reform in 1973, following the presentation of research papers and discussions (see Ethiopian Language Academy, 1973:45-46 for detail).

Based on the linguistic principle of “one symbol for one sound”, the symbols ሐ ሐ' ኸ <ha>, ሠ <śə>, ፬ <ʔa>, and ጸ <s'ə> were decided to be dropped from the list of Amharic graphemes. Moreover, the symbols ሀ and አ which were previously pronounced in the fourth order would be pronounced in the first order as <hə> and <ə>, while the symbols ኸ <hə> and ኸ <ə> were to be omitted from the list of graphemes.

Among the labialized symbols (i.e. ጐ ምጋ, ከጐ ክጐ, ቈ ሞጐ, ጐ ምጐ) except the fourth order like ጐ ምጐ, ከጐ ክጐ, ቈ ሞጐ, etc. the remaining symbols were decided to be dropped from the list of graphemes with the suggestion of replacing them with the other Amharic symbols. For instance, according to the decision, ቈጐ ሞጐጐጐ could be replaced by ቈጐ ሞጐጐ 'lowland' and ቈጐጐ ሞጐጐጐ by ቈጐጐ ሞጐጐጐ 'number'. However, the decision of the Ethiopian Language Academy of 1973 (E.C.) was not practical for the following reason (Amsalu, 2006:22):

[S]ince this decision came out during the last period of the military regime, it did not get its blessing for fear of a possible negative reaction from the leadership of the Ethiopian Orthodox Church, so that the whole venture did not take root.

The decision of Ethiopian Language Academy (1973), have been tried to be implemented in the Amharic dictionary of ELRC (1993 E.C). The replacement of labialized sounds such as ጐ ምጐ, ከጐ ክጐ, ቈ ሞጐ, ጐ ምጐ with the seven order symbols (i.e. ጐ ምጐ, ከጐ ክጐ, ቈ ሞጐ, ጐ ምጐ) has pedagogical advantage since it reduces learning additional complex symbols. Furthermore, the shape of labialized symbols is not simple to identify in reading and writing. In this regard, the decision of Ethiopian Language Academy (1973) and the implementation reform in the Amharic Dictionary of ELRC (1993 E.C) seems appropriate. In this dictionary, complex labialized sounds were replaced by nearest graphemes, as in (7).

- (7) ቈ ሞጐጐ replaced with ቈ ሞጐ; and ቈጐ ሞጐጐጐ with ቈ ሞጐጐ  
ከጐ ክጐጐ replaced with ከጐ ክጐ; and ከጐ ክጐጐጐ with ከጐ ክጐጐ  
ጐ ምጐጐ replaced with ጐ ምጐ; and ጐ ምጐጐጐ with ጐ ምጐጐ  
ጐ ምጐጐ replaced with ጐ ምጐ<sup>25</sup>; And ጐ ምጐጐጐ with ጐ ምጐጐ

<sup>25</sup> Ethiopian Language Research Center (1993 E.C) has proposed new grapheme ጐ to replace the varieties of labialized sound ጐ ምጐ in the dictionary. The new grapheme is developed to be consistent with the selection of ጐ <h> from extra graphemes (ሐ, ጐ, ጐ).

The labialized sounds for  $c+^wi$  and  $c+^wi$  are similar. This kind of similarity in the shape of symbols could create confusion (it might be blurred) for Amharic readers and writers. For instance, compare the two columns in (8) and consider the difficulty of symbols to identify each other.

(8)	$c+^wi$		$c+^wi$
	$\Phi^* q^wi$	and	$\Phi^* q^wi$
	$\Gamma^* h^wi$	and	$\Gamma^* h^wi$
	$\mathfrak{h}^* k^wi$	and	$\mathfrak{h}^* k^wi$
	$\mathfrak{r}^* g^wi$	and	$\mathfrak{r}^* g^wi$

During the 1973 Ethiopian Language Academy's decision, consensus was not reached on the issues of regularizing the vocalization system and marking gemination. As a result, the assembly has given assignment to the technical committee to further study and make recommendations on regularizing Amharic vocalization system. Therefore, the issues related to vocalization and gemination were not proposed in the Amharic dictionary of the ELRC (1993 E.C).

From all reform efforts, those who brought the idea of reduction of extra symbols were not successful as compared to those who suggested the invention or addition of symbols. The reason for the unsuccessful reform efforts is the resistance from the user of the Amharic script by providing argument that the script involves the social meaning, historical value, expression of philosophy of the people and cultural wealth of the country. Even though the Ethiopian Language Research Center (the former Ethiopian Language Academy) implemented some of the proposal of script reform in the Amharic dictionary (1993 E.C), this proposal or decision was not implemented in other institutions or domains. Moges (2010:111) explains the reason for the rejection of the implementation of reform efforts of the Academy as follows:

[S]ince the Academy had (and has) no legal power to put its decisions into practice, the proposal ended up as a mere research paper. The ELRC, nevertheless persisted in its decision and used its revised version of the Amharic script in a recently published Amharic Dictionary in 2000. This practice has neither been followed by any other institution nor approved by concerned authorities, mainly in order to avoid a possible clash with the

Ethiopian Orthodox Church and other sectors of the public. The Academy's power was merely theoretical, and in a script reform much depends on the ideology of the power structure and the society at large.

The above quote asserts that the Academy has no legal power to implement and enforce language reform among language users. In other words, it could not influence the education system, media, publications, etc. Furthermore, very recently the issue of Ethiopic script has been discussed during one day panel discussion. Different papers have been presented during the workshop entitled, "The Ethiopic: Origin, Development, Challenges and Prospects" on 23 June 2015 at Addis Ababa University, but the issue is not yet resolved.

### 3.1.10 Conclusion

The Amharic script has been developed from the Ge'ez script. Amharic created symbols for palatal consonants, which do not exist in Ge'ez, and for labialized consonants. Though Amharic script has been passed through significant reforms (such as creating graphemes for palatal and labialized sounds), it is criticized for keeping extra symbols. Several attempts to avoid the extra symbols for writing Amharic were in vain. The role of the Ethiopian Orthodox Church is paramount in the implementation of reform efforts.

The extra graphemes in the Amharic orthography violate the principle of one-to-one correspondence between grapheme and phoneme, which resulted in spelling variations as seen in section (3.1.8). The assessment of Amharic spelling, therefore, indicated that there are various alternative ways to write a word due to overrepresentation of some Amharic symbols. Variation in the spelling of compounds and loanwords is also attested and there is no clear rule that regulate the spelling inconsistencies. Though there is Academy of Ethiopian Language and Culture, it has no legal power to enforce the language standard or reform except describing and providing recommendations for the language development activities.

Most of the arguments during experts' interview and FGDs suggested that the Amharic extra symbols should not be dropped since the symbols have been used for many years and they have etymological significance for Ge'ez cognate words. Moreover, the idea of dropping the extra

symbols is argued for the reason that it would be difficult for new generations to read previously written literatures if those symbols are discarded. Hence, it has been recommended that a guideline or spelling convention should be developed which functions as a tool to standardize the Amharic spelling that can be used in school system.

### *3.2 Orthography development and standardization in Hadiyya*

The development or standardization of orthography is an essential sub-component of language planning. As explained in Cooper (1989:31), adopting new script for a language, introducing reform to make an efficient orthography, and enriching language with terminological and lexical items are important aspects of language development. Hence, in the following section, the orthography development and standardization as part of corpus planning will be described in the context of the Hadiyya language.

#### 3.2.1 Hadiyya phonology

Before describing Hadiyya orthography, it is imperative to review its phonology since it is the base for devising orthography. In the following sections, therefore, phoneme inventory and the syllable structure of the language are described briefly based on Tadesse (2015).

##### 3.2.1.1 Phoneme inventory

Tadesse (2015:20) identified 23 consonant phonemes. These consonants are six plosives, /b/, /t/, /d/, /k/, /g/, and /ʔ/, five fricatives /f/, /s/, /z/, /ʃ/ and /h/, two affricates /tʃ/ and /dʒ/, four ejectives /pʰ/, /tʰ/, /tʃʰ/ and /kʰ/, two nasals /m/ and /n/, lateral approximant /l/ and trill /r/ and two approximants /w/ and /j/, as depicted in Table 18.



*Table 18: Consonants of Hadiyya*

Manner of Articulation		Point of articulation				
		Labial	Alveolar	Palatal	Velar	Glottal
<b>Plosive</b>	Voiceless		t		k	ʔ
	Voiced	b	d		g	
<b>Fricative</b>	Voiceless	f	s	ʃ		h
	Voiced		z			
<b>Affricate</b>	Voiceless			tʃ		
	Voiced			dʒ		
<b>Ejective</b>		pʼ	tʼ	tʃʼ	kʼ	
<b>Nasal</b>		m	n			
<b>Lateral</b>			l			
<b>Trill</b>			r			
<b>Approximant</b>		w		j		

The sounds [p], [v], [sʼ], [ɲ] and [ʒ] were not included in the phonemic list of Hadiyya (see Tadesse, 2015:20). The relevance of those sounds is assessed in Section 3.2.8.2. These consonant sounds are introduced via loanwords. Of these sounds the use of /p/ and /v/ is prevalent in the loanwords of scientific and technological terms. Moreover, /sʼ/ is also introduced into Hadiyya through Amharic loanwords.

Consonant gemination is phonemic in Hadiyya, i.e., gemination of consonants brings meaning difference, as shown in Table 19.

*Table 19: Gemination of consonants in Hadiyya*

Status of phoneme	Hadiyya		Gloss	Hadiyya		Gloss
Non-geminated	a.	[anukko]	‘he splited’	c.	[tʼaatʼe]	‘wrap’
Geminated		[annukko]	‘become matured’		[tʼaattʼe]	‘be ready’
Non-geminated	b.	[dasukko]	‘delayed’	d.	[gurubo]	‘humorous talk’
Geminated		[dassukko]	‘to chop off’		[gurubbo]	‘knee’

Geminated consonants occur only in a word medial position (Tadesse, 2015:23). From the consonant phonemes, the glottals /ʔ/ and /h/, the alveolar trill /r/ and the voiced fricative /z/ cannot be geminated in Hadiyya. The consonant /r/ does not occur word initially (Tadesse, 2015: 22), consequently, when loanwords are integrated into the phonological system of Hadiyya, they are adjusted by inserting vowel [i] word initially, as in *iriippoorta* ‘report’.

Like other Highland East Cushitic languages, Hadiyya has five vowel phonemes /a, u, i, e, o/. Each vowel has a long counterpart which exhibit meaning difference. Hence, vowel length is phonemic in the language (Tadesse, 2015:25). The Hadiyya vowel phonemes are shown in Table 20.

*Table 20: Hadiyya vowels*

		front	Central	back
high	short	i		u
	long	ii		uu
mid	short	e		o
	long	ee		oo
low	short		a	
	long		aa	

As can be seen from Table 21, vowel length brings meaning difference in Hadiyya. In this language, vowel length occurs only in word medial position i.e. it does not occur in word initial and word final position (Tadesse, 2015:27).

*Table 21: Vowel length in Hadiyya*

Status of phoneme	Hadiyya	Gloss	Hadiyya	Gloss
Short vowel	a. [hafa]	‘shadow’	d. [mine]	‘house’
Long vowel	[haafa]	‘forgiveness’	[miine]	‘forehead’
Short vowel	b. [gudukko]	‘became ready’	e. [k’ota]	‘partly broken’
Long vowel	[guudukko]	‘made burnt’	[k’oota]	‘dowry’

Status of phoneme	Hadiyya	Gloss	Hadiyya	Gloss
Short vowel	c. [gedʒa]	‘group work’	f. [ʔagga]	‘drink’
Long vowel	[geeddʒa]	‘huge/big’	[ʔaagga]	‘introduction’

### 3.2.1.2 Syllable structure

The syllable in Hadiyya is composed of an onset, nucleus and coda; the nucleus can be a short or long vowel. The consonant segment is either an onset or a coda. The maximum number of consonants in a sequence is two. However, the position of onset or coda cannot be occupied by more than one consonant segment (Tadesse, 2015:33).

Words in Hadiyya always begins with consonants. Hadiyya has both closed and open syllables of which word-final syllables are always open. Syllables in other positions can be either open or closed. The open syllable in Hadiyya is the most frequent syllable type occurring in any position of a word. Tadesse (2015:34-35) identified the following syllable types, as in Table 22.

*Table 22: Syllable types in Hadiyya*

<u>CV</u>		<u>CVC</u>	
/ba.re/	‘hole’	/gun.da/	‘short’
/ʔa.do/	‘milk’	/gaʔ.na/	‘address’
/ʔa.ma/	‘mother’	/fa.raʃ.fo /	‘horse’
<u>CVV</u>		<u>CVVC</u>	
/baa.do/	‘revenge’	/gaan.dʒe/	‘neck’
/suu.me/	‘mouth’	/ʔuul.la/	‘country’
/ʔaa.ge/	‘enter’	/ʔeej.ja/	‘yes’

All words in Hadiyya end in vowel<sup>26</sup>; as a result, there are no word-final clusters of consonants. Word initial consonant clusters are also not permissible. Hence, the language allows consonant cluster only word medially. The maximum consonant cluster allowed word medially is two. The

<sup>26</sup> The vowels *-a*, *-o* and *-e* are terminal vowels which occur in their order of frequency (Tadesse, 2015:27).

formation of clusters in the language is of two types: sequence of identical consonants (gemination) and sequence of different consonants (Tadesse, 2015:33-35).

Vowel harmony is another feature in Hadiyya where a vowel is assimilated by another vowel occur near each other or in the entire word. For instance, a word *egare* ‘wait’ has an alternative pronunciation, *egere* in Hadiyya. In this example, the first vowel progressively assimilated the second vowel and it became *e*. Vowel harmony also occurs in regressive assimilation, as in *kurakko* ‘uuyya → *kurakku* ‘uuyya ‘while he was telling’.

### 3.2.2 Development of Hadiyya to a written language: historical overview

Efforts to establish writing systems for Hadiyya can be seen in three distinct periods, namely the writing of Hadiyya in the *Fidel*-based syllabary, the development of the first Roman-based<sup>27</sup> orthography, and its revision. Hadiyya became a written language by the missionaries’ effort when they translated the Gospel of Matthew into Hadiyya in 1927 E.C (Tesfaye, 1986 E.C:6). Later, the New Testament, ሃሬች ህድሶል መግፈ. *Haareechchi Hidi’l Maxaafa*, was translated into Hadiyya by the Ethiopian Bible Society in 1983 E.C. In both cases, the Hadiyya language was written in a modified Ethiopic script.

Hadiyya was one of the 15 languages that were used in the national literacy campaign during Derg regime (McNab, 1989:85). This was the first incidence for the language to appear in the educational domains even if it was non-formal, adult education that was initiated by the government. Textbooks for the literacy campaign in the areas of mathematics, health, and vocational training had been developed by selected teachers. However, until the introduction of national literacy campaign and during the Derg regime the medium of primary level education in Hadiyya zone was Amharic.

After the downfall of the Derg in 1991, the language in education policy has been changed. The current government of Ethiopia (EPRDF) has been encouraging nations, nationalities and

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<sup>27</sup> Writers usually use a term Latin script for the Roman script. In this study the term Roman script is used.

peoples to practice mother tongue in education (Ministry of Education (MoE), 1994:23). In order to implement mother tongue education, the EPRDF has opened the door for the development of languages for educational and administrative purposes. Before the development of educational materials, such as textbooks and dictionaries, nations and nationalities were provided with opportunities to make decisions on choosing the type of script for their respective languages (Ministry of Youth, Sports and Culture, 1995:8).

Following this condition, script selection process had started in a new way for Ethiopian languages. Regarding the script selection for Hadiyya, the Hadiyya language expert said the following:

The reason we opted for the Roman-based script was not because we have developed hatred for Amharic or Amhara, as others claim. ...The problem of the script which Amharic uses is that it does not indicate consonant and vowel discretely. Due to this, it is difficult to identify consonant gemination and vowel length from a word except using context. ... Since Ethiopic could not identify geminated and non-geminated, we did not get solution for this problem previously. Then, after EPRDF had controlled the power, Transitional Government was established. After the establishment of the Transitional Government in 1983 E.C, it has been affirmed in the document and Education and Training Policy that every language group would be able to develop and use its own language. In the charter of the Transitional Government, general issues were mentioned. In the detailed guideline, we were explicitly asked which of the scripts we choose for our language. (Interview with Expert D, January 2, 2015).

The Hadiyya language expert and organizer during the orthography development process explained reasons for the rejection of Ethiopic script which was used during literacy campaign. The Ethiopic script is insufficient to represent consonant gemination and vowel length which are important phonemic features of the Hadiyya language. The Hadiyya language expert mentioned some examples to illustrate ambiguity of Ethiopic script in transcribing Hadiyya. The word <ጉዱኮ> can be represented by three different ways in Hadiyya; <gudukko> ‘he got ready’, <guudukko> ‘he got it burnt’ or <guddukko> ‘he made it tied’ (see Appendix V, Expert D, 4).

In relation to ambiguity, additional examples are presented in Table 23 (see also Tesfaye, 1986:21).

*Table 23: Ambiguity of Ethiopic script and their Roman counterpart*

<b>Ethiopic</b>	<b>Hadiyya orthography</b>	<b>Gloss</b>
ቆቱኮ	<i>qotukko</i>	‘broken partly’
ቆቱኮ	<i>qootukko</i>	‘(he) gave dowry’
ቆቱኮ	<i>qottukko</i>	‘sat down on ankle’
ጎሉኮ	<i>golukko</i>	‘narrowed down’
ጎሉኮ	<i>goollukko</i>	‘(he) concluded’
ጎሉኮ	<i>gollukko</i>	‘became greedy’
ቱሩኮ	<i>turukko</i>	‘went dry (cows’ milk)’
ቱሩኮ	<i>tuurukko</i>	‘became ashamed’
ቱሩኮ	<i>turrukko</i>	‘(It) rolled’

The examples in Table 23 assert that Ethiopic script could create ambiguity since a single written form in Ethiopic can have three different meanings that can clearly be distinguished in the Roman-based Hadiyya orthography. The ambiguity of meaning observed in the data occurs due to the phonemic value of vowel length and consonant gemination. Hence, the existence of these linguistic features in Hadiyya language is mentioned as primary reason for developing Roman-based Hadiyya orthography.

Before making final decision with regard to the choice of a suitable script to embark on mother tongue education, workshops were held in Addis Ababa and Hosa’ina town. Regarding this process, the Hadiyya language expert put in the following terms.

Just as it was done during literacy campaign, Amharic, Tigrinya, Oromo, Sidaama, Wolayta, were selected based on the population size [to embark on mother tongue education]. Somali was included in second round together with our

language. We shared experiences from the five languages that were selected in the first round. After that I jot down spelling manual based on Roman alphabet. ... After that we organized a meeting the Hadiyya scholars who reside in Addis Ababa in the Menilik II school hall. We also invited Dr. Tilahun Gamta, who compiled Oromo dictionary in Roman alphabet, to share experiences. ... Hence, after making thorough discussions, this script (Roman-based script) has got acceptance as a suitable script for the language by the Hadiyya scholars who reside in Addis Ababa. Finally, it has been suggested to make discussions regarding the proposed script with scholars and people in Hadiyya zone (Interview with Expert D, January 2, 2015).

After the Addis Ababa discussion, I went to Hosa'ina and then I made presentation to teachers who came from Hosa'ina and around, scholars from different offices and administrators in *Nigist* Elleni Hospital hall. I explained to them about the script that got acceptance by the Hadiyya scholars in Addis Ababa. I provided explanation on the problems we faced when we were using Ethiopic script and indicated the option of using Roman alphabet. I tried to respond to their questions and then finally they unanimously decided in November 1985 E.C that Roman script should be the alphabet for Hadiyya (Interview with Expert D, January 2, 2015).

The Hadiyya language expert received a directive directly from Ministry of Education to facilitate the script selection and orthography development process. Accordingly, he shared previously drafted orthography for politicians who were sent to the expert from the higher official and member of Hadiyya people in the Ministry of Education (see Appendix V, Expert D, 10).

In the script selection process, however, there was no formal committee that comprises of chairperson, secretary and member(s) during the consultative meetings held in Addis Ababa and Hosa'ina. The Hadiyya language expert drafted the proposed Roman-based orthography and brought it for the discussion. The assembly of Addis Ababa, however, was assumed as a committee. Before the second round meeting held in Hosa'ina, the Hadiyya zone administration recommended four individuals to discuss with the expert regarding the draft Hadiyya orthography. These individuals were: Assefa Bunte, Abatkun Lamboro, Gebrekidan Onkiso and Abera Achiso (see Appendix V, Expert D, 12).

As regards to the educational background of those individuals, Assefa Bunte had a diploma in Political science, Abatkun Lamboro had a BA degree in English, Gebrekidan Onkiso had a diploma in English and Abera Achiso had a certificate (TTI) and he was also a language teacher (see Appendix V, Expert D, 14). The educational background of participants in the appraisal of the proposed orthography indicates that there was no linguist who directly participated in this process though three of them (including the Hadiyya language expert) had a language background.

During script choice for Hadiyya, there was experience sharing session with one of the Oromo scholars before they came up with the preferred script. The languages such as Oromo, Sidaama and Wolayta, which were implemented in the first round for mother tongue education, also contributed for the selection of Roman script for Hadiyya. This is reflected in the writing and reading manual of Hadiyya orthography (Tesfaye, 1986:7-12). The manual developer asserts that the problem of representing gemination and vowel length is assured by a comparative analysis made between the Ethiopic script and the Roman-based script.

There were arguments during script selection from Roman script and Ethiopic script for Hadiyya. Mathematics expert and participant during the consultative workshop that was held in Addis Ababa described this scenario as follows:

There were some people arguing in favor of Ethiopic script. Their point of argument was that since there are ample resources in Amharic and translated from different languages into Amharic, we can easily access those resources. Hence, even though they are few in number, there were people who preferred Ethiopic for us (Hadiyya). There were such kind of idea differences. However, most of the scholars commented against this idea which actually was convincing. We attended a one-day training that was given by Dr. Tilahun Gamta which helped us to gain experience. We have also been informed that our language is in Cushitic category. He illustrated with examples about how to use Roman-based script particularly for Cushitic languages such as Hadiyya and Kambaata. Finally, he left the decision for us and at the end we agreed on the Roman-based script (Interview with Expert F, May 26, 2014).



Expert F stated that majority of the workshop participants were arguing in favor of Roman-based script. However, few individuals in the consultative workshop argued in favor of adopting the Ethiopic script. The main point of argument in favor of Ethiopic script was that if Hadiyya uses the Ethiopic script, its use makes easier a reading of Amharic literatures which have already been developed. This argument implies that it becomes easier to learn Amharic by transferring the reading skills of Hadiyya if the Ethiopic script is chosen for Hadiyya. Even though there was such kind of counter argument, finally, the Roman-based script was chosen by the majority of participants to write Hadiyya language.

As mentioned earlier, the linguistic reasons such as representation of vowel length and consonant gemination were stated for the selection of Roman-based script for Hadiyya language. In addition to linguistic reasons, ideological reasons have also significant role in the script selection. The reason for the choice of Roman-based script particularly by the majority of Cushitic, Omotic and Nilo-Saharan languages could go beyond the linguistic reasons. Bekale (2012:299) explains that the pro-Roman script groups have underlying fear of a threat of the coming back of the old language policy with its Amharic hegemony. Due to this, they do not freely accept the choice of the Ethiopic script. As further explained by Bekale (2012:299), the groups who opt the Roman-based script think as the strategy of divergence so as to maintain distance from the identity of the group that they think is supporting an assimilationist aim. Thus, this kind of ideology might have influenced the script choice in Hadiyya as well.

Following the script choice decision, textbooks were developed for grade 1 to 6<sup>28</sup> between March 1985 E.C and June 1985 E.C (see Appendix V, Expert D, 8). In order to guide writers and teachers of Hadiyya language, a manual on the Roman-based Hadiyya orthography was finalized by Tesfaye (1986 E.C). Then, the manual was published by the Hadiyya Zone Education desk.

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<sup>28</sup>Currently, MT education has been provided in first cycle (grade 1-4) in SNNPR. The decision was made on the regional level to teach second cycle of primary education by English as a medium of instruction.

### 3.2.3 Development of Roman-based Hadiyya orthography

At the very beginning of the development of Roman-based Hadiyya orthography, 22 consonant graphemes and 5 vowel graphemes were devised. In the orthography, alphabet chart was prepared with the equivalent graphemes in the Ethiopic script.<sup>29</sup> The first Roman-based Hadiyya orthography is presented in Table 24 as follows:

*Table 24: Orthographic representation of Hadiyya*

Phonemes in IPA	Upper case graphemes	Lower case graphemes	Ethiopic script
/a/	A	a	አ
/b/	B	b	ባ
/tʃʼ/	C	c	ፎፊ
/d/	D	d	ዳ
/e/	E	e	ኤ
/f/	F	f	ፋ
/g/	G	g	ገ
/h/	H	h	ሃ
/i/	I	i	ኢ
/dʒ/	J	j	ጃ
/k/	K	k	ካ
/l/	L	l	ላ
/m/	M	m	ማ
/n/	N	n	ና
/o/	O	o	ኦ
/kʼ/	Q	q	ቃ
/r/	R	r	ራ
/s/	S	s	ሳ
/t/	T	t	ታ
/u/	U	u	ኡ
/w/	W	w	ዋ
/tʼ/	X	x	ጣ
/y/	Y	y	ያ
/z/	Z	z	ዛ

<sup>29</sup> The reason for the presentation of Ethiopic script is to help Hadiyya learners who had exposure of reading and writing Amharic first as to how to read the Hadiyya orthography by comparing with the Ethiopic script. Since there is no first order vowel ə in Hadiyya, most of the sounds are uttered in the fourth order.

Phonemes in IPA	Upper case graphemes	Lower case graphemes	Ethiopic script
/tʃ/	CH	ch	ቸ
/ʃ/	SH	sh	ሻ
/pʰ/	PH	ph	ከ

The devised consonant graphemes of the Hadiyya language are: *b, c, d, f, g, h, j, k, l, m, n, q, r, s, t, w, x, y, z, ch, sh* and *ph*. According to this order, first all monographs are sequenced that are then followed by digraphs. Digraphs, in this context, are compound letters to represent a single phoneme. Though the representation of some phonemes requires the combination of symbols (e.g., *ch, sh*), they stand for one phoneme. In the Hadiyya orthography, each phoneme of the language is represented. Due to this, there is no different ways of pronunciation for certain words, i.e., every word is pronounced in the same way as it is written.

In the contrary to the phonemic inventory of consonants of Hadiyya, the glottal stop /ʔ/ is simply written by using the apostrophe <'>. In the Hadiyya writing manual, the identified number of phonemes is 22 without mentioning glottal stop which is one of the most frequently occurring sounds in the language (Tesfaye, 1986 E.C:13). In fact, the use of apostrophe <'> is presented with some graphemes such as <'l>, <'m>, <'n>, <'w>, and <'y>. Even though the writing of glottal stop is indicated in the context of consonant clusters, it is not considered in the list of graphemes though it has phonemic status in the language. The symbol for glottal stop is also employed in the orthography between the impermissible sequences of two different vowels or after vowel length, as in <aa'e> 'take!', or <Waa'a> 'God'.

Vowel length and consonant gemination are written by doubling the graphemes. For vowel length, *hafa* 'shadow' versus *haafa* 'forgiveness' and *gudukko* 'became ready' versus *guudukko* 'made it burn' are some of the examples. The same is true for consonant gemination as portrayed in the example *gurubo* 'fun' versus *gurubbo* 'knee' and *anukko* 'he splited' versus *annukko* 'become matured'.

In the Hadiyya orthography, which is mentioned earlier, <zh> /ʒ/, <ny> /ɲ/, <ts> /s'/, <p> /p/ and <v> /v/ were added to the list of graphemes after it had been used for more than a decade. Of

these consonant sounds [p] and [v], are frequently attested in loanwords which are commonly used in school domains particularly in science and technology terms. The Amharic phoneme /s'/, which is represented by grapheme <ts>, has also been incorporated into Hadiyya via Amharic loanwords. It is borrowed through personal names (e.g., *Tsaddaqa* 'was approved', *Tsahay* 'sun') or other words (e.g., *tsaaloota* 'prayer'). Non-literate Hadiyya speakers usually replace those phonemes with the nearest Hadiyya sound. For instance, [p] with [f] or [b], [v] with [b] and [s'] with [t']. However, the educated people use the phonemes which are borrowed via loanwords (see also 3.2.8.2) .

### 3.2.4 Punctuation

Hadiyya adapted the punctuation marks that English uses. The major punctuation marks in Hadiyya orthography are the following.

*Table 25: The Hadiyya punctuation*

Symbol	Name of punctuation mark	Gloss
.	<i>uullishshi mare'e</i>	'full stop'
,	<i>giphit mare'e</i>	'comma'
;	<i>shiqqeen giphit mare'e</i>	'semi-colon'
:	<i>caakkishshi mare'e</i> <sup>30</sup>	'colon'
?	<i>xa'michchi mare'e</i>	'question mark'
!	<i>maalalaxxi mare'e</i>	'exclamation mark'
“ ”	<i>aggishshi mare'e</i>	'quotation mark'
( )	<i>qaapho'o</i>	'parenthesis'
-	<i>ceeqit mare'e</i>	'hyphen'
—	<i>dafaachchi mare'eldaasha</i>	'dash'
< >	<i>matandar aggishshi mare'e</i>	'single quotation mark'

<sup>30</sup> This term was previously designated as *gabbeen uullishshi mare'e* (small+of pause + mark). The term *caakkishshi mare'e* (of listing + mark) 'colon' seems more appropriate for the name shows its function.

The term *dufaachchi mare'e* (horizontal+mark) 'dash' is rarely used as a name of punctuation mark even though it is mentioned in Tesfaye (1986 E.C) and it is being replaced by the loanword *daasha* 'dash'. The punctuation mark of hyphen <-> is employed to write compound words or phrases in English and many other languages, however, it is not suggested in Tesfaye (1986 E.C) and in the dictionary of Hadiyya Zone Education Desk (1996 E.C) to be used in writing compound words in Hadiyya. Hence, the hyphen <-> is used for mathematical symbols.

Punctuation marks such as single quotation mark, ellipsis and paragraph spacing are not mentioned in the orthography manual for Hadiyya (Tesfaye, 1986 E.C). The symbol for single quotation is recently suggested to be represented by curved bracket i.e. < >. Ellipsis (...), which is used to indicate text or word that has been left out of a quotation, is not designated or not included in the list of Hadiyya orthography manual though it is practically employed in the Hadiyya-English dictionary and textbooks. On the other hand, paragraph spacing is not clearly indicated in the orthography manual to guide readers and writers though textbooks are mainly written by leaving space without indenting to indicate new paragraphs.

In Hadiyya orthography, parenthesis < ( ) > is designated to indicate elements which provide extra and related information. This symbol used in the Hadiyya-English dictionary inconsistently with slash </ />. Moreover, the symbol <:-><sup>31</sup> is used in the dictionary without the explanation of its function; it is not explained in the orthography manual either.

### 3.2.5 Numerals

Arabic numerals are used in Hadiyya orthography to write numbers. Numerals can be written or counted in words, cardinals, in rank order or ordinals and fractions. The numerals from one to twenty and thirty to million are provided in Table 26 as example to show the representation of numerals in the language.

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<sup>31</sup> The use of this punctuation mark is probably due to the influence of the symbol for colon (:-) that is used in Amharic.

*Table 26: Hadiyya cardinals and their Arabic equivalent*

Cardinal numerals (in words)	Arabic	Cardinal numerals (in words)	Arabic	Cardinal numerals (in words)	Arabic
<i>mato</i>	1	<i>tommoo mato</i>	11	<i>sade</i>	30
<i>lamo</i>	2	<i>tommo lamo</i>	12	<i>sore</i>	40
<i>saso</i>	3	<i>tommoo saso</i>	13	<i>ontayye</i>	50
<i>sooro</i>	4	<i>tommoo sooro</i>	14	<i>lohayye</i>	60
<i>onto</i>	5	<i>tommoo onto</i>	15	<i>lamarayye</i>	70
<i>loho</i>	6	<i>tommoo loho</i>	16	<i>sadeentayye</i>	80
<i>lamara</i>	7	<i>tommoo lamara</i>	17	<i>honsayye</i>	90
<i>sadeento</i>	8	<i>tommoo sadeento</i>	18	<i>xibbe</i>	100
<i>honso</i>	9	<i>tommoo honso</i>	19	<i>kuma</i>	1,000
<i>tommo</i>	10	<i>lamiyye</i>	20	<i>kaakuma</i>	1,000,000

The base of cardinals are used to derive ordinal numbers, except number ‘one’ which is totally different form i.e., *luxxi*-. The ordinal numerals and their short forms are shown in Table 27.

*Table 27: Hadiyya ordinals and their short forms*

Ordinals in words	Ordinals in short form	Gloss
<i>luxxi</i>	1 <sup>x</sup>	1 <sup>st</sup>
<i>la'm</i>	2 <sup>m</sup>	2 <sup>nd</sup>
<i>saxxi</i>	3 <sup>x</sup>	3 <sup>rd</sup>
<i>soo'l</i>	4 <sup>l</sup>	4 <sup>th</sup>
<i>onti</i>	5 <sup>t</sup>	5 <sup>th</sup>
<i>loh</i>	6 <sup>h</sup>	6 <sup>th</sup>
<i>lama'l</i>	7 <sup>l</sup>	7 <sup>th</sup>
<i>sadeenti</i>	8 <sup>t</sup>	8 <sup>th</sup>
<i>honsi</i>	9 <sup>s</sup>	9 <sup>th</sup>
<i>tommi</i>	10 <sup>m</sup>	10 <sup>th</sup>

The representation of ordinal numerals in Hadiyya orthography was inconsistent and had long forms (e.g., 1<sup>-xxi</sup> ‘first’, 2<sup>mmi</sup> ‘second’). However, they are recently modified and regularized. For instance, in the form 1<sup>-xxi</sup> → 1<sup>x</sup> ‘first’, 2<sup>mmi</sup> → 2<sup>m</sup> ‘second’, 3<sup>-xxi</sup> → 3<sup>x</sup> ‘third’, etc. the latter form is economical, simple to remember and being short.

### 3.2.6 Frequent problems of applying the Hadiyya orthography to loanwords

#### 3.2.6.1 Writing loanwords beginning with /r/

In Hadiyya, there is no word that begins with the phoneme /r/ (Tadesse, 2015:22). Accordingly, in the actual pronunciation of loanwords that begin with /r/ sound, the epenthetic vowel [i] is inserted in English and Amharic loanwords to adjust to the phonological structure of Hadiyya. In the dictionary of Hadiyya zone Education Desk (1996 E.C:372-374), however, some problems were observed in writing loanwords that begin with [r] sound at the orthography level. The recommended way of writing in this context is presented in column two in (9).

(9)	Partially adapted form	Recommended form	Gloss
	<i>reedo'o</i>	<i>iraadoona/iraado'o</i>	‘radio’
	<i>raadeshiina</i>	<i>iraadeshiina</i>	‘radiation’
	<i>raadikila</i>	<i>iraadikila</i>	‘radicle’
	<i>rektama</i>	<i>irektama</i> <sup>32</sup>	‘rectum’
	<i>rektaangil</i>	<i>irektaangila</i>	‘rectangle’

As in (9), the possible reason for the partial adaptation of the loanwords that begin with /r/ sound is that the dictionary compilers are literate in Amharic or English as a result they were influenced by the orthography of these languages. In other words, their priority might be maintaining the source form of loanwords rather than following actual pronunciation in Hadiyya.

<sup>32</sup> Though the vowel [i] is basically inserted word-initially, the actual pronunciation of the loanwords *irektama* ‘rectum’ and *irektaangila* ‘rectangle’ are also uttered as *erektama* and *erektaangila* due to vowel harmony.

### 3.2.6.2 Maintaining rule of consonant cluster

Hadiyya has a maximum consonant cluster of two which appears word medially (Tadesse, 2015:33). Contrary to this rule, some words with the word initial consonant cluster were observed in the dictionary of the Hadiyya Zone Education Desk (1996 E.C.) and in the selected textbooks. Consider the following data in (10).

(10)	Hadiyya	Gloss	Hadiyya	Gloss
	<i>plaastika</i>	‘plastic’	<i>progiraama</i>	‘program’
	<i>plee’n misila</i>	‘plane geometry’	<i>staarcha</i>	‘starch’
	<i>priinsippila</i>	‘principle’	<i>tyoore’e</i>	‘theory’

The phonological adaptation of English loans is not consistent and violates the rule of Hadiyya syllable structure. In the data (10), the loanwords begin with consonant cluster. The word initial consonant clusters of *pl-*, *pr-*, *st-*, and *ty-* are not permissible in Hadiyya because the Hadiyya mother tongue speakers pronounce these words by using epenthetic vowel [i] for the phonological adjustment. Hence, the appropriate written form for those word should be *pilaastika*, *piriinsippila*, *pirogiraama*, *istaarcha* and *tiyoore’e*. The sequence of vowel, on the other hand, is not permissible in the language but the written form of the term *aorta* ‘aorta’ violates the syllable structure of Hadiyya. So, it should be written as *aworta’a*.

### 3.2.7 Spelling conventions

As indicated in Tesfaye (1986 E.C.) and in the Hadiyya Zone Education Desk (1996), the following major guidelines<sup>33</sup> apply to write Hadiyya in the Roman-based orthography:

- 1) Every word in the beginning of sentence should be written in capital letter. The initial letter of proper nouns and names of places, rivers, oceans, etc. should be written in capital letters when they appear in any position of a sentence.

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<sup>33</sup> Some of the rules are stated in recently developed (in 2014/15) grade 5-8 Hadiyya textbooks.



- 2) Since vowel length and consonant gemination are phonemic, they are marked in the orthography. Accordingly, short phonemes are written with a single grapheme whereas long phonemes are written by reduplicating the graphemes to show vowel length or consonant gemination. Geminated digraphs are repeated entirely, i.e., non-geminated <ch> vs. geminated <chch>. For instance, <ichcha> ‘food’, <qashsha> ‘spoon’ and <daphpha> ‘hidden place’ (see chapter six for the suggested options to revise this rule).
- 3) The rule of doubling the sonorant graphemes or sounds (<l> /l/, <m> /m/, <n> /n/, <w> /w/ and <y> /j/) after glottal stop is modified<sup>34</sup> to be written as a single grapheme when Hadiyya textbooks were developed in 2014. For example, <la’llaaggo> ‘proper name’, <wo’mma> ‘full’, <baa’yyaata> ‘information’ is modified as <la’laaggo>, <wo’ma>, <baa’yaata>, respectively.
- 4) In Hadiyya, coordinating conjunction ‘and’ is marked by the vowel length which is attached to all words in the enumeration. The following data (11) illustrate this:

(11)	<i>adoo buuroo</i>	
	milk-CNJ butter- CNJ	‘milk and butter’
	<i>annii beetii</i>	
	father- CNJ son- CNJ	‘father and son’
	<i>annaa ammaa</i>	
	father- CNJ mother- CNJ	‘father and mother’
	<i>isee ixoo</i>	
	her- CNJ him- CNJ	‘her and him’
	<i>eesee keesee</i>	
	me- CNJ you- CNJ	‘me and you’

When vowel length appears in the final position of verbs, it shows frequency of action. The following examples in (12) demonstrate this.

<sup>34</sup> The reform has been made by the Hadiyya Zone Curriculum Development Department.

- |      |                      |                      |                        |                       |
|------|----------------------|----------------------|------------------------|-----------------------|
| (12) | <i>itaa itaa</i>     | ‘eating repeatedly’  | <i>hollaa hollaa</i>   | ‘chasing repeatedly’  |
|      | <i>maraa maraa</i>   | ‘going repeatedly’   | <i>moo 'aa moo 'aa</i> | ‘watching repeatedly’ |
|      | <i>geeraa geeraa</i> | ‘running repeatedly’ | <i>xophaa xophaa</i>   | ‘jumping repeatedly’  |

5) When plural marker *-uww* or *-eeww* is attached to a singular noun, a terminal vowel will be dropped from a base noun. The terminal vowel appears again after the addition of the plural marker *-uww* or *-eeww*. If a consonant which comes before terminal vowel is single or does not occur in consonant cluster, the consonant will be geminated as plural marker is added.

(13a) **Plural marker** *-uww*

- googo* + *-uww* → *googguwwa* ‘roads’  
*suuqa* + *-uww* → *suuquwwa* ‘shops’  
*summa* + *-uww* → *summuwwa* ‘names’  
*anga* + *-uww* → *anguwwa* ‘hands’

b) **Plural marker** *-eeww*

- mine* + *-eeww* → *minneewwa* ‘houses’  
*laro* + *-eeww* → *lalleewwa* ‘cattle’

6) Hadiyya conjunction *-aare/-haare* ‘if/when’ is used as an affix not as an independent morpheme. The terminal vowel will be dropped<sup>35</sup> when morpheme *-aare* is added but this does not work for *-haare* as indicated in (14a and b).

(14a) **-aare**

- waarummo-aare* → *waarummaare* ‘if I come’  
*dissinummo-aare* → *dissinummaare* ‘if we put’  
*itto'o-aare* → *itto'aare* ‘if she eats’

<sup>35</sup> The vowel /o/ is dropped in this context since three vowel sequence is not permissible in Hadiyya.

b) **-haare**

<i>waaroo-haare</i> → <i>waaroo<b>haare</b></i>	‘when he comes’
<i>maramoo-haare</i> → <i>maramoo<b>haare</b></i>	‘when they go’
<i>geettoo-haare</i> → <i>geettoo<b>haare</b></i>	‘when you run’

7) The relative marker *keeno* will be written as part of the main word as depicted in (15).

(15)	unacceptable	acceptable	
	<i>waar-oo keeno</i>	<i>waaroo<b>keeno</b></i>	‘those who come’
	come-IPV-REL		
	<i>y-oo keeno</i>	<i>yoo<b>keeno</b></i>	‘those who exist’
	exist-IPV-REL		
	<i>mar-u keeno</i>	<i>maru<b>keeno</b></i>	‘those who went’
	go-PV-REL		

8) A word *bikkina* ‘since/for/about’ which shows the conjunction of reason or prepositional phrase will be written independently when it occurs with demonstrative pronouns, nouns, and verbs. Consider example (16).

(16)	<i>ka + bikkina</i> →	<i>ka bikkina</i>	‘for this reason’
	<i>sibaaru + bikkina</i> →	<i>sibaaru bikkina</i>	‘since he is hungry’
	<i>waaru + bikkina</i> →	<i>waaru bikkina</i>	‘since he came’
	<i>ki + bikkina</i> →	<i>ki bikkina</i>	‘about you’
	<i>manchi + bikkina</i> →	<i>manchi bikkina</i>	‘about a man’

9) When a lexical item *bee’isa* ‘without/not/un-’ appears with noun, it will be written by leaving word space. On the contrary, when it occurs with verbs it will be written as part of the word.

- (17a) **N + *bee'isa***
- |                           |                           |
|---------------------------|---------------------------|
| <i>huushanchi bee'isa</i> | 'without error'           |
| <i>qophphan bee'isa</i>   | 'without fault'           |
| <i>iitti bee'isa</i>      | 'without feeling of love' |
- b) **V + *bee'isa***
- |  |                              |
|--|------------------------------|
| <i>maroo + bee'isa</i> → <i>maroobee'isa</i> | 'as it will not go together' |
| <i>xanu + bee'isa</i> → <i>xanubee'isa</i>   | 'that he was unable'         |
| <i>siidu + bee'isa</i> → <i>siidubee'isa</i> | 'that he did not see'        |

In *v + bee'isa* combination, the meaning of *bee'isa* denotes negation 'un-/not'. In the *n + bee'isa* combination, *bee'isa* refers to the meaning 'without'.

10) Rule of writing compounds: as stated in the Hadiyya Zone Education Desk (1996 E.C:XIII), compound words are written as one word and without using hyphen. Consider the following data in (18).

(18)	Compound constituents	Compound	Gloss
	<i>heera</i> 'all' + <i>ulla</i> 'earth' →	<i>heerulla</i>	'world'
	<i>maalala</i> 'surprise' + <i>kura</i> 'telling' →	<i>maalalkura</i>	'interjection'
	<i>ille</i> 'eye' + <i>beeto</i> 'son' →	<i>ilbeeto</i>	'pupil'

As shown in (18) compounds have been written as one word since they have unit of utterance. However, there is some exceptions<sup>36</sup> of writing compounds in Hadiyya that allow word space (see 4.2.2.4 orthographic rule of Hadiyya compound).

<sup>36</sup> Recently (in 2014/15) Hadiyya textbooks development committee revisited the rule of writing compound. In grade 8, for instance, compounds which shows possession written by using word space. This was not mentioned either in orthography manual or Hadiyya-English dictionary. In fact, such compounds were written separately though the rule was not stated explicitly.

11) When reduplicated lexical items or numerals are written, word final vowel of the first word is dropped and the reduplicated word will be written as one word.

- (19) *mato* + *mato* → *matmato* 'everyone'  
*lamo* + *lamo* → *lamlamo* 'being in a pairs'  
*onto* + *onto* → *ontonto* 'in a group of five'  
*saso* + *saso* → *sassaso* 'in a group of three'  
*ooso* + *ooso* → *oosooso* 'grandson'  
*hane* + *hane* → *hanhane* 'shallow'

For the reduplication of number eight and ten, the general rule of writing reduplicated words is violated. The reduplicated form for the word eight is *sadeento* + *sadeento* → *sadeenti sadeento* 'in a group of eight'. This shows that when word final consonants which precede terminal vowel are different, the terminal vowel of first word is dropped and <i> functions as an epenthetic vowel. This rule is similarly applied in compound word formation (see data 49b). On the other hand, for number ten the reduplicated form is *tomm* + *tommo* → *tomtommo*. This also similarly follows the compounding pattern of deletion of terminal *cv* of the first word (see data 52).

12) Reduplicated roots in Hadiyya are also written as single words. Consider the following examples in (20).

- (20) *batbat* 'be unsettle'                      *shafshaf* 'shake repeatedly'  
*fitfit* 'try hard'                                  *taftaf* 'be in a hurry'  
*qafqaf* 'be restless'

13) Pronouns (demonstrative or possessive) in NP formation is written independently, or by using word space as shown in the following examples.

Demonstrative pronouns		Possessive pronouns	
<i>ku beet</i>	‘this boy’	<i>i mine</i>	‘my house’
<i>oo manni</i>	‘those people’	<i>ni mine</i>	‘our house’
<i>tu landichcho</i>	‘this girl’	<i>ki mine</i>	‘your house’
<i>tu meentichcho</i>	‘this woman’	<i>ki ’nuwwi mine</i>	‘your house’
<i>o beet</i>	‘that (distal) boy’	<i>is mine</i>	‘her house’
<i>e mine</i>	‘that (distal) house’	<i>issuwwi mine</i>	‘their house’

Exception: in kinship terms the possessive markers *ki*, *i*, *ni*, used as part of a word as illustrated in the following examples.

<i>ki + anna</i> →	<i>kiyyanna</i>	‘your father’
<i>ki + abbaaayo</i> →	<i>kiyyabbaaayo</i>	‘your brother’
<i>ki + ama</i> →	<i>kiyyumma</i>	‘your mother’
<i>i + aayya</i> →	<i>iyyaayya</i>	‘my sister’
<i>ni + aayya</i> →	<i>niyyaayya</i>	‘our sister’

However, when possessive pronouns such as *is* ‘her’, *ixxi* ‘his’, *issuwwi* ‘their’, *ki ’nuwwi* ‘your’ are used with kinship terms, they are written independently. For example, *is ama* ‘her mother’, *issuwwi anni* ‘their father’, *ki ’nuwwi aayya* ‘your (PL) sister’. On the other hand, in supplementary reading materials such as *Qanannaaxxi Beshichcho 3* and *4* possessive pronouns are written by using hyphen. Consider data (21).

(21)	<i>i-mine</i>	‘my house’
	<i>i-sogtano</i>	‘my advice’
	<i>ixxi-suume</i>	‘his language’
	<i>ki-heeda</i>	‘your axe’

As a rule Hadiyya pronouns (i.e. demonstrative or possessive) will be written without hyphen and by using word space. However, there is inconsistency in applying this convention in the previously mentioned supplementary reading materials. Since possessive pronouns in Hadiyya

have lexical meanings or occur independently, it is recommended to write them independently rather than writing them as affixes.

14) Rule of writing loanwords: Loanwords are written adapted into the Hadiyya phonological system. Foreign words with word initial consonant cluster will be integrated into Hadiyya by inserting vowel (<i>), as in (22).

(22)	<u>s</u> port	→	<i>ispoorta</i>
	<u>s</u> tadium	→	<i>isteediyeema</i>
	<u>p</u> rogram	→	<i>pirogiraama</i>

### 3.2.8 Evaluation of the Hadiyya orthography

In this section, the Hadiyya orthography will be described and assessed in light of essential principles of orthography development according to Smalley (1963), Fishman (1977) and Malone (2004).

#### 3.2.8.1 Maximum motivation for the learner and acceptance by the community

Community acceptance is a main factor in the orthography development. If the linguistic community does not have a positive attitude toward the devised orthography, they are unlikely to use it. Hence, the issue of acceptance is crucial and is the first imperative concern in the orthography design.

As mentioned in Section 3.2.2, initially Hadiyya was written in an adapted Ethiopic script particularly with the missionaries' efforts during Bible translation and during literacy campaign. The adapted Ethiopic script was abandoned and replaced by Roman-based script during the beginning of mother tongue education in post 1991. There was no chance for script choice until the change of language policy during EPRDF (see 3.2.2). From various options of adapting Roman-based script, Hadiyya employed a phonemic one. English also uses Roman-based script; but its pronunciation and written form usually vary. In the modified Roman-based Hadiyya

orthography, generally every sound is written in the way it is uttered. In addition to symbol sound correspondence, phonological features such as gemination and vowel length are represented in Hadiyya orthography for the reason that priority is given for transparency than economy.

After discussions with Hadiyya scholars, politicians and people's representatives have been made, the proposed Roman-based orthography have been used in school system starting from 1993. As stated in Section 1.2.2, the Hadiyya language is being given in primary level (grade 1-4) as medium of instruction and as school subject from grade 1-12. It is also given in Hosa'ina Teachers' College as a subject and has become department in Wachamo University located in Hosa'ina town. This situation indicates that the Hadiyya language is being developed and used particularly in the educational domains.

### 3.2.8.2 Maximum representation of speech

According to the principle of maximum representation of speech, each sound distinctions should be represented by a single symbol (see 2.2.1.2.1). As can be seen from the modified Hadiyya orthography in Table 28, the grapheme <zh> is representing a non-existent phoneme in the language. For the introduction of grapheme <zh> the orthography reformers have reasoned out that the grapheme has been introduced to Hadiyya via Amharic loanwords, as in <zhaanxila> /zaant'ila/ 'umbrella'. Hadiyya words or loanwords with the grapheme <zh> are rare. Even though the grapheme <zh> has been included in the revised Hadiyya orthography, it is written inconsistently in the language. It is sometimes written using the nearest existing sound [dʒ] or [z], as in [dʒaant'ila] <jaanxila> or [zaant'ila] <zaanxila> 'umbrella'. In this context, the adapted form of Amharic loanword indicates that the grapheme <zh> is not important for Hadiyya orthography. Hence, loanwords that comprise [ʒ] could be written through adaptation to the nearest existing Hadiyya phonemes.

Moreover, grapheme <ny> which stands for the sound [ɲ] was included in the revised Hadiyya orthography. However, it is non-existent in the language especially in the non-geminated form. Even the geminated counterpart occurs only in a few ideophones, as in *hanynyi aa'* - 'bite' and



*hanynyi hanynyi aa'* - 'bite repeatedly'. Apart from these ideophonic words, when Amharic loanwords which include [ɲ] are borrowed into Hadiyya, they are replaced with the nearest Hadiyya sound [n], as in *sanna* /sanna/ < ሰንኞ /səɲɲo/ 'Monday', *daanna* < ዳኛ /daɲɲa/ 'judge'. Hence, with the exception of the ideophones it is unnecessary to use the un-adapted form for the loanwords. Though it is very rare, in order to write ideophones the geminated grapheme <nyny> could be retained.

Hence, the graphemes <zh> and nongeminated <ny>, are representing non-existent phonemes in the language. The representation of such non-existent phonemes is unnecessary burden to the Hadiyya learners. This might adversely affect the teaching learning process since it unnecessarily demands additional time and effort to learn the symbols. It will also be difficult to give concrete example to teach words with non-existent symbols. This also goes against the phonological principle of one grapheme for one phoneme (see Smalley, 1963:63). According to Smalley's principle, the graphemes that are created or assigned in a language should be based on the number of phonemes in the language. Hence, from the newly added graphemes to Hadiyya, <zh> and <ny> are in contrast to this principle.

The occurrence of glottal stop is frequent in Hadiyya. With regard to its representation, the grapheme for this phoneme is not devised in the orthography of the language; rather it is indicated by the English apostrophe <'>. Its use may not be problematic for Hadiyya since it has no additional functions in the language since single quotations <' '> are not marked until now. Moreover, in Hadiyya orthography glottal stop /ʔ/ <'> was not considered as an independent phoneme until recent time. This perception has been reflected in writing words which contain glottal stop /ʔ/ <'> word initially. For instance, [ʔamade] written as <amade> 'hold it!' or [ʔuulle] written as <uulle> 'stand up!'. Thus, there is word initial underrepresentation of glottal stop [ʔ] which is consistently omitted in word initial position.

In general, in Hadiyya orthography each sound distinction is represented by a single symbol. However, the symbols <zh> and <ny> are unnecessarily designated graphemes for they are non-

existent in the language. The omission of a glottal stop /ʔ/ <'> in word-initial position is also considered as underrepresentation of the grapheme in this position.

### 3.2.8.3 Maximum ease of learning

A good orthography facilitates ease of learning. In order to prevail proper understanding of the text, orthography should encode all and only the information needed by a mother-tongue reader (Stark, 2010:12). In relation to this, majority of Hadiyya graphemes are necessary to write the language in full-fledged form except unnecessarily created grapheme <zh> for the sound [ʒ] and <ny> [ɲ]. Hence, this kind of unnecessarily added graphemes could be mentioned as reducing factor for simplicity or it is unnecessary burden for mother tongue learners.

Ease of learning can also be achieved by maintaining clarity of orthography through utilizing consistent way of word break (see 2.2.1.2.1). Based on the principles of word spacing rule for writing compounds, pronouns, morphemes and conjunctions have been described in Section 3.2.7. For instance, in Hadiyya demonstrative and possessive pronouns are written as separate words, as in *ku beet* 'this boy', *e mine* 'that (distal) house', or *i mine* 'my house' or *ki'nuwwi mine* 'your house'. On the contrary, some conjunctions and affixes are written as part of a word when they do not occur independently. For example, a conjunction *-aare/-haare* 'if/when' is used as part of a word, as in *waarummaare* 'if I come', or *maramoohaare* 'when they go'. Such writing conventions would ease learning and use of the orthography.

### 3.2.8.4 Maximum transfer

Transfer of reading skills can be made if the same symbol is used with the same phonetic value in the language that the transfer is going to be made to (see 2.2.1.2.1). For the people from SNNPR, it is important to learn Amharic and English so as to access wider opportunities in the country. The regional government uses Amharic as a working language of the region in Hawassa, capital of SNNPR. Hence, this implies that literacy in Amharic is vital for the maximum opportunities even within the region (Cohen, 2007:68). In the case of Hadiyya, since there is no relationship between the Ethiopic script and the Roman-based script, which is adopted by the language, students are expected to learn additional script to become literate in Amharic.

When the relationship between the written forms of the local languages that employ the Roman script and English is seen, it is more problematic due to the different uses of the Roman script for the two languages (Cohen, 2007:68-69). Regarding Hadiyya and English, the graphemes *c*, *q*, *x* and *ph* exist in both English and Hadiyya but they have different phonetic values. The sound of these graphemes is ejective in Hadiyya, as in *c* [tʃʼ], *q* [kʼ], *x* [tʼ] and *ph* [pʼ]. The ejectives, which are non-existent in English, are existent in Hadiyya phonology. This kind of sound discrepancy created negative impact on the transfer of skills during early grade reading of English for Hadiyya mother tongue learners. The negative transfer become severe particularly when a teacher teaches both the mother tongue and English in a self-contained class. Regarding the problem of transfer, one of the teachers has confirmed during the FGDs as follows:

When students learn English they often get confused to pronounce some symbols for they read English as they read Hadiyya. For instance, they read the symbol *x* as [tʼ], *c* as [tʃʼ] particularly in early grade reading. When they got matured or in later grades the problem is minimized. This problem is more recurrent in a self-contained class. We tell students to identify that this has happened due to the use of Roman script. We encourage them to recognize the differences (FGDs June 17, 2014). (See Appendix VI, FGDs 3, 26).

The English vowels *u*, *i*, *e* were pronounced in manner of reading Hadiyya because the English vowels change their phonetic value in different contexts as opposed to Hadiyya. For instance, *church* /tʃɜːtʃ/ could be pronounced as [tʃurtʃ] since the grapheme <u> is always pronounced as [u] in Hadiyya. On the other hand, the Hadiyya mother tongue readers apply correct pronunciation for the sounds or graphemes which are common for both languages.

Generally, there is no relationship between the Ethiopic script and Roman-based script which is adopted for Hadiyya. This requires Hadiyya mother tongue students to learn additional script when they learn Amharic, the federal, regional and zonal working languages. Although Hadiyya and English share similar Roman script and some graphemes, the difference in phonetic value of consonant and vowel sounds in both languages negatively affect skill transfer between the two languages.

### 3.2.8.5 Maximum ease of reproduction

In the orthography design typing and printing facilities need a consideration, although they are not of first importance. The reproduction of written materials become much easier using computer technology in many languages. Language users may want to select symbols that can be written on computer if there is computer access to them (Malone, 2004:53). During the development of Roman-based Hadiyya orthography, all the symbols which are used to represent sounds of the language exist in a computer keyboard. This also makes the typing easier.

Since there is no compatibility problem to recognize symbols, it is simple to share and read documents in another computer. It is also easy to share documents and information written in Hadiyya orthography through technologies such as e-mail, external discs and smart devices. Moreover, it is possible to choose and use various types of fonts for the production of materials. Therefore, as to the principle of maximum reproduction, the Roman script which Hadiyya uses is convenient to reproduce since all characters of the orthography are available in a computer keyboard.

### 3.2.8.6 Economy

Economy can be seen in relation to the number of graphemes and mode of writing words in the way that saves space. The total number of graphemes in Hadiyya orthography is 33 which is not time consuming to learn. However, in writing words the use of digraphs consumes much spaces which has implications for printing cost and time during typing.

In Hadiyya orthography development, more attention was given to transparency than economy regarding representation of geminated digraphs. For instance, the geminated forms of *ch*, *sh*, *ph*, *zh*, *ts*, and *ny* were decided to be written by doubling the digraphs. Hence, these graphemes become tetragraphs when they appear in the geminated form. Accordingly, the geminated form for grapheme *ch* is *chch*, for *sh* is *shsh*, for *ph* is *phph*, etc. The gemination of the grapheme *ch* and *sh*, for instance, make words longer as in <hallichcho> ‘donkey’, <wengereellichcho> ‘fox’,

and <hamashshichcho> ‘snake’. This kind of word length does not save space during writing and make difficult the word recognition activities especially during early grade reading.

### 3.2.9 Reform in Hadiyya orthography

After the first Roman-based Hadiyya orthography had been used for 11 years, it was modified by the curriculum department of the Hadiyya Zone Education Desk. The modification of orthography was employed in Hadiyya-English dictionary (1996 E.C) and grade 1-4 Hadiyya textbooks. The revised Hadiyya orthography adds five consonants graphemes <ny> /ɲ/, <p> /p/, <ts> /sʰ/, <v> /v/ and <zh> /ʒ/. As to the explanation of Hadiyya language expert and participant of the orthography reform, the primary reason for the addition of those graphemes was speech sounds added to the language as a result of lexical borrowing (see Appendix V, Expert D, 24). The revised Hadiyya orthography indicated in Table 28.

*Table 28: The revised Roman-based Hadiyya orthography<sup>37</sup>*

Upper case	A	B	C	CH	D	E	F	G	H	I	J	K	L	M	N	NY
Lower case	a	b	c	ch	d	e	f	g	h	i	j	k	l	m	n	ny
Letter name	[ʔa]	[ba]	[tʃˈa]	[tʃa]	[da]	[ʔe]	[fa]	[ga]	[ha]	[ʔi]	[dʒa]	[ka]	[la]	[ma]	[na]	[ɲa]
Upper case	O	P	PH	Q	R	S	SH	T	TS	U	V	W	X	Y	Z	ZH
Lower case	o	p	ph	q	r	s	sh	t	ts	u	v	w	x	y	z	zh
Letter name	[ʔo]	[pa]	[pʰa]	[kʰa]	[ra]	[sa]	[ʃa]	[ta]	[sʰa]	[ʔu]	[va]	[wa]	[tʰa]	[ja]	[za]	[ʒa]

The revision of Hadiyya orthography increased the number of graphemes to 33. From these graphemes, 28 are consonants (including grapheme <ʔ> for glottal stop /ʔ/) while five are vowels. However, though the glottal stop is now considered a phoneme, it is not included in the alphabet. The order of alphabet is modified in the revised Roman-based Hadiyya orthography. The digraphs, which were ordered separately after the monographs in the former Roman-based orthography (see Table 24), follow now immediately the related monographs. In other words,

<sup>37</sup> The glottal stop /ʔ/ which is marked by <ʔ> is not added to the list of Hadiyya alphabet.

the arrangement of graphemes in the recent modification is systematic which goes from monographs to digraphs and follows similar orthographic shape in the initial graphemes. Such arrangement is important for arranging lexical entry during dictionary compilation. As in Table 28, all the names of the letters end in [-a] except the vowels *e* [ʔe], *i* [ʔi], *o* [ʔo] and *u* [ʔu].

The suggested forms for the capital letters of digraphs such as *ch*, *sh*, *ph*, etc. is *CH*, *SH*, *PH* respectively. However, these forms are not manifested in the natural way of writing. The proper nouns, for example, is written as <**Ch**aayyo> instead of <**CH**aayyo>.

### 3.2.10 Conclusion

Orthographic development is a vital aspect of language standardization. Hadiyya was initially written in Ethiopic script during literacy campaign and by the missionary efforts for Bible translation. Following the change in language policy, Roman-based orthography has been developed for Hadiyya in 1993. After it had been used for 11 years, the Roman-based orthography revised. The devised orthography has been described and evaluated in light of different principles. Accordingly, the areas that need to be revisited are suggested for future standardization (see chapter six for recommendation).

As seen in Section 3.2.8.2, the grapheme *zh* [ʒ] is unnecessarily introduced to the Hadiyya orthography since it is not part of phonemic inventory. Moreover, the *ny* [ɲ] sound is also not existent in Hadiyya except one instance of ideophone in which it appears only in the geminated form. Generally, loanwords are written in Hadiyya by adapting to the phonological system of the language. However, some inconsistencies also have been evidenced in writing loanwords which are written by violating the phonological rule of Hadiyya. Furthermore, there were inconsistencies in using word division and regular spelling.

The capital letters which are listed in the grapheme list such as *CH*, *SH*, *PH*, *NY* and *TS* do not follow natural way of writing. Capitalizing both digraphs could also create confusion with the abbreviated forms of words in Hadiyya. As indicated in the evaluation section of the Roman-based Hadiyya orthography, economy and transfer are identified as major problems of the

orthography. In relation to the problem of economy, geminated forms for digraphs are responsible. A doubling of digraphs such as <ch>, <sh>, <ph>, etc. as <chch>, <shsh>, <phph> make words unnecessarily very long or take too much spaces. With regard to transfer, representation of ejectives <x> [t'], <q> [k'], <c> [tʃ'] and <ph> [p'] has negative impact in the transfer of reading skills.

## CHAPTER FOUR: LANGUAGE INTERNAL MEANS OF LEXICAL ELABORATION

This chapter presents language internal means of lexical elaboration in Amharic and Hadiyya. This method enables a language to search for ways of enriching its vocabulary using language internal resources such as semantic transfer, compounding, abbreviation and blending. In the following sections, lexical elaboration in Amharic and Hadiyya has been described.

### *4.1 Semantic transfer method*

A language uses existing resources in order to expand its vocabulary. One of the possible methods of using language internal resources is semantic modifications of existing lexical items. Cabre (1999:93) states semantic modification as the major criteria of classifying terms by semantic methods. Akmajian et al (2010:30-31) suggests six ways to describe semantic method. These comprise conversion, which involves change in parts of speech, metaphorical extension, broadening, narrowing, semantic drift and reversal. This categorization is used to describe semantic transfer method in Amharic and Hadiyya.

#### 4.1.1 Semantic transfer methods in Amharic

##### 4.1.1.1 Semantic extension

Semantic extension (also referred to as metaphorical extension) is one of the ways in which the meaning of an existing word is extended. When a language encounters a lexical gap to express a concept, speakers usually take an existing word and extend its meaning to fill the gap. In other words, semantic extension is the expansion of vocabulary of one domain to a new domain (Akmajian et al. 2010:31).

Semantic extension is used in Amharic as one of the methods of lexical elaboration. This method employs language internal resources to expand lexicon of the language. In the following sections, meaning extension from human body parts, from name of farming or animal breeding activities, from parts of plants and sociocultural contexts or situations are described.



#### 4.1.1.1.1 Extension from human body parts

In Amharic, meaning extension from human body parts functions as a source to designate new lexical items. As shown in Table 29 ‘meaning 1’ refers to the basic meaning of a word whereas ‘meaning 2’ refers to the extended meaning of a word.

*Table 29: Meaning extension from human body parts in Amharic*

Amharic	Meaning 1	Meaning 2
ልብ <i>libb</i>	heart	mental acuteness
ራስ <i>ras</i>	head	title <sup>38</sup> (e.g. duke)
አሻራ <i>pašara</i>	fingerprint	legacy
አፍ <i>paḥ</i>	mouth	language
ዓይን <i>ḥayn</i>	eye	very important <sup>39</sup>
እንብርት <i>ḥinbirt</i>	navel	center/core
እጅ <i>ḥiḡḡ</i>	hand	percent
ከርስ <i>kars</i>	belly	inner part (e.g. underground)
ወገብ <i>wagəb</i>	waist	middle
ግንባር <i>ginbar</i>	forehead	luck/front (military)/political organization
ጎን <i>gonn</i>	flank (of body)	side (in Ma.)

Some lexical items have multiple meaning in which the base words have homonymic nature. For instance, the word ግንባር *ginbar* ‘forehead’ has multiple layer of meaning in the extended sense (i.e., luck/front (military)/political organization/unity). Concepts such as ‘center/core’ and ‘middle/equator’ extended by considering the location of body parts እንብርት *ḥinbirt* ‘navel’ and ወገብ *wagəb* ‘waist’, respectively. This kind of designation could easily make the meanings of concepts concrete.

<sup>38</sup> This title was functioning during imperial period and currently non-existent.

<sup>39</sup> In this case, there is a shift in word class since the first meaning represents a thing, i.e. a noun, while the second meaning refers to a property concept i.e. an adjective.

#### 4.1.1.1.2 Extension from farming and animal breeding activities

In Amharic, new lexical items could be formed by the extension of meaning from farming and animal breeding activities, as in (23).

(23)	Amharic	Basic meaning	Extended meaning
	ምርት <i>mirt</i>	produce	production
	እርከን <i>irkən</i>	terrace	level/degree (Ma)
	መስክ <i>məsk</i>	field (of farming)	area of specialization
	(እ)ርባታ <i>(i)rbata</i>	breeding (of animal)	inflection
	ፈር <i>fər</i>	furrow (of a plough)	order/system

#### 4.1.1.1.3 Extension from parts of plants

In Amharic, parts of plants serve as a means of concept designations. For instance, the economics' concept 'inflation' is extended from the term ግሽበት *gišbət* which basically means immature and unhealthy growth of plants. The meta-language terms such as ሀረግ *harəg* 'phrase', ስር *sir* 'root (of word)', ግንድ *gind* 'stem (of word)', etc. are developed from words denoting parts of plant, as in (24):

(24)	Amharic	Basic meaning	Extended meaning
	ሀረግ <i>harəg</i>	creeper	phrase (grammar)
	ስር <i>sir</i>	root of plant	root of word
	ዘር <i>zər</i>	seed	type/variety
	ግሽበት <i>gišbət</i>	growing precociously	inflation
	ግንድ <i>gind</i>	stem of plant	stem of word

#### 4.1.1.1.4 Extension from sociocultural contexts/situations

Sociocultural contexts/situations are other vital sources for lexical expansions in Amharic. In Table 30, lexical items related to equipments (e.g. መደብ *mədəb* 'bed/seat', ቀስት *qəst* 'arrow'), cultural settings (e.g. መንደር *məndər* 'village'), dressings (e.g. ዘርፍ *zərf* 'fringe of dress'), etc. are

employed to designate different terms by extending their senses. The basic meanings that we mentioned in column two have extended meanings in column three as in Table 30.

*Table 30: Extension from sociocultural contexts/situations*

Amharic	Basic meaning	Extended meaning
መንደር <i>məndər</i>	village	zone (e.g. industrial zone)
መደብ <i>mədəb</i>	bed/seat	social class/ political organization/ person/ background (of color)/ position (of work)
መግቢያ <i>məgbiya</i>	gate	introduction (of a text)
ቀስት <i>qəst</i>	arrow/bow (weapon)	arrow (in Ma.)
አባል <i>ʔabal</i>	member (of group)	element (in Ma.)
ወንበር <i>wənbər</i>	seat	position/responsibility
ዘርፍ <i>zərɸ</i>	fringe of dress	sector/field of study or knowledge
ጉርብት <i>gurbīt</i>	neighbor	adjacent

In Table 30, some lexical items are used for the designation of different concepts. For instance, the word መደብ *mədəb* has a basic meaning of ‘bed or seat’, and it has been extended to represent at least five additional terms (i.e. social class, political organization, background (color), position (of work), person (in language)). Hence, this term is overloaded for it represents multiple meanings.

#### 4.1.1.2 Re-use of a special designations

In some instances, terms that have designated concepts in one field of study could be re-used in another field of study. Because of this nature, the method is sometimes referred to as *translingual* borrowing. In Amharic, for instance, the term ጨረር *č’ərər* is used to designate ‘rays (of sunlight)’ in Environmental science. The same term is also designated to express ‘rays’ in Mathematics which is used in geometry. Consider examples in (25):

(25)	Amharic	Basic meaning	Extended meaning
	ምንጭ <i>minč'</i>	stream/origin (Env.Sc.)	source or reference (Edu.)
	ጨረር ር' <i>arər</i>	rays (sunlight) (Env.Sc.)	rays in Ma.
	ገጽ <i>gəss'</i>	front/surface (Env.Sc.)	page (Edu.)
	ግፊት <i>giffit</i>	pressure (of blood, in Bio.)	pressure (in Py.)
	ይዘት <i>yizət</i>	content (of a book)	volume (geometry, Ma.)

#### 4.1.1.3 Redefinition of words

New lexical items and terms can be redefined to express modern and scientific concepts in Amharic. Concepts of Mathematics and Physics (Environmental science) are designated by redefinition of words. For instance, the word ስፋት *sifat* 'vastness' in general vocabulary is redefined to express 'area' in Mathematics (see Table 31) .

*Table 31: Semantic transfer by redefinition of words*

Amharic lexical item	Meaning in general vocabulary	Meaning in specific subject area
ስፋት <i>sifat</i>	vastness/width	area (in Ma.)
ስበት <i>sibət</i>	pulling	gravity (in Py.)
ሃይል <i>hayil</i>	strength (of doing things)	force (in Py.)
(እ)ርቀት ( <i>i</i> ) <i>riqət</i>	farness	distance (in Py.)
(እ)ርዝመት ( <i>i</i> ) <i>rzimət</i>	height/length	length (in Ma./Py.)

In addition to previously discussed semantic extension methods, there are also new lexical items which could be classified under different categories. In (26), such lexical items are presented as additional examples. Hence, meanings of lexical items that are mentioned under column 2 show the basic lexical meanings while meanings of lexical items in column 2 indicate the extended ones, as in (26):

(26) Amharic	Basic meaning	Extended meaning
ድምጽ <i>dims'</i>	sound	phone/vote
ቁልፍ <i>qulf</i>	key	crucial <sup>40</sup>
ጭራ ር'ira	tail	back of something
አቃፊ <i>ገaqafi</i>	one who embrace	file cabinet
ግጥም <i>git'im</i>	arranged/ordered	poetry
ጣምራ <i>t'amra</i>	joint/couple	simultaneous (Ma.)

## 4.1.2 Semantic transfer methods in Hadiyya

### 4.1.2.1 Semantic extension

Semantic extension is also one of the productive methods of lexical elaboration in Hadiyya. This method uses language internal sources to expand the vocabulary of a language for newly emerged concepts. As stated earlier, the characteristics of the designation of the words and terms created by semantic extension are usually associated with body parts of human, animals or plants. It also includes extension of the names of farming or animal breeding activities as has been described in the following sections.

#### 4.1.2.1.1 Extensions from human body parts

In Hadiyya, meaning extensions from body parts are the most prominent sources for lexical elaboration. In Table 32, meaning 1 indicates the basic or literal meaning of a word while meaning 2 is the extended meaning of a word.

*Table 32: Meaning extension from human body parts in Hadiyya*

Hadiyya	Meaning 1 (Literal)	Meaning 2 (Extended)
<i>afare</i>	back	field
<i>anga</i>	hand	cubit (measurement in Ma)

<sup>40</sup> There is a word class change in the case of the extended meaning, i.e. from noun to adjective.

Hadiyya	Meaning 1 (Literal)	Meaning 2 (Extended)
<i>godabo</i>	abdomen	one of a pair (of something)
<i>gudumo ejja</i>	contacting shoulder	co-operation
<i>gurubbo</i>	knee	node/internode/linage
<i>horoore</i>	hair/head/mind	main/most important/key/prime
<i>ille</i>	eye	center/bud /key/most important
<i>lamado</i>	waist	middle/center
<i>lokko</i>	foot	edge
<i>macce</i>	ear	leaf/fame/security worker <sup>41</sup>
<i>midaado</i>	rib	side (in Ma)
<i>sane</i>	nose	edge
<i>suume</i>	mouth	language/ portion /percentage
<i>uullichcha</i>	height of someone	height (in Ma)

In Table 32, the lexical items and terms in slash indicate the homonymic nature of the vocabulary. For instance, the primary meaning of the word *horoore* has three different senses ‘hair/head/brain’. Moreover, the same word is elaborated as secondary meaning to express the related concepts ‘main/most important/key/prime’. In other words, the same term stands for the expression of different concepts. This kind of terminology designation could create ambiguity in the comprehension of concepts. However, this could be disambiguated by the context in which the term appears.

The term for the concept ‘edge’ is extended by different words or from the extension of body parts such as *lokko* and *sane*. In this case, one concept is represented by different terms (i.e., the relationship between concept and term is one-to-many). On the contrary, there is instance of one term or word standing for different concepts. For instance, the word *suume* ‘mouth’ has homonymic nature because it stands for *language/portion /percentage* in the extended sense.

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<sup>41</sup> *macce* designated to refer to ‘security worker’ starting from *Derg* regime.

The concept ‘center’ is designated by body parts such as *ille* ‘eye’ and *lamado* ‘waist’. The former one is designated by taking the importance of body part *ille* ‘eye’ whereas the later by taking into account the location of waist which is located almost in the center of human body parts. For example, *illi sawwite* refers to ‘central/main idea’ whereas *uullamado*<sup>42</sup> ‘of earth waist’ implies the ‘equator’. Amharic also uses ‘waist’ in genitive construction form (የፖድር ወገብ *yamidir wəgəb* ‘of earth waist’) to express ‘equator’. The Hadiyya language developers probably coined the term for the concept ‘equator’ via loan translation from Amharic.

#### 4.1.2.1.2 Extension from farming and animal breeding activities

Hadiyya people are pastoralists and agriculturalists. Due to this, semantic extensions from occupations are productive in the lexical expansion of the language. Consider the following examples in Table 33.

*Table 33: Semantic extension from farming and animal breeding activities*

Hadiyya (term)	Basic meaning	Extended meaning
<i>atootā</i>	product of plants	summary
<i>awwonsaancho</i>	the one who shows direction to someone	leader/predecessor/principal/chair person
<i>diinate</i>	animal property	money
<i>doona</i>	hive of cereal container	dictionary
<i>farara</i>	wooden bars use to tie cows and oxen	chart/table
<i>fintimma</i>	scattering soil	segmenting words into its parts (e.g. syllable)
<i>hooyya</i>	furrows on field	rhyme
<i>oodo’o</i>	threshing floor/identified place for goods in a market	station (for airplane, bus station), institution
<i>qaashancha</i>	oxen are being fixed to plough	being in pair
<i>qaashimma</i>	fixing oxen to plough together	blending word parts

<sup>42</sup> *uullamado* is a compound word which is formed from *uulla* + *lamado* ‘of earth + waist’.

Hadiyya (term)	Basic meaning	Extended meaning
<i>qooxo'o</i>	dissected wood	ordinance/ stair/ phase
<i>shuqunimma</i>	weeding	correcting exam papers
<i>ushe'aancho</i>	the one who ride cattle	vehicle driver
<i>bon beyyo</i>	un-ploughed portion of land	gap/blank space

Concepts related to farming or animal breeding are among the most important sources in Hadiyya vocabulary expansion. In Table 33 second column (meaning 1) indicates the primary meaning of the lexical items in the language, whereas the third column (meaning 2) indicates recently extended meanings. Most of the concepts or words mentioned in Table 33 are used in academic or educational domains.

#### 4.1.2.1.3 Extension from parts of plants

Parts of plants also serve as concept designations in Hadiyya language. Meta-language terms such as *lugumo* 'root of the word', *qoxo'i sawwite* 'paragraph' are developed from parts of plants. Moreover, the lexical item *shoga* basically refers to smaller branched parts of roots or branches of plant and its meaning extension refers to an area of knowledge or components of something. The same concept is designated by *hamma* and *shoga*. The term *shoga* is also used to designate the concept 'genre' which is represented in compound word form i.e. *kitaabo'i shoga* (literally 'branches of text'). The concept of field of study is also designated by the same word *shoga*. In this case, the term *shoga* has multiple meanings. Similarly, this form is also used in Amharic to designate the concept field of study (ዘርፍ *zərf*). Moreover, the basic concept of 'leaf' is employed in both Amharic and Hadiyya to represent page in a book. Data in (27) are illustrative examples of this method of lexical elaboration in Hadiyya.

(27)	<b>Hadiyya</b>	<b>Basic meaning</b>	<b>Extended meaning</b>
	<i>buyya</i>	leaf	number of pages in an exercise book
	<i>hamma</i>	a fork made of wood	organs (in civics)/branches of knowledge area



(27) Hadiyya	Basic meaning	Extended meaning
<i>lata</i>	bud	reforestation
<i>lugumo</i>	root of plant	root of word (linguistics)
<i>misha</i>	fruit (ripped)	result/finding
<i>qooxo 'o</i>	chopped timber/ tree in pieces	phase/level/region/component
<i>shoga</i>	branch in parts of a plant	field of study/area of knowledge/component/genre

#### 4.1.2.1.4 Extension from cultural practices or activities

Cultural practices or activities are among the prevalent sources of lexical elaboration in Hadiyya. In Table 34, the basic meaning (in column 2) and the extended meaning (in column 3) of the lexical items are illustrated as follows:

*Table 34: Meaning extension from cultural practice or activity*

Hadiyya	Basic meaning	Extended meaning
<i>asalmaam finajja</i> <sup>43</sup>	cultural ceremony during circumcision	demonstration
<i>dabo 'o</i>	pillar which supports a wall/roof of a house	framework (of concepts)
<i>goollaancha</i>	the one who finalize traditional handcraft particularly its edge	verb
<i>handokulula</i>	kind of play by making circle (for children)	orbit /rotation
<i>lamaqqa</i>	two pieces of traditional cloth ( <i>shamma</i> in Amh.)	compound (word/sentence)
<i>qarxa</i>	partition (in traditional house)	section (in school)
<i>shooto 'o</i>	basement for house construction	basics of something or idea

<sup>43</sup> *Asalmaam finajja* ‘demonstration’ is a newly coined term extended from cultural practice in Hadiyya. The term *asalmaam* is probably borrowed from Silti language due to linguistic contact in the border area. In oral language, the concept ‘queue’ represented by the Amharic loanword *salfa* (ሪሳልፍ), but the terminology developers of Hadiyya prefer to use *finajja* for queue. *Finajja* is extended from cultural expression of the events of circumcised Hadiyya boys and girls in the market place in order to celebrate cultural practice that demonstrate the completion of stay in the circumcision vacation for months. On the other hand, the *asalmaam finajja* seems loan translation of Amharic since it follows the pattern of Amharic ሰላማዊ ሰልፍ *səlamawwi səlf* (literally, peaceful queue) ‘demonstration’.

Hadiyya	Basic meaning	Extended meaning
<i>tuuta</i>	traditionally formed group for celebrating holyday ( <i>Meskel</i> <sup>44</sup> )	member/element
<i>uulmeeggaro 'o</i> (earth+beam)	wall reinforcing beam	latitude
<i>uulwoxabaca</i> (earth+rod)	rod (long tin pole)	longitude
<i>xinta</i>	tip of roof	pole (of magnet)
<i>xum sagara</i> (assembled+word)	<i>xuma</i> refers to butter that is ready to be collected in milk	phrase
<i>xuunsammi woca</i> (assembled+speech)	<i>xuunsamma</i> refers to collected butter from milk	sentence

As depicted in Table 34, lexical items such as *xum* ‘ready to be assembled’, *xuunsammi* ‘assembled (butter)’, *xuunse* ‘summarize’ or *xuunsimma* ‘summarizing’ all extended from the concept of milk processing. In the process, *xum* is in the lower level as compared to *xuunsamma*. Hence, *xum sawwite* (assembled+idea) ‘composition, essay’ doesn’t indicate higher level in the hierarchy. *Xuunsammi sawwite*<sup>45</sup> is more appropriate to express the concept. It will go in parallel with the concept *xuunsammi woca* (assembled+speech) ‘sentence’ vs *xuunsammi sawwite* (collected+idea) ‘composition’.

There are also new terms developed through meaning extension from the art of Hadiyya cultural house construction. For instance, words for latitude and longitude which are designated as *uulmeeggaro 'o* (earth+beam) and *uulwoxabaca* (earth+rod), respectively. The terms are extended from mode and material of the Hadiyya cultural house construction. The designated lexical items are compounds by nature. In both lexical items, the first part i.e. *uulli-* is a specifier in the compound word. The basic idea of latitude or longitude lies in the words *meeggaro 'o* or *woxabaca*. The word *meeggaro 'o* describes abstract idea of ‘latitude’ in concrete lexical item in

<sup>44</sup> *Meskel* refers to Ethiopian holyday ‘Finding of the true cross’.

<sup>45</sup> This concept is recently modified in Hadiyya module as *xuunsammi sawwite* for the term ‘composition’ (in Hossaena Teacher Education). However, *xumsawwite* is employed for the concept ‘composition’ in recently developed grade 5-8 textbooks.

Hadiyya. The word *meeggaro'o* literally refers to the wall reinforcing beam in the construction of Hadiyya traditional house which has circular shape. Similarly, the concept 'longitude' is designated by semantic extension of rod (long tin pole which run through tip of the roof to the wall of a house). Hence, *uulwoxabaca* is compound word which literally refers to 'earth rod' and longitude in the extended sense.

Moreover, lexical item *dabo'o* 'pillar which supports the wall/roof of a house' is extended for the concept 'framework'. The making of basement for house construction i.e., *shooto'o* in Hadiyya extended to express basics of something (idea). In similar way, the word *xinta* 'the tip of cultural house' is used to designate pole (e.g. magnetic pole).

#### 4.1.2.1.5 Extension from natural events/phenomena

Natural events or phenomena are other productive sources of extending vocabulary in Hadiyya. For instance, Biological concepts such as fertilized egg and parasite are designated by the extension from *xanqo'o* 'blazing fire'. The natural phenomenon *tuunso* 'darkness' extended to express mathematical concept 'infinity'. Similarly, *caakkisaancho* 'light producer' extended to meta-language term adjective or descriptive (for an essay). The term circle is extended from the lexical item *kululleesa* 'round' which is relatively general concept. Consider examples in (28):

(28)	Hadiyya	Basic meaning	Extended meaning
	<i>caakka</i>	light	clear (idea, description)
	<i>caakkisaancho</i>	light producer	adjective/descriptive (in essay)
	<i>kulkullimma</i>	a day becoming dark	confusion (to get confused)
	<i>kululleesa</i>	round	circle
	<i>tuunso</i>	darkness	infinity
	<i>xanqo'o</i>	blazing fire	fertilized egg/parasite

#### 4.1.2.2 Re-use of a special designation

Hadiyya re-uses special designations (translingual borrowing) for expressing scientific concepts. Social science term *abagudo* 'of the same age/rank' is reused in Mathematics to describe the

concept ‘equivalent’. On the other hand, the term *amaxxa* is used in print concept (part of book) and in Mathematics to designate the geometric concept (i.e., volume). Similarly, *do’o* is employed to express cycle or circulation (for instance, *xiiq do’o* ‘blood circulation’) in Biology and circumference/perimeter in Mathematics. The term *laaga* used to name sunlight (Biology) and ray or line in Mathematics. The data stated in (29) demonstrate the re-use of special designations in Hadiyya.

(29) Hadiyya	Basic meaning	Extended meaning
<i>abagudo</i>	of the same age/rank	equivalent (Ma. <sup>46</sup> )
<i>amaxxa</i>	content (of a book) (Edu.)	volume (geometry, Ma.)
<i>do’o</i>	cycle/circulation (Bio.)	perimeter/circumference (Ma.)
<i>keenato</i>	examination (Edu.)	measurement (Ma.)
<i>kululleesa</i>	round (Env.Sc.)	circle (Ma.)
<i>laaga</i>	sun light (Bio.)	ray (Ma.)

#### 4.1.2.3 Redefinition of words

Redefinition of words usually denotes narrowing their senses to represent specialized meanings (Sager & Nkwenti, 1989:11). Hence, when words are redefined, they express modern and scientific notions, as shown in Table 35.

*Table 35: Semantic transfer through redefinition of words*

Hadiyya lexical item	Meaning in general vocabulary	Meaning in specific subject area
<i>baxo</i>	labor	work (in Py/ Env.sc.)
<i>gafechcha</i>	pushing	pressure (in py.)
<i>guurato</i>	small but dense	mass (in Py.)

<sup>46</sup> *Ma.* stands for Mathematics, *Py.* for Physics, *Env.sc.* for Environmental Science, *Edu.* for Education.

Hadiyya lexical item	Meaning in general vocabulary	Meaning in specific subject area
<i>kee'mato/kee'maalloom</i>	heaviness	weight (in Py.)
<i>habuubo'o</i>	being hurry	acceleration (in Py.)
<i>haraarooma</i>	being vast	area (in Ma.)
<i>hixixxeesa/hixixxaato/aad gosha</i>	pulling	gravity (in Py.)
<i>ido</i>	other side (for location)	page number (in Edu.)
<i>iiyyo</i>	burden	load (in Py.)
<i>malaayye</i>	strength (of doing things)	force (in Py.)
<i>midaado</i>	side in human/animal body	side (in Ma.)
<i>qarechcha</i>	rush	speed (in Py.)
<i>qaxooma</i>	an amount	rate (St or Ma.)
<i>qee'looma</i>	becoming faraway	distance (in Py.)
<i>qeeraa'looma/qeeraa'lato</i>	height of people	length (Ma/Py.)
<i>sibiriixa</i>	divided into smaller parts	fraction (in Ma.)
<i>wixxite</i>	assembly of people	set (in Ma.)

As shown in Table 35, in the second row, general vocabulary is presented whereas in the third row the redefined lexical items, which indicate specific subject areas or domains, are presented. In the extended meaning, Environmental science, Mathematics, language and educational terms are named by redefinition of words. For instance, the basic meaning of the word *baxo* is 'labor' while the same lexical item is redefined to express the concept 'work' in physics. Similarly the word *gafechcha* refers to 'pushing' in general vocabulary whereas it is redefined to designate the concept 'pressure' in physics. The term for gravity is designated by three different forms, i.e. *hixixxeesa/hixixxaato/aad gosha*. When these terms are evaluated, *aad gosha* (downward+pulling) is a better term to show the direction of gravity which is downward or uni-directional movement whereas *hixixxaato* may indicate the horizontal and bi-directional movement.

The alternative use of *hixixxeesa/hixixxaato/aad gosha* (downward+pulling), on the other hand, is an indication of lack of standard form in using the term for the concept of 'gravity' in

Hadiyya. In Table 35, lexical items or terms such as *qeeraa'lato*, *kee'mato*, *hixixxaato*, and *guurato* are derived from potential words using the same analogy as words *marato* 'journey', *keenato* 'measurement', *usheexxato* 'rest', using morpheme *-at* to the stem of *qeeraa'l-*, *kee'm-*, *hixix-* and *guur-*.

In addition to previously discussed semantic extension methods, there are also various lexical items or terms that can be classified under different categories. They are presented in (30) as additional data since it is not convenient to categorize them.

(30)	Hadiyya	Basic meaning	Extended meaning
	<i>aago'o</i>	income	input
	<i>agukko</i>	drank	stole
	<i>awwonsa</i>	showing direction	guideline/instruction/ department/ leadership
	<i>ejjo'o</i>	increment	joint/intersection
	<i>gaalcha</i>	peers	group
	<i>gabala</i>	boundary	phase/stage/level
	<i>gattisa</i>	living condition	dialect
	<i>laare</i>	cry out!	apply
	<i>usheexxato</i>	rest	chapter
	<i>wona</i>	first born	capital (city)
	<i>xambo</i>	sound, calling someone	news

The first day of a week *Sanna* 'Monday' is extended to show the concept season by semantic broadening. Similarly, basic meaning of the word *lata* 'seedling' became broadened to include the concept 'reforestation'. This method of semantic extension is referred to as metonymy (part-whole meaning relationship). Consider the following examples in (31):

(31)	Hadiyya word	part	whole
	<i>anga</i>	hand	favor/help/cooperation
	<i>ille</i>	eye	face

(31)	Hadiyya word	part	whole
	<i>horoore</i>	hair/brain	head of household (for person)
	<i>lata</i>	bud	reforestation
	<i>macce</i>	ear	the whole attention
	<i>sanna</i>	Monday(day)	season, period of time

Extension of meaning in metonymy emerges from the decisiveness of a particular part of something (a part something is extended from). For instance, *lata* ‘seedling’ is very important for the existence or multiplication of plants. In the same manner, *macce* ‘ear’ is the basic element or center for listening attentively.

#### 4.1.3 Comparison between semantic transfer in Amharic and Hadiyya

In Section 4.1, semantic transfer method as one of the ways of lexical elaboration has been described in Amharic and Hadiyya. Of the semantic transfer methods, the method of conversion is not attested in both languages. According to the finding presented earlier, designation of new concepts from human body parts, from farming and animal breeding activities, from parts of plants and sociocultural contexts or practices are commonly attested semantic extension processes in both languages. In addition, Hadiyya uses natural events or phenomena to designate some new terms. Moreover, special designations are also reused in areas or fields of study in Amharic and Hadiyya. On the other hand, words from general vocabulary have been redefined so as to designate new concepts in both languages. Relatively, Hadiyya has intensively exploited the method of semantic transfer as compared to Amharic.

## 4.2 Compounding

Compounding is a word formation process by integrating two free morphemes or lexical items in order to get a new word with a different semantic value (Hamawand, 2011:201). Compounding is different from derivation in that the combining elements in derivation are lexical items and affixes whereas in compounding they are independent lexical items. The combining elements in

compounding could also be more than two items. Multiple compounds of 3 or 4 elements are very common in the designation of technical terms (Sager & Nkwenti-Azeh, 1989:13).

Compounds can be classified as endocentric, exocentric and appositional based on the presence or absence of a semantic head that determines the meaning of the compound. According to Hamawand (2011:202), in the endocentric compound, “[t]he meaning of a compound structure is fully determined by the meaning of its substructure.” In other words, the meaning of the compound is determined by one of its constituents or the head. In exocentric compound, however, the meaning of a compound word is outside its constituents as it lacks a head (Hamawand, 2011:202). In appositional compound, both constituents contribute to the meaning of the compound (Spencer, 1991:311).

In relation to such concepts, the method of compounding, as one of the vital and productive techniques of lexical elaboration, is described in Amharic and Hadiyya in the following sections. After describing compounding in each language, comparative summary has been made.

#### 4.2.1 Compounding in Amharic

##### 4.2.1.1 Types of compounds in Amharic

Based on syntactic category, Amharic compounds can be classified into nominal, adjectival and verbal compounds. In other words, the function of compounds in syntax determines the type of compounds. In Amharic, compound nouns are formed by the combination of different lexical categories as shown in 4.2.1.1.1.

##### 4.2.1.1.1 Nominal compounds

Nominal compounds are very productive in Amharic. Basically nominal compounds in Amharic have two forms on the basis of the syntactic structure of constituents. More specifically, in line with the arrangement of modifier and head of compounds, Amharic has left-headed and right-headed compounds. As described in Baye (2000 E.C:213), and Takkele (2000:31), Amharic has two major ways of compound formation based on the grammatical structure of compounds. The



first type is formed in the Ge'ez grammatical pattern whereas the second type is formed in the grammatical pattern of Amharic itself.

As indicated in (32), some of the Amharic compounds are formed in Ge'ez pattern of compounding. The Ge'ez pattern of compound word formation is identified by the compounding strategy which uses vowel 'ኧ /ə/<sup>47</sup> as a linker between the constituents. The linker is attached to the first element of the compound, as in (32a and b):

(32)	Noun	Noun	Compound noun
(a)	መስረት-ኧ <i>məsərət-ə</i> 'base'	ልማት→ <i>limat</i> 'development'	መስረተ ልማት <i>məsərətə limat</i> 'infrastructure'
	ቤት- ኧ <i>bet-ə</i> 'house'	መንግስት→ <i>məngist</i> 'government'	ቤተ መንግስት <i>betə məngist</i> 'palace'
	ገጽ-ኧ <i>gəss'-ə</i> 'front'	ምድር→ <i>midir</i> 'earth'	ገጽ ምድር <i>gəss'ə midir</i> 'earth surface'
	ስርአት-ኧ <i>sirʔat-ə</i> 'order'	ትምህርት→ <i>timihirt</i> 'education'	ስርአተ ትምህርት <i>sirʔatə timihirt</i> 'curriculum'
	ስርአት-ኧ <i>sirʔat-ə</i> 'order'	ልመት → <i>limət</i> 'being grinded'	ስርዓተ ልመት <i>sirʔatə limət</i> 'digestion'
	ዘር-ኧ <i>zər-ə</i> 'seed'	እንጉዳይ→ <i>inguday</i> 'mushroom'	ዘረ እንጉዳይ <i>zərə inguday</i> 'fungus'
	ንጥር-ኧ <i>nit'r-ə</i> 'refined'	ነገር→ <i>nəgər</i> 'thing'	ንጥረ ነገር <i>nit'rə nəgər</i> 'element'
(b)	ቤት- ኧ <i>bet-ə</i> 'house'	ሰብ → <i>səb</i> 'human'	ቤተ ሰብ <i>betə səb</i> 'family'
	ድር-ኧ <i>dir-ə</i> 'web'	ገጽ→ <i>gəss'</i> 'page'	ድረ-ገጽ <i>dirə gəss'</i> 'website'

<sup>47</sup> Baye (2000 E.C:208), also identifies 'ኧ ə as a linking morpheme.

(32)	Noun	Noun	Compound noun
	ግብር-ኧ	ኃይል	ግብረ ኃይል
	<i>gibir-ə</i> ‘task’	<i>hayil</i> ‘force’	<i>gibirə hayil</i> ‘task force’

In this kind of compounding, the basic arrangement is *head + modifier*. For instance, in the compound word ቤተ መንግስት *bet-ə mængist* (house+government) ‘palace’, *bet* is head, and *mængist* modifies the kind of house. This pattern is borrowed from Ge’ez to Amharic and it is productively employed in designating a number of new concepts in Amharic.

Probably due to the misconception of the basic structure of Ge’ez compounding pattern, in some instances of compounds, the head-modifier order is misplaced. In data (32b), for instance, in the word ግብረ ኃይል *gibrə hayil* (task+force) ‘task force’ the construction of compound seems to have followed the Ge’ez pattern at least in using the linker -ə. However, in a closer examination the arrangement of the constituents is not in *head + modifier* relationship. Hence, it deviates from the Ge’ez syntactic pattern or it is inconsistent with Amharic compounds which follows the Ge’ez syntactic pattern as shown in (32a). If this compound is arranged in semantically determined structure of Ge’ez, it would be ኃይል ግብር *hayil-ə gibr* (force-linker+task) ‘task force’. As to Takkele’s (2000), reason the use of *gibrə hayil* is due to loan translation of English ‘task force’. Similarly, the arrangement of head-modifier order is also not followed in the compounds such as ቤተ ሰብ *bet-ə sab* (house-linker+human) ‘family’ and ድረ-ገጽ *dir-ə gəss* (web-linker+page) ‘website’. However, the linking element -ኧ -ə is attached to the modifier not to the head. Hence, in order to follow the Ge’ez syntactic pattern, the order of modifier and head should be transposed as *head + modifier* in the case of the two compounds to maintain transparency and consistency. If the Ge’ez pattern is strictly followed, those compounds would have been written as ሰብ ቤት *səb-ə bet* and ገጽ-ድር *gəss’-ə dir*, respectively.

In compound words that are formed based on Ge’ez syntactic pattern, the attached linking element shows the head of the compound. The head also determines both syntactic and semantic categories of the compound. The compounds mentioned in (32a) are left headed and endocentric. For instance, in the compound ቤተ መንግስት *bet-ə mængist* (house-linker+government) ‘palace’ the

linker *-ə* formally shows the head of the compound. Syntactically, the word category of the compound ቤተ መንግስት *betə mənɣist* is determined by the head noun *bet* ‘house’ which determines the word category of the compound as a whole. In the same example, the meaning of the compound is also determined by the head ቤት *bet* ‘house’ while the modifier መንግስት *mənɣist* ‘government’ specifies the kind of head or the ‘house’ in this particular example.

There are also Amharic compounds whose meanings are not predicted from the constituents of the compounds. In other words, these compounds are headless or exocentric compounds. Consider examples in (33) for noun + noun constituents of Amharic exocentric compounds.

(33)	Noun		Noun		Nominal compound	Gloss
a)	ነፍሰ	+	ጡር →		ነፍሰ ጡር	
	<i>nəfsə</i> ‘life’		<i>t’ur</i> ‘wrongdoing’		<i>nəfsə t’ur</i>	‘pregnant’
b)	ጸጉረ	+	ልውጥ →		ጸጉረ ልውጥ	
	<i>s’əgurə</i> ‘hair’		<i>liwwut</i> ‘changed’		<i>s’əgurə liwwut</i>	‘newcomer’
c)	እንግዲ	+	ልጅ →		እንግዲ ልጅ	
	<i>ʔingide</i> ‘guest’		<i>liǧ</i> ‘boy’		<i>ʔingide liǧ</i>	‘placenta’

As can be seen from data (33), there is no semantic head that determine the meaning of the compound. In other words, though the linker *-ə* is formally attached to the first constituents (33a and b), the meaning of the compound is not existent in either of the constituents. These compounds formally belong to the Ge’ez type (see 32a). In (33c), the compound is formed as a result of simple juxtaposition of the constituents (see also example 36).

The second type of Amharic compounds are formed in the syntactic pattern of Amharic itself. This kind of Amharic compounds have forms or strategies such as using *-ኡ -o*<sup>48</sup> as a converb

<sup>48</sup> Baye (2000 E.C:220) suggests that the *-o* is a linker and he does not consider it as the third-person-singular-masculine converb marker since it is invariant for number and gender. On the contrary, Shimelis (2014:207) considers *-o* as the 3MSG suffix pronoun of the converb which is neutralized for number and gender distinction. Following Shimelis, the *-o* is considered as the 3MSG suffix pronoun of the converb marker in this research.

marker of the first constituents, juxtaposed and possessive compounds. These compounding strategies will be discussed in the following sections.

Nominal compounds are also formed from the combination of verb stem+ verb stem constituents. From the two verb stems the first one ends in converb marker suffix *-o* and followed by another verb stem. This structure has similar form to the juxtaposed compounds except the converb marker in the first constituent, as shown in (34).

(34)	Verb stem	Verb stem	Nominal compound	Gloss
	አርሱ-አ +	አደር- →	አርሱ አደር	
	<i>ʔarso</i> ‘having ploughed’	<i>ʔaddər</i> ‘spent the night’	<i>ʔarso ʔaddər</i>	‘farmer’
	አርብት-አ +	አደር- →	አርብት አደር	
	<i>ʔarbito</i> ‘having breeding’	<i>ʔaddər</i> ‘spent the night’	<i>ʔarbito ʔaddər</i>	‘pastoralist’
	ሰርግ-አ +	ገብ- →	ሰርግ ገብ	
	<i>sərgo</i> ‘having penetrated’	<i>gəbb</i> ‘entered’	<i>sərgo gəbb</i>	‘infiltrate’

As seen in (34), the combination of verb stems have resulted in nominal compound since the output compound is used as a noun in sentence structure (see Baye, 2000 E.C:218). The first verb stem functions as a modifier while the second one as a head of the compound which determines the basic meaning of the compound word. Apart from the combination of verb stems, verb stems combine with nouns to form nominal compounds. The converb marker */-o/* is also attached to the first constituents of such compounds. In this kind of compounds, the position of the head is right-hand constituent as depicted in (35).

(35)	Verb stem	Noun	Nominal compound	Gloss
	ወድ-አ	ዘመናች →	ወድ ዘመናች	
	<i>wədd-o</i> ‘willing’	<i>zəmač</i> ‘campaigner’	<i>wəddo zəmač</i>	‘voluntary (fighter)’
	ፈጥን-አ	ደራሽ →	ፈጥኖ ደራሽ	
	<i>fət’n-o</i> ‘being quick’	<i>dəraš</i> ‘one who arrives’	<i>fət’no dəraš</i>	‘stand by military force’

(35)	Verb stem	Noun	Nominal compound	Gloss
	ሰርቲ-አ	አዳራ→	ሰርቲ አዳራ	
	<i>sərt-o</i> ‘having worked’	<i>ḥadari</i> ‘one who spent’	<i>sərtə ḥadari</i>	‘living by labour’

Another strategy of compound formation is through juxtaposition of compound constituents. In this strategy, there is no overt linking element. The status of compounding could be identified by inseparability test. In other words, the constituents do not allow intervening elements between them. The following examples show nominal compound (N+N) which is formed without employing a linker between the constituents.

(36)	Noun		Noun	Nominal compound	Gloss
	ሥራ	+	አጥነት →	ሥራ አጥነት	
	<i>sira</i> ‘job’		<i>ḥatt’innət</i> ‘failure to find’	<i>sira ḥatt’innət</i>	‘unemployment’
	ሰበር	+	ወሳኔ →	ሰበር ወሳኔ	
	<i>səbbər</i> ‘broken’		<i>wussane</i> ‘decisions’	<i>səbbər wussane</i>	‘speedy resolution’
	ጽሕፈት	+	ቤት →	ጽሕፈት ቤት	
	<i>mikir</i> ‘council’		<i>bet</i> ‘house’	<i>mikir bet</i>	‘parliament’
	ፍርድ	+	ቤት →	ፍርድ ቤት	
	<i>fird</i> ‘judgment’		<i>bet</i> ‘house’	<i>fird bet</i>	‘court’
	ፖስታ	+	ቤት →	ፖስታ ቤት	
	<i>posta</i> ‘post’		<i>bet</i> ‘house’	<i>posta bet</i>	‘post office’
	ፖሊስ	+	ጣቢያ →	ፖሊስ ጣቢያ	
	<i>polis</i> ‘police’		<i>t’abiya</i> ‘station’	<i>polis t’abiya</i>	‘police station’

In compounds shown in (36), the derivational morphemes could be attached to the compound words just like the simplex words. For instance, in the compound *ሥራ አጥ sira ḥatt’* (job+failed to find) ‘unemployed’, the morpheme *-nnət* is attached to form abstract compound nominal, as in ([[*sira ḥatt’*]+ *-innət*]). This kind of compounds is said to be synthetic compounds.<sup>49</sup> In the compound *ፖስታ ቤት posta bet* (post+house) ‘post office’ and *ፖሊስ ጣቢያ polis t’abiya*

<sup>49</sup> In synthetic compounds, a nominal head of a compound is formed from a verb by affixation (Spencer, 1991:309).

(police+station) ‘police station’, the first constituents *ፖስታ* *posta* ‘post’ and *ፖሊስ* *polis* ‘police’ are English loanwords. Compounds seen in (36), are semantically endocentric and right-headed.

(37)	Adjective	Noun	Nominal compounds	Gloss
	ትርፍ +	አንጀት →	ትርፍ አንጀት	
	<i>tirf</i> ‘extra’	<i>ጋጠጃ</i> ‘intestine’	<i>tirf ጋጠጃ</i>	‘appendix’
	ቀጭን +	አንጀት →	ቀጭን አንጀት	
	<i>qəčč</i> ‘in’ ‘thin’	<i>ጋጠጃ</i> ‘intestine’	<i>qə čč in ጋጠጃ</i>	‘small intestine’
	ጥገኛ +	እንስሳት →	ጥገኛ እንስሳት	
	<i>t’iggəñña</i> ‘dependent’	<i>ጎንደር</i> ‘animals’	<i>t’iggəñña ጎንደር</i>	‘parasites’
	ጥቁር +	ሰሌዳ →	ጥቁር ሰሌዳ	
	<i>t’iqur</i> ‘black’	<i>səleda</i> ‘board’	<i>t’iqur səleda</i> <sup>50</sup>	‘blackboard’

In addition to the previously mentioned compounding strategies, modification of genitive phrases is also another mechanism of compounding in Amharic. The N+N genitive phrase is diachronically developed into compound in Amharic. In other words, possessive compound is formed by lexicalization of N+N genitive construction. This process is formally indicated by dropping the genitive marker *ʔ*- *yə*- from the phrasal construction. The following compounds are examples of diachronically lexicalized phrases.

(38)	Noun	Noun	Nominal compound	Gloss
	አውሮፕላን + ማረፊያ →		አውሮፕላን ማረፊያ	
	<i>ገawuoppilan</i> ‘airplane’	<i>marəfiya</i> ‘resting place (landing)’	<i>ገawuoppilan marəfiya</i>	‘airport’
	አየር + ንብረት →		አየር ንብረት	
	<i>ገayyar</i> ‘air’	<i>nibrət</i> ‘possession’	<i>ገayyar nibrət</i>	‘climate’
	ጤና + ኬላ →		ጤና ኬላ	
	<i>t’ena</i> ‘health’	<i>kella</i> ‘checking point’	<i>t’ena kella</i>	‘health post’
	ጤና + ጣቢያ →		ጤና ጣቢያ	
	<i>t’ena</i> ‘health’	<i>t’abiya</i> ‘station’	<i>t’ena t’abiya</i>	‘health center’

As seen in (38), in some of the compounds like *አውሮፕላን ማረፊያ* *ገawuoppilan marəfiya* ‘airplane’ and *አየር ንብረት* *ገayyar nibrət* ‘climate’ first constituents are English loanwords. Health related terms such as *ጤና ኬላ* *t’ena kella* ‘health post’ and *ጤና ጣቢያ* *t’ena t’abiya* ‘health center’ originally were phrasal constructions. These days, the prefix የ- *yə-* is being dropped from the phrasal construction in order to lexicalize genitive phrase into compound (see Takkele, 2000: 49). Accordingly, the phrases such as *የጤና ኬላ* *yət’ena kella* ‘of health post’ and *የጤና ጣቢያ* *yət’ena t’abiya* ‘of health center’ became *ጤና ኬላ* *t’ena kella* ‘health post’ and *ጤና ጣቢያ* *t’ena t’abiya* ‘health center’, respectively. On the other hand, the examples in (38) seem juxtaposed compounds unless diachronic development is considered. Some compound words are in transition from genitive phrase to compound. Because of this, sometimes the parallel use of phrasal form and compound form is observed until it is fully lexicalized. The lexicalized compounds (in 38) are semantically endocentric and right-headed.

Apart from previously discussed endocentric and exocentric compounds, there are appositional<sup>51</sup> compounds in Amharic. In this type of compounding, as opposed to exocentric compounds, both

<sup>51</sup> In Sanskrit, they are also called *dvandva* literally ‘two-and-two’ which means ‘pair’ (Spencer 1991:311).

constituents contribute to the meaning of compounds. In exocentric compounds, the meanings of compounds cannot be predicted from the meanings of each elements. Shimelis (2014:217) mentions some examples to illustrate appositional compounds (see 39a and b). The examples provided in (39a) show the combination of derived nouns while examples mentioned in (39b) are the combination of primitive or underived nouns.

- (39a) ከሳሽ ተከሳሽ *kəsasi tə-kəsasi* [kəsas̥ tə-kəsas̥] (accuser + accused) ‘plaintiff-defendant’  
 ተማሪ አስተማሪ *tə-mari as-tə-mari* (student + teacher) ‘student-teacher’
- b. እጅ እግር *iğǝ igir* (arm + leg) ‘limbs’  
 እናት አባት *innat ʔabbat* (mother + father) ‘parents’

#### 4.2.1.1.2 Adjectival compounds

With regard to the compounding mechanisms, adjectival compounds also use the same strategy employed in the nominal compounds. As shown in (40), noun plus verb stem is combined in juxtaposition to form adjectival compounds.

(40)	Noun		Verb stem	Adjectival compound	Gloss
	ዓለም	+	አቀፍ- →	ዓለም አቀፍ	
	<i>ʔaləm</i> ‘world’		<i>ʔaqqəf-</i> ‘encompass’	<i>ʔaləm ʔaqqəf</i>	‘international’
	ብረት	+	ለበሰ- →	ብረት ለበሰ	
	<i>birət</i> ‘iron’		<i>ləbbəs-</i> ‘covered’	<i>birət ləbbəs</i>	‘armoured’
	ተክል	+	በል- →	ተክል በል	
	<i>təkil</i> ‘plant’		<i>bəll-</i> ‘consumed’	<i>təkil bəll</i>	‘herbivorous’
	ገበያ	+	መሮ- →	ገበያ መሮ	
	<i>gəbəya</i> ‘market’		<i>mərr-</i> ‘led’	<i>gəbəya mərr</i>	‘market led’
	ድህነት	+	ተኮሮ- →	ድህነት ተኮሮ	
	<i>dihinnət</i> ‘poverty’		<i>təkkor-</i> ‘focused’	<i>dihinnət təkkor</i>	‘poverty oriented’
	ውሃ	+	ወለድ- →	ውሃ ወለድ	
	<i>wiha</i> ‘water’		<i>wəlləd-</i> ‘born’	<i>wiha wəlləd</i>	‘waterborne’



In data (40), the second constituent is head of the compound which determines the meaning of the compound. For instance, in ተክል በል (literally ‘plant eater’), በል *bəll* ‘eater’ is head or determinant whereas ተክል *təkil* ‘plant’ specifies what kind of eater it is. The output of compounds in the examples (40) are categorized as adjectival compounds. For instance, the underlined compound words or terms in phrases ተክል በል እንስሳ təkil bəll *insisa* (plant+eater+animal) ‘herbivorous animal’, ውሃ ወለድ በሽታ wiha wəlləd *bəššita* (water+born+disease) ‘waterborne disease’ modifies the noun እንስሳ *insisa* ‘animal’ and በሽታ *bəššita* ‘disease’, respectively.

The linker -ə is also employed in adjective compounds, as in (41a and b). The adjectival compound in (41c) is formed by juxtaposed lexical items.

(41)	Noun		Adjective	Adjectival compound	Gloss
a)	ልበ	+	ሰፊ →	ልበ ሰፊ	
	<i>libbə</i> ‘heart’		<i>səffī</i> ‘wide’	<i>libbə səffī</i>	‘tolerant’
b)	እጅ	+	ሰፊ →	እጅ ሰፊ	
	<i>iğgə</i> ‘hand’		<i>səffī</i> ‘wide’	<i>iğgə səffī</i>	‘generous’
c)	ጥላ	+	ቢስ →	ጥላ ቢስ	
	<i>t’ila</i> ‘shadow’		<i>bis</i> ‘less’	<i>t’ila bis</i>	‘graceless’

In data (41), the meaning of the compound is not the composition of its constituents. For instance, ልበ ሰፊ *libbə səffī* (heart+wide) is not to say ‘wide heart’; it is rather to say ‘tolerant’. Similarly, እጅ ሰፊ *iğgə səffī* (hand+wide) does not refer to a person who has wider hand, however, it indicates ‘generosity’. Hence, in (41) the combination of noun+adjective forms exocentric adjectival compounds. Based on the data collected on Amharic compounds, it could be generalized that exocentric compounds are limited in number as compared to endocentric compounds.

#### 4.2.1.1.3 Verbal compounds

The formation of compound verbs<sup>52</sup> from preverb elements or stems with auxiliary verb ‘to say’ or ‘to make’ is one of the grammatical features that characterize the Ethiopian language area (Ferguson, 1976:71-72). In Amharic, verbal compounds are formed by the combination of bound stem plus verbs (i.e., አለ *ʔalə* ‘said’ or አደረገ *ʔadərrəgə* ‘made’). This bound stem (non-inflecting and the first element of the compound verbs) is identified as ideophone<sup>53</sup>. It is unclear to classify the word category of the stem<sup>54</sup> that is listed as a first constituent of the compound. Moreover, the stem (ideophone) does not exist independently and it occurs with the two Amharic verbs (i.e., *ʔalə* ‘said’ or *ʔadərrəgə* ‘made’). The following examples illustrate Amharic verbal compounds.

(42)	Ideophone	Verb	Compound verb	Gloss
(a)	ወጥት- <i>witt’it-</i>	አለ <i>ʔalə</i> ‘said’	ወጥት አለ <i>witt’it ʔalə</i>	‘went out quickly’
	ግልብጥ- <i>gilbitt’-</i>	አለ <i>ʔalə</i> ‘said’	ግልብጥ አለ <i>gilbitt’ ʔalə</i>	‘turned upside down’
	ድርግም- <i>dirgimm-</i>	አለ <i>ʔalə</i> ‘said’	ድርግም አለ <i>dirgimm ʔalə</i>	‘be darken quickly’
(b)	ቁልጭ- <i>qulličč’-</i>	አደረገ <i>ʔadərrəgə</i> ‘made’	ቁልጭ አደረገ <i>qulličč’ ʔadərrəgə</i>	‘put clearly’
	ገፋ <i>gəfa</i>	አደረገ <i>ʔadərrəgə</i> ‘made’	ገፋ አደረገ <i>gəfa ʔadərrəgə</i>	‘pushed a bit’
	ፈቅ <i>fəqq-</i>	አደረገ <i>ʔadərrəgə</i> ‘made’	ፈቅ አደረገ <i>fəqq ʔadərrəgə</i>	‘moved a bit’

The verbal compounds, which are only formed with either in *ʔalə* ‘said’ or *ʔadərrəgə* ‘made’ pattern, are limited in Amharic. The major difference between the two subtypes of verbal compounds is that the compounds formed with አለ *ʔalə* ‘said’ do not require an object in a syntactic position while the compounds formed with አደረገ *ʔadərrəgə* ‘made’ require an object in a syntactic position.

<sup>52</sup> Compound verbs in Amharic and Hadiyya are of composite verb type.

<sup>53</sup> Shimelis (2014:68). Following Shimelis, the term ideophone is used to refer the preverbal element in this research.

<sup>54</sup> Baye (2000 E.C:224-226) states that the stems are not inflected for number gender and person.

Amharic uses some lexical items frequently as one of the constituents of compounds to designate new concepts. Accordingly, in Amharic compounding, there are some Ge'ez loanwords which are employed as sources for the coinage of scientific and technical terms. For example, various field of study or area of knowledge is designated by employing the Ge'ez loanword *ሥን sin* 'beauty' that is equivalent to the English morpheme '-logy' which came from the Greek term 'logus'. Amharic uses the term *ሥን sin* as first element of a compound to designate a number of field of specializations as demonstrated in (43):

(43)	<i>sinə</i> + Amharic word	Gloss	<i>sinə</i> + Amharic word	Gloss
	<i>ሥነ ጥበብ sinə t'ibəb</i>	'art'	<i>ሥነ ቃል sinə qal</i>	'oral literature'
	<i>ሥነ ጽሁፍ sinə s'ihuf</i>	'literature'	<i>ሥነ ግጥም sinə git'im</i>	'poetry'
	<i>ሥነ ልሳን sinə lissan</i>	'linguistics'	<i>ሥነ ሕይወት sinə hiwot</i>	'biology'
	<i>ሥነ ዘዴ sinə zəde</i>	'methodology'	<i>ሥነ ቃላት sinə qalat</i>	'morphology'
	<i>ሥነ-ምድር sinə midir</i>	'geology'	<i>ሥነ-ህዝብ sinə hizb</i>	'population'

The lexical items *ቅድመ qidmə* 'before' and *ድህረ dihirə* 'after' are also productive to designate a number of terms in Amharic. For instance, *ቅድመ መደበኛ qidmə mädəbəñña* (before+formal) 'preprimary', *ቅድመ ምረቃ qidmə mirrəqa* (before+graduation) 'undergraduate', *ቅድመ ሥራ qidmə sira* (before+job) 'preservice', *ቅድመ ወሊድ qidmə wəlid* (before+delivery) 'prenatal', etc. are coined using the term *qidmə*. Similarly, the Ge'ez term *ድህረ dihirə* 'after' is also productive in naming different concepts such as *ድህረ ወሊድ dihirə wəlid* (after+delivery) 'postnatal', *ድህረ ምረቃ dihirə mirrəqa* (after+graduation) 'postgraduate', *ድህረ አብዮት dihirə ገabiyot* (after+revolution) 'post revolution', etc.

The lexical item *ክፍለ kiflā* 'portion or section' is also very productive in designating various Amharic terms. For instance, *ክፍለ ኢኮኖሚ kiflā ገikkonomi* (portion+economy) 'economic sector', *ክፍለ ሃገር kiflā hagər* (portion+country) 'sub-national region', *ክፍለ አለም kiflā ገaləm* (portion+world) 'continent' and *ክፍለ ከተማ kiflā kətəma* (portion+city) 'sub-city' are terms which indicate section of something or area. Moreover, the lexical item *ጣቢያ t'abiya* 'station or center' is also productive in designating terms such as *ሬዲዮ ጣቢያ rediyo t'abiya* (radio+station) 'radio

station’, አውሮፕላን ጣቢያ *ፖላሮፕላን ተ’ብያ* (airplane+station) ‘airport’, ፖሊስ ጣቢያ *ፖሊስ ተ’ብያ* (police+station) ‘police station’, ጤና ጣቢያ *ቲ’ኔላ ተ’ብያ* (health+station) ‘health center’, ምርጫ ጣቢያ *ሚሪሻ’ላ ተ’ብያ* (election+center) ‘election center’, ቴሌቪዥን ጣቢያ *ቲሌቪዥን ተ’ብያ* (television+station) ‘television station’ and ባቡር ጣቢያ *ባቡር ተ’ብያ* (railway+station) ‘railway station’.

#### 4.2.1.1.4 Summary of compound types in Amharic

Generally, of the types of compounding in Amharic, nominal compounding is very productive, and is followed by adjectival and verbal compoundings. Compound adverbs<sup>55</sup> are not attested or not productive in Amharic. In Amharic compounding, various word categories are employed as means of lexical elaboration. Accordingly, in the combination of different word categories, N+N, N+V, N+A, V+N and A+N are productive patterns in expanding Amharic vocabulary. Consider the summarized inventory of Amharic compounds in Table 36.

*Table 36: Inventory of Amharic compounds*

Right-hand constituent				
Left-hand constituent		Noun	Verb	Adjective
	Noun	a. መሰረተ ልማት <i>məsərətə limat</i> ‘infrastructure’  b. አየር ንብረት <i>ፖሃሃር ንብረት</i> ‘climate’	ዓለም አቀፍ <sup>56</sup> <i>ፖላም ፖላባፍ</i> ‘international’	ልብ ሰፊ <i>ሊባላ ሰፊ</i> ‘tolerant’
	Verb	ወደ ዘማት <i>wəddo zəmač</i> ‘voluntary (fighter)’	—	—
	Adjective	ትርፍ አንጀት <i>tirf ፖላጅት</i> ‘appendix’	—	—
	Ideo.	—	ቁጭ አለ <i>ባህሻ’ ፖላ</i> ‘sat down quickly’	—

<sup>55</sup> Shimelis (2014:216) also mentions that the presence of compound adverb is very limited. He mentions one instance of compound adverb which is formed by total reduplication of the word ትንሽ ትንሽ ‘little little’ in Amharic.

<sup>56</sup> አቀፍ *ፖላባፍ* is verb stem that combines with noun to form adjectival compounds.

#### 4.2.1.2 Complex compounds

In previous sections compounds with two words are described. There are also complex compounds with three constituents. In fact, the three words have binary combinations which have the structure of (a+ (b+c)). The following examples show Amharic complex compounds which consist of the following elements:

(44)	Adjective		Noun		Compound noun	Gloss
	ጎጂ	+	ጥቃቅን ሕዋሳት →		(ጎጂ (ጥቃቅን ሕዋሳት))	
	<i>goḡi</i> ‘harmful’		<i>t’iqaqqin hiwasat</i> ‘micro cells’		<i>goḡi t’iqaqqin hiwasat</i>	‘microbes’
	ቀዳማይ	+	ቀጭን አንጀት →		(ቀዳማይ (ቀጭን አንጀት))	
	<i>qadamay</i> ‘prior’		<i>qəčč’in ጎanḡat</i> ‘small intestine’		<i>qadamay qəčč’in ጎanḡat</i>	‘duodenum’
	ማዕከላይ	+	ቀጭን አንጀት →		(ማዕከላይ (ቀጭን አንጀት))	
	<i>maḥikəlay</i> ‘central’		<i>qəčč’in ጎanḡat</i> ‘small intestine’		<i>maḥikəlay qəčč’in ጎanḡat</i>	‘jejunum’

In (44), the compounds have two steps-combinations. The first combination, for example, in compound word ጎጂ ጥቃቅን ሕዋሳት *goḡi t’iqaqqin hiwasat* is ጥቃቅን ሕዋሳት *t’iqaqqin hiwasat* ‘micro cells’ which further combines with ጎጂ *goḡi* ‘harmful’ to form (ጎጂ (ጥቃቅን ሕዋሳት)) *goḡi t’iqaqqin hiwasat* ‘microbes’. This combination could be summarized mathematically as (a+ (b+c)). Thus, the second components (b+c) combined first and then it forms longer compound by adding another word ‘a’ to make (a+ (b+c)).

#### 4.2.1.3 Defining features of Amharic compounds

Compounds have defining features that distinguish them from phrasal constructions. In this subsection, in order to show the distinctive features of compounds, the morphological, syntactic and semantic features of Amharic compounds will be discussed.

With regard to morphological features, a compound can behave as simplex words do. In other words, compounding enables to form new lexical items just like any other types of simplex words (see Bauer 2003:135). Derivational morpheme -ነት *-nnət*, for instance, is added to the compound to form abstract compound word, as in:

(45)	አገር ወዳድ	-ነት	አገር ወዳድነት	
	<i>ʔagər wəddad</i>	+ <i>-nnət</i>	→	[ʔagərwəddadinnət] ‘patriotism’
	country lover	ANM		
	ስራ አጥ	-ነት	ስራ አጥነት	
	<i>sira ʔatt’</i>	+ <i>-nnət</i>	→	[siratt’innət] ‘unemployment’
	job lost	ANM		
	ልቦ ሰፊ	-ነት	ልቦ ሰፊነት	
	<i>libbə səffi</i>	+ <i>-nnət</i>	→	[libbəsəffinnət] ‘tolerance’
	heart wider	ANM		

Another morphological characteristics of a compound, which distinguishes it from genitive or phrasal construction, is that it does not allow inflectional affixes to intervene. For instance, the definiteness marker -ኡ *-u* is attached to the second member but not to the first member of a compound, as depicted in (46):

(46)	a.	ፍርድ ቤት-ኡ	ፍርድ ቤቱ	
		<i>fird bet -u</i> →	<i>fird betu</i>	‘the court’
		verdict house-DF		
		ፍርድ-ኡ ቤት	ፍርዱ ቤት	
		* <i>fird-u bet</i> →	* <i>firdu bet</i>	*‘the court’
		verdict- DF house		
	b.	ድህነት ተኮር-ኡ	ድህነት ተኮሩ	
		<i>dihinnət təkko -u/</i> →	<i>dihinnət təkko</i>	‘the poverty oriented’
		poverty focused- DF		
		ድህነት-ኡ ተኮር	ድህነቱ ተኮር	
		* <i>dihinnət-u təkko</i> →	* <i>dihinnətu təkko</i>	*‘the poverty oriented’
		poverty-DF focused		

Moreover, the addition of inflectional morphemes on the head of a compound is another morphological feature of a compound. For instance, the number marker appears on the head of a compound, as in (47):

(47)	ትምህርት ቤት-አች	ትምህርት ቤቶች	
	<i>timihirt bet-očč</i> →	<i>timihirt betočč</i>	‘schools’
	lesson house-PL	lesson houses	
	*ትምህርት-አች ቤት	*ትምህርቶች ቤት	
	* <i>timihirt-očč bet</i> →	* <i>timihirtočč bet</i>	* ‘schools’
	lesson-PL house	lessons house	

In (47), the head ቤት *bet* ‘house’ determines how the inflectional properties of the whole compounds are realized. On the other hand, the modifier ትምህርት *timihirt* ‘lesson’ could not bear the inflectional morpheme (plural marker) -አች -*očč* in Amharic.

Another defining feature of compound is the way it behaves in syntactic construction. Compound words behave like simplex words in syntax. Compare the following two sentences:

- (48a) ጌታቸው ተማሪ ነው።  
*getaččaw tāmari nəw*  
 Getaččaw student is ‘Getachew is student.’
- (b) ጌታቸው አገር ወዳድ ነው።  
*getaččaw ʔagər wəddad nəw*  
 Getaččaw country lover is ‘Getachew is patriot.’

As shown in the examples, the underlined word in (48a) is the simplex word whereas the underlined element in (48b) is the compound that behaves in similar manner as simplex word in (48a). Thus, the Amharic አገር ወዳድ *ʔagər wəddad* (country+lover) ‘patriot’ can substitute the

simplex word ተማሪ *təməri* ‘student’ in this context. This, on the other hand, can be an evidence for Amharic compounds which operate as simplex words in syntactic construction. Furthermore, compounds belong to one major syntactic category just like any other simplex words. In relation to this, Amharic compounds are classified as nominal, adjectival or verbal (see 4.2.1.1).

Semantically, the meaning of compounds is different from its constituents. Compounds have single unit of reference as simplex words. For instance, in compound ፍርድ ቤት *fird bet* (judgment+house) ‘court’ the constituents ፍርድ *fird* ‘judgment’ and ቤት *bet* ‘house’ have independent meaning and the meaning of the compound is totally different from its constituents except appositional compounds.

## 4.2.2 Compounding in Hadiyya

Compounding is a productive method of forming new term in Hadiyya. By combining different lexical items, Hadiyya forms compound words to designate newly introduced concepts into the language. The combining elements in compounding are lexical items or roots or stems which distinguish the process from derivation. In derivation, the combining elements are lexical items and affixes. In the following sections different types and mechanisms of forming compounds and the defining features of compounds in Hadiyya will be described.

### 4.2.2.1 Types of compounds in Hadiyya

Based on syntactic category of compounds, Hadiyya compounds are classified into nominal, adjectival and verbal compounds. All of these types are not equally productive in the language. The three major categories of compounds will be described in the following sections.

#### 4.2.2.1.1 Nominal compounds

In this subsection, different types of nominal compounds are included. First, the compounds whose second constituent is noun are presented (N+N, Numeral +N, A+N, ADP+N), which are followed by N+V, N+ADP, A+V. From various possible combinations of word categories, N+N is the most recurrent form. Unlike other HEC languages such as Kambaata and Halaaba, nominal



compounding is a common phenomenon in Hadiyya (Tadesse, 2015:78). The following examples illustrate noun + noun combination of Hadiyya compounds:

(49)	Noun + Noun	Nominal compounds	Gloss
(a)	<i>ado</i> ‘milk’ + <i>mushsha</i> ‘gland’ →	<i>axxi mushsha</i>	‘mammary gland’
	<i>ado</i> ‘milk’ + <i>booso</i> ‘pot’ →	<i>axxi booso</i>	‘milkpot’
	<i>amma</i> ‘nato’ ‘belief’ + <i>seera</i> ‘rule’ →	<i>amma</i> ‘naxxi seera	‘dogma’
	<i>giphite</i> ‘little pause’ + <i>mare’e</i> ‘mark’ →	<i>giphixxi mare’e</i>	‘comma’
(b)	<i>anga</i> ‘hand’ + <i>qoocca</i> ‘creation’ →	<i>angi qoocca</i>	‘handcraft’
	<i>nerva</i> ‘nerve’ [Eng] + <i>sono</i> ‘o’ ‘system’ →	<i>nervi sono</i> ‘o	‘nerve system’
	<i>xinta</i> ‘beginning’ + <i>sawwite</i> ‘idea’ →	<i>xinti sawwite</i>	‘concept’
	<i>xambo</i> ‘news’ + <i>kitaabcho</i> ‘magazine’ →	<i>xambi kitaabcho</i>	‘newspaper’
(c)	<i>suume</i> ‘mouth’ + <i>sono</i> ‘o’ ‘system’ →	<i>suu</i> ‘m sono	‘grammar’
	<i>hiimo</i> ‘night’ + <i>hurbaata</i> ‘food’ →	<i>hii</i> ‘m hurbaata	‘dinner’
	<i>agana</i> ‘month’ + <i>miquo</i> ‘o’ ‘payment’ →	<i>aga</i> ‘n miquo	‘salary’
	<i>sane</i> ‘nose’ + <i>afo</i> ‘o’ ‘hollow’ →	<i>sa</i> ‘n afo	‘nostril’
	<i>qaro</i> ‘giving birth’ + <i>ma</i> ‘na’ ‘place’ →	<i>qa</i> ‘l ma	‘womb’
	<i>sagara</i> ‘word’ + <i>doona</i> ‘hive’ →	<i>saga</i> ‘l doona	‘dictionary’

In compounds shown in (49a-c), it is easier to describe modifier-head relationship. In the N+N compounds, the role of first noun is to make the meaning of second noun more specific. In compound words such as, *angi qoocca* (of hand+creation) ‘handcraft’, *axxi booso* (of milk+pot) ‘milkpot’, *suu* ‘m *sono* ‘o (of mouth+system) ‘grammar’, *aga* ‘n *miquo* ‘o (of month + payment) ‘salary’, *saga* ‘l *doona* (of word+hive) ‘dictionary’, etc. the second constituents are heads of the compounds. In the compound *nervi sono* ‘o (of nerve [Eng.] system) ‘nerve system’ the first

constituent is English loanword. Since in such compounds the meaning of the compounds is determined by the head, they fall under the category of endocentric compounds.

The compounds mentioned in (49a-c) are semantically possessive compounds. The constituents have possessor-possessed relationship. In other words, the first noun is possessor while the second noun is possessed, as in *sa'n afo'o* (of nose+hollow) 'nostril'. There is no structural difference between such compounds and genitive phrases since both are formed through juxtaposed nominals. As mentioned in example (69) and (70), N+N compounds can be distinguished from genitive constructions in that they do not allow intervening element between the constituents. In other words, neither of the constituents cannot be independently modified. For instance, the modifier <*xuqqi*> 'narrow' is added to the whole compound as in <*xuqqi sa'n afo'o*> (narrow+of nose+hollow) 'narrow nostril'. However, <*sa'n xuqqi afo'o*> is unacceptable in the language.

In Hadiyya, based on the order of frequency /a/, /o/ and /e/ appear in terminal position of the citation form (see Tadesse 2015:27). As shown in (54a and b), the terminal vowels <-a> and <-o> are changed into <-i> at the final position of the first constituents in order to show possession. The graphemes <d> and <t> which precede terminal vowels in the first constituents are changed into <-xx>. For instance, in *giphite* 'little pause' the consonant precedes terminal vowel (i.e., <t> in the word *giphite*) is changed into geminated <-xx>. In this manner, it forms the compound *giphixxi mare'e* ('of little pause+mark) 'comma'. This kind of compounds is formed as a result of lexicalized genitive phrases.

Another set of possessive compounds are also formed by the insertion of the glottal stop /ʔ/ <'> before sonorants *n*, *l* and *m* which are parts of the first constituents. When this kind of compound is phonemically transcribed, the first constituent ends in -i though it is not represented orthographically in the language. For example, the compound word for 'grammar' is phonemically transcribed as /suuʔmi sonoʔo/, but orthographically it is represented as <*suu'm sono'o*>. As shown in (49c), if a consonant which appears before terminal vowel is /r/ in the first

constituent, it will be changed into /l/<sup>57</sup> and then the glottal stop /ʔ/ <'> will be inserted when it is combined with the second constituent to form a compound. In the case of /n/ and /m/ the glottal stop /ʔ/ <'> is simply inserted before <n> and <m>. Generally, the possessive compounds shown in (49a-c) are written as two separate words orthographically though they are considered as single phonological and semantic unit.

When N+N compound is formed with a word which involves preglottalized vowel in word final position of the first constituent, the final *glottal + vowel*, (' + V), will be dropped from the final position of the first constituent, as evidenced in (50).

(50)	Words (constituents)	Compound	Gloss
	<i>ito'o</i> 'merciless' + <i>doolle</i> 'epoch' →	<i>itodoolle</i>	'before birth of Christ'
	<i>lambe'e</i> 'middle' + <i>tako'o</i> 'point' →	<i>lambetako'o</i>	'mid-point'
	<i>leella'a</i> 'oesophagus' + <i>luwwa</i> 'thing' →	<i>leellaluwwa</i>	'infection of uvula'
	<i>meto'o</i> 'problem' + <i>ku'la</i> 'way of expression' →	<i>metoku'la</i>	'application'

In addition to the compounding strategy or rule stated in (50), when the second constituent of a compound word begins with vowel, only word final vowel of the first word is dropped. For instance, *lambe'e* 'center' + *angila* 'angle' → *lambe'angila* 'central angle'. This is similar with the rule of vowel elision (see example 51) that shows the deletion of first vowel when it appears in the juxtaposition of two different vowels. The output of constituents of compounds in (50) are written as one word orthographically.

The N+N combination of compounds which are discussed earlier fall under endocentric compounds. There are also N+N exocentric compounds in Hadiyya though they are less productive as compared to endocentric compounds. In exocentric compound, the meaning cannot

<sup>57</sup> The reason for the change of /r/ to /l/ is unknown.

be inferred from its constituents. The examples in (51) demonstrate the exocentric compounds in Hadiyya.

(51)	Noun	+	Noun	Nominal compounds	Gloss
	<i>anga</i>		<i>ejja</i>	<i>angejja</i>	‘participation’
	<i>anga</i>		<i>issimma</i>	<i>angissimma</i>	‘winning’
	<i>ille</i>		<i>iiqa</i>	<i>illiiqa</i>	‘loss or crisis’
	<i>ille</i>		<i>ganimma</i>	<i>ilganimma</i>	‘giving permission’
	<i>lokko</i>		<i>ejja</i>	<i>lokkejja</i>	‘accompanying’
	<i>tefo</i>		<i>ejja</i>	<i>tefejja</i>	‘shared secrete’

In (51) two major compounding strategies were applied. The first one is vowel elision<sup>58</sup> which indicates that deletion of one of the vowels occurs at word boundaries during compound word formation. One of the vowel elision pattern is deletion of final vowel of the first constituent and bringing together words beginning with a long or short vowel in the second constituent. In this case, the vowel of second constituent will not be affected. For instance, the combination of *anga* + *ejja* forms the compound *angejja* (hand+addition) ‘participation’.

The second compounding strategy that is applied in (51) is the deletion of final *cv* of the first constituent. When the first constituent of a compound involves geminated consonants that appear before terminal vowel and the second constituent begins with a consonant, the word final *cv* (consonant+vowel) of the first constituent is dropped. For instance, the compound word *ilganimma* ‘giving permission’ is formed from the combination of (< *ille* + *ganimma* (eye+hitting) ‘giving permission’). This strategy is very productive in endocentric compounds as

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<sup>58</sup> *Vowel elision* refers to the audibility of the second vowel when two consecutive vowels encountered in word boundary.

well. The following additional examples show deletion of final *cv* from the first constituents of endocentric compounds.

(52)	Words (constituents)	Compound	Gloss
	<i>aggiishsha</i> ‘borrowing’ + <i>sagara</i> ‘word’ →	<i>aggiishsagara</i>	‘loanword’
	<i>ille</i> ‘eye’ + <i>beetichcho</i> ‘son’ →	<i>ilbeetichcho</i>	‘pupil’
	<i>beyyo</i> ‘place’ + <i>kura</i> ‘teller’ →	<i>beykura</i>	‘adposition’
	<i>lokko</i> ‘foot’ + <i>xulbe’e</i> ‘ball’ →	<i>lokxulbe’e</i>	‘football’
	<i>uulla</i> ‘earth’ + <i>beeto</i> ‘son’ →	<i>uulbeeto</i>	‘citizen’
	<i>uulla</i> ‘earth’ + <i>kobi’la</i> ‘alike’ →	<i>uulkobi’la</i>	‘globe’
	<i>uulla</i> ‘earth’ + <i>qaaphpha</i> ‘encompass’ →	<i>uulqaaphpha</i>	‘nationwide’
	<i>heechcha</i> ‘life’ + <i>qaanqa</i> ‘method’ →	<i>heechqaanqa</i>	‘culture’

When Hadiyya digraphs are geminated, they become tetragraphs. The deletion of *cv* from the final position of the first constituent makes the word economic or short particularly for the geminated digraphs. For instance, in *aggiishsha* + *sagara* → *aggiishsagara* ‘loanword’, *heechcha* + *qaanqa* → *heechqaanqa* ‘culture’, etc. the space of three graphemes will be saved. The lexical item *kura* is recently introduced and productive form following the introduction of MT education in Hadiyya to designate new terms in the language.

In addition to endocentric and exocentric compounds, there are also appositional compounds (though marginal) in Hadiyya. In appositional compounds, the meaning is extracted from both elements equally. In such compounds, each element can serve as a head in its own right, as in (53).

- (53) a. *angii lokkii* (arm+leg) ‘limb’  
 b. *amaa annaa* (mother+father) ‘parents’  
 c. *ilshura* (<*ille* ‘eye’ + *shura* ‘brow’) ‘eyebrow’

In (53a and b), the final vowel of both elements are lengthened which function as a coordinator ‘and’. In (53c), the appositional compound is formed without coordinator ‘and’ rather the final *cv* of the first constituent (*ille* ‘eye’) is deleted due to similar compounding strategy as indicated in examples (52) above.

Apart from noun + noun combination, some technical terms are designated by numeral + noun combination. By this combination, as indicated in (54), mathematical and biological (Environmental science) terms were designated:

(54)	Numeral + Noun combination	Nominal compound	
(a)	<i>lamo</i> ‘two’ + <i>haqqa</i> ‘wood’ →	<i>lamaqqa</i>	‘compound’
	<i>mato</i> ‘one’ + <i>haqqa</i> ‘wood’ →	<i>mataqqa</i>	‘single’
	<i>saso</i> ‘three’ + <i>haqqa</i> ‘wood’ →	<i>sasaqqa</i>	‘triple’
(b)	<i>lamo</i> ‘two’ + <i>anga</i> ‘hand’ →	<i>lamanga</i>	‘double’
	<i>lamo</i> ‘two’ + <i>ejja</i> ‘addition’ →	<i>lamejja</i>	‘joint’
	<i>lamo</i> ‘two’ + <i>ejja</i> ‘addition’ →	<i>la’m ejja</i>	‘intersection’
(c)	<i>mato</i> ‘one’ + <i>fira</i> ‘outlet’ →	<i>matfira</i>	‘uniform’
	<i>saso</i> ‘three’ + <i>midaado</i> ‘side’ →	<i>sasmidaado</i>	‘triangle’
	<i>sooro</i> ‘four’ + <i>midaado</i> ‘side’ →	<i>soormidaado</i>	‘quadrilateral’

The terms *lamaqqa* and *lamanga* have different usages though they have related meanings. The term *lamaqqa* is designated to express a pair of something; for example, *lamaqqi sagara* (pair+word) ‘compound word’, *lamaqqi xuunsammi woca* (pair+sentence) ‘compound sentence’, etc. whereas *lamanga* expresses twice of the quantity or double percent of something. In (54), the terms *lamanga* ‘double’, *sasmidaado* ‘triangle’ and *soormidaado* ‘quadrilateral’ are designated to represent mathematical concepts.

The same lexical items, for instance, (*lamo* + *ejja*) are combined in two different ways in order to designate biological and mathematical concepts. The first output of the combination *lamo* + *ejja* is *lamejja* (two+addition) ‘joint’ that refers to biological concept is formed by dropping the final vowel of the first word whereas *lamo* + *ejja* → *la’m ejja* (of two addition) ‘intersection’, which stands for mathematical concept is formed in the possessive compound pattern (see data 49 for possessive compounds).

When the compounding strategy employed in (54a) is examined, the grapheme <h> in juxtaposition of the constituents is deleted. In other words, when compound words begin with the consonant <h> in the second constituents, the sound [h] is dropped in the compound form. For instance, the combination of *lamo* ‘two’ and *haqqa* ‘wood’ would result in the compound *lamaqqa* ‘double’ by deleting <h> from the initial position of the word *haqqa*.

Another compounding strategy shown in (54b) is vowel elision, which is discussed previously in example (51). The compounding strategy applied in (54c) is the dropping of terminal vowel from the first constituents. In other words, when the first constituent ends in a terminal vowel and the second constituent begins with consonant, terminal vowel of the first word is dropped and the compound is written as one word. The dropping of terminal vowel of the first word results in the sequence of two consonants in juxtaposition. For example, the combination of *saso* + *midaado* → *sasmidaado* (three+side) ‘triangle’ in which the vowel grapheme <o> is dropped from the word *saso*. The following additional examples show similar compounding strategy to (54c), however, the majority of second constituents are newly coined forms, as in (55):

(55)	Words (constituents)	Compound	Gloss
	<i>gaga</i> ‘self’ + <i>laba</i> ‘alike’ →	<i>gaglaba</i>	‘identical’
	<i>gaga</i> ‘self’ + <i>xana</i> ‘able’ →	<i>gagxana</i>	‘independent’
	<i>gaga</i> ‘self’ + <i>moo’ixxa</i> ‘show’ →	<i>gagmoo’ixxa</i>	‘mirror’
	<i>heera</i> ‘many’ + <i>qaaphpha</i> ‘encompass’ →	<i>heerqaaphpha</i>	international
	<i>laso</i> ‘back’ + <i>tiira</i> ‘remembering’ →	<i>lastiira</i>	‘flashback’
	<i>tirato</i> ‘meaning’ + <i>fenqa</i> ‘identify’ →	<i>tiratfenqa</i>	‘minimal pair’

As can be seen from (55), most of the forms of the second constituents are new forms in which they became actual words based on analogy of different word forms in the general vocabulary. For instance, the words *laba* ‘alike’, *xana* ‘able’, *tiira* ‘remembering’ and *fenqa* ‘identify’ became actual words probably following the analogy of the following words in (56):

(56)	<i>koka</i> (adjective)	‘hollow’	→	<i>laba</i> ‘alike’
	<i>kara</i> (adjective)	‘immature’	→	<i>xana</i> ‘able’
	<i>siira</i> (adjective)	‘pregnant’	→	<i>tiira</i> ‘remembering’
	<i>fenga</i> (noun)	‘the top of entrance’	→	<i>fenqa</i> ‘identify’

Another possible justification for the formation of new forms or verb stems such as *lab-*, *xan-*, *tiir-* and *fenq-* is backformation in which the verb stems are developed from verbal nouns by dropping the nominalizer (*-imm*). For instance, verb stem *lab-* is formed from the verbal nominal (< *lab-imm-a* ‘resemblance’) and *xan-* is formed from (*xan-imm-a* ‘being able’) via backformation process. When these verb stems are used in citation form, they become *laba* and *xana*.

The combination of adjective and noun is also another possible pattern of compound formation in Hadiyya. The output of this combination is nominal compound as indicated in (57):

(57)	Adjective + Noun	Nominal compound	Gloss
	<i>awwonaanchi</i> ‘following’ + <i>daayrektera</i> ‘director’ →	<i>awwonaanchi daayrektera</i>	‘vice-director’
	<i>er-</i> ‘good’ + <i>abga’a</i> ‘conduct’ →	<i>erabga’a</i>	‘virtue’
	<i>higa</i> ‘best’ + <i>qoorooma</i> ‘wiseness’ →	<i>higqoorooma</i>	‘civilization’
	<i>lob-</i> ‘great’ + <i>wongira</i> ‘boat’ →	<i>lobwongira</i>	‘ship’
	<i>uumaxxi</i> ‘natural’ + <i>maaja</i> ‘resource’ →	<i>uumaxxi maaja</i>	‘natural resource’



The combination of adposition + noun is rare in Hadiyya nominal compounds. Some instances of ADP+N combination of nominal compounds are indicated in (58):

(58)	Adposition + Noun	Nominal compound	Gloss
	<i>aade</i> ‘downward’ + <i>gosha</i> ‘milking’ →	<i>aadgosha</i>	‘gravity’
	<i>woro</i> ‘inside’ + <i>sawwite</i> ‘idea’ →	<i>worsawwite</i>	‘concept’
	<i>lasage</i> ‘after’ + <i>luwwa</i> ‘something’ →	<i>lasaqluwwa</i>	‘placenta’

In previously stated nominal compounds, the second member was noun. Moreover, the second member could also be other than noun in the nominal compound formation. Hence, another possible combination of such compounding is noun + verb stem, as in (59).

(59)	Noun + Verb stem	Nominal compounds	Gloss
	<i>seera</i> ‘rule’ + <i>iiq-</i> ‘breaks’ →	<i>seeriiqa</i>	‘exception’
	<i>baga</i> ‘middle’ + <i>aag-</i> ‘one who enters’ →	<i>bagaaga</i>	‘infiltrate’
	<i>tirato</i> ‘meaning’ + <i>fenq-</i> ‘identify’ →	<i>tiratfenqa</i>	‘minimal pair’
	<i>mique</i> ‘bone’ + <i>iic-</i> ‘chew’ →	<i>miqiica</i>	‘bone cancer’

As shown in (59), in the second component of the compound words the verb stems *iiq-*, *aag-*, *fenq-* and *iic-* even after the addition of terminal vowel <-a> could not be used independently as *iiqa*, *aaga*, *fenqa* and *iica*. These items require the noun part to give full senses. In (59), the verb stem part is derived from verbal noun as a result of back-formation process (see data 56). For instance, from *seeriiqimma* ‘breaking rule’ → *seeriiqa* (rule+break) ‘exception’, and from *bagaagimma* ‘entering middle’ → *bagaaga* (middle+one who enter) ‘infiltrate’ are formed by dropping *-imm* from the verbal nouns. In other words, this pattern (i.e., verb stems + terminal vowel <a>) is recently developed forms while developing scientific and technical terms in Hadiyya.

The combination of noun + adposition is also rare in Hadiyya compounding. Hence, few examples are provided in (60). In the N+ADP combinations the resultant compounds are nominal compounds.

(60)	Noun + Adposition	Nominal compound	Gloss
	<i>ille</i> ‘eye’ + <i>biira</i> ‘outside’ →	<i>ilbiira</i>	‘clear/open’
	<i>qanannaaxxi</i> ‘reading’ + <i>illage</i> ‘before’ →	<i>qanannaaxxi illage</i>	‘pre-reading’
	<i>qanannaaxxi</i> ‘reading’ + <i>lasage</i> ‘after’ →	<i>qanannaaxxi lasage</i>	‘post-reading’

Though it is not recurrent, adposition + verb is also a possible combination of nominal compounding in Hadiyya, as in (61):

(61)	Adposition + verb stem	Nominal compound	Gloss
	<i>laso</i> ‘back’ + <i>tiir-</i> ‘remember’ →	<i>lastiira</i>	‘flashback’
	<i>laso</i> ‘back’ + <i>gat-</i> ‘remain’ →	<i>lasgata</i>	‘backward’

#### 4.2.2.1.2 Adjectival compounds

Adjectival compounds are very small in number as compared to nominal compounds in Hadiyya. The examples presented in (62) are adjectival compounds consisting of noun + adjective constituents. In this combination, the output could be semantically exocentric or endocentric. The examples mentioned in (62) are exocentric compounds.

(62)	Noun	+	Adjective	Adjectival compound	Gloss
	<i>anga</i> ‘hand’	+	<i>haraara</i> ‘wide’	→ <i>angaraara</i>	‘generous’
	<i>anga</i> ‘hand’	+	<i>hoffiixxa</i> ‘made smaller’	→ <i>angoffiixxa</i>	‘poor’
	<i>anga</i> ‘hand’	+	<i>iibbaalla</i> ‘hot’	→ <i>angiibbaalla</i>	‘wealthy’
	<i>bique</i> ‘chest’	+	<i>haraara</i> ‘wide’	→ <i>biqaraara</i>	‘fearless’

(62)	Noun	+	Adjective		Adjectival compound	Gloss
	<i>bique</i>		<i>iggaalla</i>	→	<i>biqiggaalla</i>	‘orator’
	<i>ille</i>		<i>qeeraa’la</i>	→	<i>ilqeeraa’la</i>	‘longing for someone’s property’

In exocentric compounds, the meaning of such words is not transparent. For example, in (62) the meaning of *anga* ‘hand’ + *iibbaalla* ‘hot’ does not refer to a person with hot hand but it stands for wealthy person. In the same way, *bique* ‘chest’ + *haraara* ‘wide’ does not indicate the wider size of person’s chest but it expresses fearless character. Hence, in such compounds the meaning is not predictable from its constituents.

There are also semantically endocentric adjectival compounds (in 63) which have the combination of N+A constituents.

(63)	Noun	+	Adjective		Adjectival compound	Gloss
	<i>doolle</i>		<i>laba</i>	→	<i>doollaba</i>	‘modern’
	<i>gaga</i>		<i>laba</i>	→	<i>gaglaba</i>	‘identical’
	<i>ille</i>		<i>iggaalla</i>	→	<i>illiggaalla</i>	‘bold’

As seen in (63), since the heads of the compounds in N+A combination are adjectives, the outputs of the compounds are adjectival. As discussed in nominal compounding section, various compounding strategies are employed in adjectival compounds as well. For instance, vowel deletion as in *gaga* + *laba* → *gaglaba* (self + alike) ‘identical’, vowel elision as in *ille* + *iggaalla* → *illiggaalla* (eye+ fearless) ‘bold’, deletion of <h> and simultaneous vowel elision as in *bique* + *haraara* → *biqaraara* (chest+wide) ‘fearless’, etc are the employed compounding strategies in the examples.

Though not so productive, adjectival compounds can also be formed from A+A combinations. Two instances are mentioned as an example:

(64)	Adjective + Adjective	Adjectival compound	Gloss
	<i>hundi</i> ‘all’ + <i>qaaphpha</i> ‘embracing’ →	<i>hundiqaaphpha</i>	‘all-inclusive’
	<i>hig</i> ‘best’ + <i>qoora</i> ‘wise’ →	<i>higqoora</i>	‘civilized’

#### 4.2.2.1.3 Verbal compounds

In Hadiyya, verbal compounds are formed by combining ideophones with the coverb<sup>59</sup> *y-* ‘say’ or *aa-* ‘make’. The first constituent (i.e. ideophone) does not receive any derivational or inflectional morphemes. On the contrary, the verbs that collocate with the ideophones can take affixes. For instance, *forgo y-* ‘move a little’ could have the forms such as *forgo yimma* ‘to move’, *forgoyyaato*<sup>60</sup> ‘movement’ *forgo yukko* ‘moved a little’, etc. Therefore, as shown in these examples, inflectional or derivational morphemes could not be inserted between the constituents of the verbal compounds. For additional examples consider Table 37.

*Table 37: Examples of Hadiyya verbal compound with yukko and aa'ukko*

Ideophone	Gloss	Verb	Verbal compound	Gloss
<i>bajj</i>	‘be regid’	<i>yukko</i> ‘said’	→ <i>bajjukko</i> (< <i>bajj yukko</i> )	‘became uplift’
<i>gojj</i>	‘stand’	<i>yukko</i> ‘said’	→ <i>gojjukko</i> (< <i>gojj yukko</i> )	‘stood up’
<i>hokk</i>	‘be upright’	<i>yukko</i> ‘said’	→ <i>hokkukko</i> (< <i>hokk yukko</i> )	‘became upright’
<i>wixx</i>	‘be collected’	<i>yukko</i> ‘said’	→ <i>wixxukko</i> (< <i>wixx yukko</i> )	‘gathered’
<i>xell</i>	‘fix/attach’	<i>yukko</i> ‘said’	→ <i>xellukko</i> (< <i>xell yukko</i> )	‘set on fire’
<i>xuxx</i>	‘bulge’	<i>yukko</i> ‘said’	→ <i>xuxxukko</i> (< <i>xuxx yukko</i> )	‘became silent’
<i>curur</i>	‘water flow’	<i>aa'ukko</i> ‘made’	→ <i>cururaa'ukko</i> (< <i>curur aa'ukko</i> )	‘made it to flow’
<i>qadd</i>	‘give a hint’	<i>aa'ukko</i> ‘made’	→ <i>qaddaa'ukko</i> (< <i>qadd aa'ukko</i> )	‘quoted/cited’

<sup>59</sup> Coverb refers to an auxiliary or helping verb.

<sup>60</sup> The compound word *forgoyyaato* is fused when the abstract nominalizer *-aat* is suffixed to the coverb *y-* ‘say’ and the verb *y-* is geminated between vowels.

Ideophone	Gloss	Verb	Verbal compound	Gloss
<i>xull</i>	‘fall’	<i>aa’ukko</i> ‘made’	→ <i>xullaa’ukko</i> (< <i>xull aa’ukko</i> >)	‘made fall down’
<i>zubb</i>	‘sudden fall’	<i>aa’ukko</i> ‘made’	→ <i>zubbaa’ukko</i> (< <i>zubb aa’ukko</i> >)	‘kick, hit’
<i>daphph</i>	‘cover’	<i>aa’ukko</i> ‘made’	→ <i>daphphaa’ukko</i> (< <i>daphph aa’ukko</i> >)	‘made it secret’

In Table 37, auxiliary verbs (*yukko* ‘said’ and *aa’ukko* ‘made’) are heads of the verbal compounds. Verbal compounds which are formed by combining ideophones with coverbs are usually written as one word at the orthographic level. For instance, *bajj yukko* written as <*bajjukko*>, *gojj yukko* as <*gojjukko*>, *hokki yukko* as <*hokkukko*>, etc. These forms are considered as simplex words since in some instances the coverb element i.e., *y-* ‘say’ is deleted in the combination process. The possible reason for the dropping of <*y*> is to avoid impermissible consonant cluster. Moreover, even in the compound verbs in which the *y-* ‘say’ element is not omitted, compounds are written as one word as in *hindi yukko* <*hindi yukko*> ‘comprehended’, *chaa yukko* <*chaayukko*> ‘entertained’, etc. When the verb *aa’-* ‘make’ collocates with the ideophone in order to form compound verbs, it is directly attached to the first element as in *curur aa’ukko* → *cururaa’ukko* ‘made it to flow’.

There is a difference of usage between *y-* ‘say’ and *aa’-* ‘make’ when they are used in syntax. The verbal compounds formed with the coverb *y-* ‘say’ do not require an object in syntactic position whereas the verbal compounds derived with coverb *aa’-* ‘make’ require the object.

In Hadiyya, apart from the description of compound types, there are some lexical items which are productive in designating new concepts via compounding. For instance, field of study or area of knowledge is designated by using a term *hayyo’ooma* ‘wisdom’ as the second constituent of a compound which is equivalent to the Greek term ‘logus’. This term is employed to coin newly introduced fields of study or specialization. Consider the following examples in (65) that show the elaboration of some scientific terms of Hadiyya meta-language concepts.

(65)	Compound constituents	Compound	Gloss
	<i>sagara</i> ‘word’ <i>hayyo’ooma</i> ‘wisdom/system’ →	<i>saga’l hayyo’ooma</i>	‘morphology’
	<i>gixo’o</i> ‘poem’+ <i>hayyo’ooma</i> ‘wisdom’ →	<i>gixohayyo’ooma</i>	‘poetry’
	<i>kitaaba</i> ‘writing’ + <i>hayyo’ooma</i> ‘wisdom’ →	<i>kitaaphphi hayyo’ooma</i>	‘literature’
	<i>sagachcho</i> ‘sound’ <i>hayyo’ooma</i> ‘wisdom’ →	<i>sagachchi hayyo’ooma</i>	‘phonetics’
	<i>xumsagara</i> ‘phrase’ <i>hayyo’ooma</i> ‘wisdom’ →	<i>xumsaga’l hayyo’ooma</i>	‘syntax’

The expert in an area of knowledge is referred to as *hayyo’o* whereas the area of knowledge itself is designated by affixation of abstract nominal marker *-oom-a* to the word *hayyo’o*. The basic meaning of *hayyo’o* refers to a person with highest knowledge, wisdom, or expertise. Hence, the term is productively used to address a person with certain expertise or specialization, for instance, *shallago’i hayyo’o* (expert of mathematics) ‘mathematician’.

The term for linguistics could also be designated in the same pattern to other field of knowledge such as morphology or phonetics by adding the term *hayyoo’ooma*. Thus, rather than using the borrowed term *lingustikisa* it could be designated as *suu’m hayyo’ooma* (of language wisdom). If this term is employed, it would be more transparent than the loanword. Similarly, it is possible to address a person who is a linguist by using the term *suu’m hayyo’o* than using loanword *lingusta*.

The term *sono’o* is also employed to designate area of knowledge as it is used in naming the word ‘grammar’ i.e., *suu’m sono’o* (of tongue+system) in the language. In some instances, the word ‘morphology’ is also coined with the term *sono’o* (for instance, *saga’l sono’o* (of word+system)) which is an alternative designation of *saga’l hayyo’ooma*. Moreover, a number of terms such as *takixxi sono’o* (of point+system) ‘punctuation marks’, *nervi sono’o* (of nerve+system) ‘nervous system’, *eelliinchi sono’o* (of sun+system) ‘solar system’, *dannaphphi*

*sono'o* (of common+system) 'communal society', etc. are designated to show how something functions as a system or field of knowledge.

Moreover, the term *kura* is productive in coining various terms. For instance, it is employed as a second constituents of the compounds such as *beykura* (position+indicator) 'adposition', *maalalkura* (surprise+indicator) 'exclamation mark', *gabalkura* (boundary+indicator) 'ordinal (number)', *xigkura* (number+indicator) 'cardinal (number)', *metoku'la* (< *meto'o* + *kura*) (problem+indicator) 'application' and very recently coined term for 'tense' is *ammankura* (time+indicator).

#### 4.2.2.1.4 Summary of compound types in Hadiyya

Generally, in Hadiyya, different combinations of word categories mainly result in nominal compounds followed by adjectival and verbal compounds. The verbal compound in Hadiyya limited to ideophonic construction. In relation to various possible combinations of word categories, Hadiyya compounds are summarized in Table 38 below.

*Table 38: Inventory of compound types based on word categories*

		Right-hand constituent			
Left-hand constituent		Noun	Verb	Adjective	Adposition
	Noun	<i>afardakka</i> 'plateau'	<i>matfira</i> 'regular'	<i>doollaba</i> 'modern'	<i>ilbiira</i> 'clear/open'
	Adjective	<i>lobwongira</i> 'ship'	<i>lasgata</i> 'backward'	<i>hundiqaaphpha</i> 'all-inclusive'	—
	Adposition	<i>aadgosha</i> 'gravity'	—	—	<i>iimane</i> ( <i>iim+hane</i> ) 'heaven'
	Ideo.	—	<i>qadd aa'ukko</i> 'quoted/cited'	—	—

As compared to other word classes, the combination of adposition and noun, adjective and verb is very rare or not productive. The combination between N+N, N+A, N+V, A+N, or A+V is a productive combination of word forms. In Table 38, *iimane* (< iim+hane) (up+on) ‘sky, heaven’ has the combination of ADP+ADP which results in the lexicalized nominal compound.

#### 4.2.2.2 Complex compounds

In previous sections, compounds with two constituents have been discussed. There are also some instances of compounds with more than two constituents. As to Sager & Nkwenti-Azeh (1989:13), “compounds do not only consist of two elements, but multiple compounds of 3 or 4 elements are quite frequent in certain technical languages.” This feature exists in Hadiyya compounds in which there is more than two constituents either in the pattern of (x + (y + z)), or ((x + y) + z), or ((a + b) + (c + d)). In line with this pattern, some new lexical items or technical terms are shown in Table 39 (a and b).

*Table 39: Complex compounds in Hadiyya*

Pattern of combinations	Compound	Gloss
(a) (x + (y + z))		
( <i>akkiwwita</i> + ( <i>saso</i> + <i>midaado</i> )) →	<i>akkiwwit sasmidaado</i>	‘acute triangle’
‘acute’      ‘three’      ‘side’	(acute+triangle)	
( <i>siggaalla</i> + ( <i>ayyara</i> + <i>qooxo</i> ’o)) →	<i>siggaalli ayya’l qooxo</i> ’o	‘cold climate zone’
‘cold’      ‘air’      ‘dissected portion’	(cold+ air+zone)	
( <i>lambe’e</i> + ( <i>nerva</i> + <i>sono</i> ’o)) →	<i>lambe’i nervi sono</i> ’o	‘central nervous system’
‘center’      ‘nerve’      ‘order’	(central+ nerve+system)	
( <i>shiqqeena</i> + ( <i>giphite</i> + <i>mare’e</i> )) →	<i>shiqqueen giphixxi mare’e</i>	‘semi-colon’
‘greater’      ‘pause’      ‘mark’	(higher + pause+mark)	
( <i>doo’l</i> + ( <i>woro</i> + <i>angila</i> )) →	<i>doo’l worangila</i>	‘alternate interior angle’
‘alternate’      ‘inside’      ‘angle’	(alternet+internal+angle)	



Pattern of combinations	Compound	Gloss
(b) ((x + y) + z)		
(( <i>lamo</i> + <i>qara</i> ) + <i>sagara</i> ) → 'two' 'direction' 'word'	<i>lamqar sagara</i> (bi-direction + word)	'metaphor'
(( <i>lamo</i> + <i>gudo</i> ) + <i>issaancho</i> ) → 'two' 'equal' 'doer'	<i>lamgud issaancho</i> (bisect+maker)	'bisector'
(( <i>foochcho</i> + <i>illichcho</i> ) + <i>membereena</i> ) → 'life' 'center' 'membrane'	<i>foochchillichchi membereena</i> (cell+membrane)	'cell membrane'
(( <i>heera</i> + <i>uulla</i> ) + <i>baxxancha</i> ) → 'many' 'earth' 'section'	<i>heeruulli baxxancha</i> (world+section)	'continent'
(( <i>heera</i> + <i>uulla</i> ) + <i>qaaphpha</i> ) → 'many' 'earth' 'encompass'	<i>heeruulli qaaphpha</i> (world+encompass)	'world-wide'

A pair of words under bracket are immediate constituents of complex compounds. In Table 39 (a), for instance, in *akkiwwit sasmidaado* 'acute triangle' *saso+midaado* (three+side) is immediate constituent that forms a compound in first level. This compound in turn forms a more complex compound by adding the word *akkiwwit* [Eng.] 'acute' which is used as a modifier of base compound *sasmidaado* (three+side) 'triangle'. Similarly, as presented in Table 39 (b), *lamo* and *qara* combine first to form a compound *lamqara* (two+direction) and then additional constituent (i.e., *sagara* 'word') is added to form *lamqar sagara* (bi-direction + word) 'metaphor'. There are also English loanwords such as *ayya'l* 'air', *nervi* 'nerve', *angila* 'angle' and *membereena* 'membrane' incorporated as part of compound constituents.

Some compounds in Hadiyya could also have constituents of four words. In this kind of construction, the immediate constituents in the compounds are  $(a+b)$  and  $(c+d)$ . Finally, the pair of combination forms the whole compound  $((a + b) + (c + d))$ . Examples listed in (66) show this phenomenon.

(66)	((a + b) + (c + d))	Compound	Gloss
	((akkiwwit + angil-aam) +(saso+ midaado)) →	akkiwwitangilaam sasmidaado	
	‘acute’ ‘angle-with’ ‘three’ ‘side’	(acute-angle-having+triangle)	‘acute angle triangle’
	((sooro +gudo) + (sooro+midaado)) →	soorgud soormidaado	
	‘four’ ‘equal’ ‘four’ ‘side’	(four-equal+four-side)	‘rhombus’
	((saso + gudo) +( saso + midaado)) →	sasgud sasmidaado	
	‘three’ ‘equal’ ‘three’ ‘side’	(three-equal+three-side)	‘equilateral triangle’
	((ille + issa) + (tiiro + issa)) →	illissitiirissa	
	‘eye’ ‘doer’ ‘mind’ ‘doer’	(eye-doer-mind-doer)	‘matured person’
	((leho + hoora) + (heechcha + hoora ))→	lehoorheechchoora	
	‘death’ ‘deprive’ ‘life’ ‘deprive’	(death-deprive-life-deprive)	‘very difficult situation’

As seen in (66), in one instance any of the constituents is not repeated while in the remaining examples one of the constituents did. For example, in *(sooro + gudo) + (sooro + midaado)*, the first constituent (*sooro*) is repeated. In the case of *(ille + issa) + (tiiro + issa)*, the second constituent (*issa*) is repeated. The four word constituents such as *illissitiirissa* ‘matured (person)’ and *lehoorheechchoora* ‘very difficult situation’ are written as single words.

#### 4.2.2.3 Defining features of Hadiyya compounds

Compounds have defining features that distinguish them from phrasal constructions. In this subsection, the phonological, morphological, syntactic and semantic features of Hadiyya compounds will be discussed.

Phonological modifications such as loss of segments occur in the compound word formation process. For instance, in Hadiyya when the second constituent of a compound begins with a consonant grapheme <h>, it will be dropped in the compound form, as in:

(67)	Words (constituents)	Compound	Gloss
	<i>shuda</i> ‘sharpen tip’ + <i>haqqa</i> ‘wood’ →	<i>shudaqqa</i>	‘comb’
	<i>gaanje</i> ‘neck’ + <i>haqqa</i> ‘wood’ →	<i>gaanjaqqa</i>	‘yoke’
	<i>heeda</i> ‘axe’ + <i>haqqa</i> ‘wood’ →	<i>heexxaqqa</i>	‘wooden part of axe’

As seen in (67), the compound *heexxaqqa* (axe+wood) ‘wooden part of axe’ is originally possessive compound. The first constituent *heeda* ‘axe’ is changed into *heexxi* ‘of axe’ to show possession. In order to become lexicalized compound, it is fused as one word by dropping the grapheme <h> from the second constituent and <i> from the word final position of the first constituent (<*heexxi*>). The dropping of vowel <i> is also due to vowel elision process which occurs at word boundary (see also example 51). Additional phonological modifications are described as compounding strategies when different types of compounds are discussed in the following sections.

In relation to morphological features, compounds could also take derivational morphemes as simplex words to form a new word. For instance, Hadiyya derivational morpheme *-oom* is suffixed to the compounds to form abstract nominal compound words, as in:

(68)	<b>Base compound</b>	<b>Derived compound</b>	<b>Gloss</b>
	<i>anga+haraara</i> (hand+wide) ‘generous’	<i>angaraara-oom</i> → <i>angaraaroom</i>	‘generosity’
	<i>higa + qoora</i> (best+wise) ‘civilized’	<i>higqoora-oom</i> → <i>higqooroom</i>	‘civilization’

Another morphological feature which helps to identify compounds from phrasal or genitive constructions is the characteristics of inseparability. If a certain construction is compound, it does not allow an intervening element between constituents. For instance, grammatical morphemes cannot be inserted between the constituents, as depicted in (69) and (70):

(69a)	<i>xinti sawwit-<b>uww</b>-</i> beginning idea-PL	‘concepts’
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- (b) \**xint-uwwi sawwite*                      ‘\*concepts’  
beginning-PL idea
- (70a) *angi xulbe’-oom-*                      ‘the handball’  
hand ball-the
- (b) \**ang-oom xulbe’e*                      ‘\*the handball’  
hand- the ball

As indicated in the examples (69b) and (70b) Hadiyya compounds do not allow the insertion of plural marker *-uww* or the definiteness marker *-oom*<sup>61</sup> between the compounding elements. On the other hand, the addition of inflectional morphemes (e.g., *-uww* and *-oom*) on the head of a compound (in 69a and 70a) is another morphological feature of compounds. In other words, from the compound constituents, modifier could not bear the inflectional morphemes which can be considered as an evidence for the inseparability test of compounds.

Another defining feature of compounds is the way they behave in syntactic constructions. Accordingly, compound words behave like simplex words in syntax. Compare the following two sentences:

- (71a) *Xummeeb beeto siidukko.*  
*Xummeebo* boy got                      ‘Xummeebo recognized the boy.’
- (b) *Xummeeb aga’n migo’o siidukko.*  
*Xummeebo* of monthly+payment got                      ‘Xummeebo was paid his salary.’

The underlined simplex word in (71a) and the compound word in (71b) have appeared in the same syntactic position. This implies that a compound word can replace the simplex word in the same context. As shown in the example 71a and 71b, with regard to the syntactic category of the simplex and compound words, both have the same syntactic category, i.e., nominal category.

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<sup>61</sup> The morpheme *-oom* functions as definiteness marker in addition to form abstract nominal compounds.

Therefore, this can be an evidence that Hadiyya compounds operate as simplex words in syntactic constructions.

Semantically, the meaning of compounds is different from its constituents (except appositional<sup>62</sup> compounds). Compounds have a single unit of reference as simplex words. For instance, the constituents in *heera* ‘all’ + *uulla* ‘earth’ has new meaning in the compound form, i.e., *heeruulla* (all+earth) ‘world’. In this example, the meaning of the compound as a whole is determined by the right-hand element in the compound.

#### 4.2.2.4 Spelling aspect of compounds

Hadiyya has two forms of writing compounds. The first and the most common way of writing compounds is writing them as a single lexical item with no space or hyphen between the constituents since hyphen is not suggested in the language to write compound words. Another option is writing compounds as two separate words. Compounds which are written as two separate words are possessive compounds, as in *aga’n migo’o* (of monthly+payment) ‘salary’ and *angi xulbe’e* (of hand+ball) ‘handball’. When compounds, such as *aga’n migo’o* (of monthly+payment) ‘salary’, *gii’l buchcha* (of fire+soil) ‘ash’, *la’m ejja* (of two+addition) ‘intersection’, etc. are transcribed phonemically –*i* is attested in the final position of the first constituent, as in /ʔagaʔni/ ‘of monthly’, /giiʔli/ ‘of fire’, /laʔmi/ ‘of two’, respectively. However, it is consistently omitted in the orthography of such words. On the other hand, for compounds which are written as two separate words, there is no overt marker of indicating compound words at the orthographic level.

In Hadiyya, there are some compounds which have gone through transitional changes through time. For instance, some compounds that were previously written as two separate words are being written as one word recently. This change is facilitated due to frequent usage of those compound words. The following examples in (72) illustrate this transition.

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<sup>62</sup> In appositional compounds, the meaning of compounds is partially compositional (i.e., its meaning comes from both elements).

(72)	As two words		As one word	Gloss
	<i>xum sagara</i> 'assembled' 'word'	→	<i>xumsagara</i>	'phrase'
	<i>xum sawwite</i> 'assembled' 'idea'	→	<i>xumsawwite</i>	'composition'
	<i>gag xana</i> 'self' 'able'	→	<i>gagxana</i>	'independent'
	<i>summi bikke</i> 'name' 'substitute'	→	<i>sumbikke</i>	'pronoun'
	<i>heechchi qaanqa</i> 'life' 'wisdom'	→	<i>heechqaanqa</i>	'culture'

Even though the orthographic rule for writing compounds is clearly stated, there are some inconsistencies observed in writing Hadiyya compounds. The reason for such inconsistencies could be attributed to the lack of linguistic knowledge among the textbook writers in relation to identifying compound words from phrases. The following compound words need be written consistently in Hadiyya according to the general rule of writing compounds in the language. Therefore, consider the following compound words that have been written inconsistently with the proposal of how they should be written according to the general convention of writing compounds in Hadiyya.

*Table 40: Examples of inconsistently written Hadiyya compounds*

Inconsistently written form	The rule based form	Rule of compounding	Gloss
<i>aggiishshi sagara</i>	<i>aggiishsagara</i>	deletion of final cv of 1 <sup>st</sup> word	'loanword'
<i>aggiishshi mare'e</i>	<i>aggiishmare'e</i>	deletion of final cv of 1 <sup>st</sup> word	'quotation mark'

Inconsistently written form	The rule based form	Rule of compounding	Gloss
<i>beyyikura</i>	<i>beykura</i>	deletion of final <i>cv</i> of 1 <sup>st</sup> word	‘adposition’
<i>heechchi qaanqa</i>	<i>heechqaanqa</i>	deletion of final <i>cv</i> of 1 <sup>st</sup> word	‘culture’
<i>illibiuro</i>	<i>ilbiuro</i>	deletion of final <i>cv</i> of 1 <sup>st</sup> word	‘explicit or bold’
<i>lokkixulbe’e/ lokki xulbe’e</i>	<i>lokkulbe’e</i>	deletion of final <i>cv</i> of 1 <sup>st</sup> word	‘football’
<i>mannigatte/manni gatte</i>	<i>mangatte</i>	deletion of final <i>cv</i> of 1 <sup>st</sup> word	‘social (life)’
<i>uulli meeggaro’o</i>	<i>uulmeeggaro’o</i>	deletion of final <i>cv</i> of 1 <sup>st</sup> word	‘latitude’
<i>uulli woxabaca</i>	<i>uulwoxabaca</i>	deletion of final <i>cv</i> of 1 <sup>st</sup> word	‘longitude’
<i>xum sagara</i>	<i>xumsagara</i>	deletion of terminal <i>v</i> of 1 <sup>st</sup> word	‘phrase’
<i>xum sawwite</i>	<i>xumsawwite</i>	deletion of terminal <i>v</i> of 1 <sup>st</sup> word	‘composition’
<i>gag xana</i>	<i>gagxana</i>	deletion of terminal <i>v</i> of 1 <sup>st</sup> word	‘independent’
<i>summi bikke</i>	<i>sumbikke</i>	deletion of final <i>cv</i> 1 <sup>st</sup> word	‘pronoun’

The listed compound words under first column show inconsistently written forms in different Hadiyya literatures<sup>63</sup> whereas those under the second column are the proposed rule-based forms. Compound words such as *heechchi qaanqa*, *mannigatte/manni gatte*, *aggiishshi mare’e*, etc. are inconsistent to the rule of compound words as well as they are not economical as compared to the suggested forms in column two. Thus, the rule based compound words such as *heechqaanqa*, *mangatte*, and *aggiishmare’e* are economical.

As portrayed in Table 40 most of the inconsistent ways of writing compound word appeared in the form of compounds which have deletion of final *cv* of the first constituents. In some cases for instance, in *xuma + sagara* → *xum sagara*, and *xuma + sawwite* → *xum sawwite*, the final vowel of the first constituent is deleted though it is written as two separate words. Hence, it

<sup>63</sup> The literature refers to the selected textbooks and dictionary for the present study (see Methodology section).

should be written as *xuma + sagara → xumsagara* and *xuma + sawwite → xumsawwite* to maintain consistency of writing compound words.

#### 4.2.3 Comparison between compounds in Amharic and Hadiyya

Compounding is productive method of forming new lexical items or terms in Amharic and Hadiyya. The defining features of compounds were discussed by providing evidences from both languages in relation to phonological, morphological, syntactic and semantic features which distinguish compounds from phrasal forms.

The constituents of compounds in both Amharic and Hadiyya involve mainly the categories of nouns, adjectives, verbs and ideophones (in the limited instances, i.e. when it combines with verbs to form verbal compounds). Adpositions as constituent of compounds have been attested in Hadiyya whereas they have not been attested in Amharic. In relation to compound types, nominal, adjectival and verbal compounds have been identified in Amharic and Hadiyya. Of the three types of compounds, nominal compounds are most productive in both languages followed by adjectival and verbal compounds. Verbal compounds are only attested in the combination of ideophones with limited coverbs in both Amharic and Hadiyya.

As regards semantic head, compounds are categorized in Amharic and Hadiyya into endocentric (in which the head determines the semantics of a compound), appositional (in which both elements contribute to the meaning of a compound) and exocentric compounds (in which the meaning is out of the constituents). The first type of compounds are very common whereas the second and third types are very limited in both languages. In Amharic, endocentric compounds are both left-headed and right-headed. In more detail, compounds that behave in Ge'ez grammatical pattern are left-headed whereas those formed following Amharic syntactic pattern are right-headed. In the case of Hadiyya, the semantic head of an endocentric compound is the right-hand constituent.

In relation to compounding strategies, some compounds in Amharic are formed by employing a linker between the constituents. Amharic, for this purpose, uses /-ə/ as a linker particularly in



compounds formed in Ge'ez grammatical pattern. On the contrary, Hadiyya compounds do not use a linker between the constituents. Amharic has also juxtaposed compounds, i.e., without modifying combining elements whereas Hadiyya use with some modification such as vowel modification of the first constituents (*anga* + *xulbe'e* → *angi xulbe'e* (of hand+ball) 'handball'). This kind of compound construction has a similar structure to genitive (syntactic) phrase; however, semantically, it has single unit of reference as a simplex lexical item.

Formal changes such as vowel modification, deletion of segments, vowel elision, etc. are exhaustively used in Hadiyya compounds as compared to Amharic. Following the formal changes like deletion of segments in word boundary, majority of the compounds are written as single lexical items in Hadiyya with the exception of possessive compounds which are written as separate words. In most cases, Amharic compounds are written as separate words except in recently written Amharic textbooks. Though it is not common, in some instances Amharic compounds are written by using hyphen between the constituents. In this case, the use of hyphen serves as a marker of compound in orthographic representation.

### ***4.3 Abbreviation and blending***

Abbreviation is a broader concept which includes acronyms and initialisms (Plag, 2003:127). As stated in Felber (1984:178) abbreviation could be created when a single term is written in short form by omitting certain part of the term (i.e., a letter or letters). On the other hand, as to Lieber (2009:52), "blending is a process of word formation in which parts of lexemes that are not themselves morphemes are combined to form a new lexeme." The methods such as acronyms and blendings are rarest mechanisms of lexical enrichment in Ethiopian languages (Zealelem, 2009:80). However, some instances of designation of concepts through acronyms and blendings are discussed in the following sections.

#### **4.3.1 Abbreviations and blendings in Amharic**

Abbreviations are usually formed by taking initial letters of multiword sequences to form a new word (Plag, 2003:126), and it could be specified as acronyms and initialisms, as in (73):

(73)	Full form	Abbreviation	Gloss
a.	አዲስ አበባ <i>addis ababa</i>	አ.አ <A.A>	‘Addis Ababa’
	ዓመተ ምህረት <i>aməṭə mihirət</i>	ዓ.ም <a.m>	‘Ethiopian calendar’
	ዓረፍተ ነገር <i>arəṭə nəgər</i>	ዓ.ነገር <a.nəgər>	‘sentence’
	ጽህፈት ቤት <i>s’ihifət bet</i>	ጽ.ቤት <s’.bet>	‘office’
b.	እንደ አውሮፓ አቆጣጠር <i>ində awiropṗa</i>	እ.አ.አ <i.a.a>	‘European calendar’
	ወላጅ መምህራን ህብረት <i>wolaḡ məmmihiran hibrət</i>	ወ.መ.ህ <wə.mə.h>	‘parent teachers association’
	የመልእክት ሳጥን ቁጥር <i>yəmaliṛikt sat’in qut’ir</i>	መ.ሣ.ቁ <mə.sa.qu>	‘p.o.box’
	የኪራይ ቤቶች አስተዳደር ድርጅት <i>yəkiray betočč astədadar diriḡḡit</i>	ኪ.ቤ.አ.ድ <ki.be.a.d>	‘Rental Houses Administrative Enterprise’

As shown in (73a and b), the abbreviated forms are composed of two words and three words, respectively. These forms are commonly written in Amharic with period. In compound words such as ዓረፍተ ነገር *arəṭə nəgər* ‘sentence’ and ጽህፈት ቤት *s’ihifət bet* ‘office’ the first words are abbreviated as ዓ. ነገር <a.nəgər> and ጽ.ቤት <s’.bet>, respectively. When the initial word begins with the morpheme የ- *yə-* in the full form, it will be dropped in the abbreviated form, as in የመልእክት ሳጥን ቁጥር *yəmaliṛikt sat’in qut’ir* መ.ሣ.ቁ <mə.sa.qu> ‘p.o.box’. In data (73), except ወ.መ.ህ <wə.mə.h> which can be pronounced as a word ወመህ *wəməh* ‘parent teachers association’ the abbreviated forms are pronounced letter by letter. Specifically the term ወመህ *wəməh* ‘parent teachers association’ can be considered as acronym since it will be read as a word. In other cases, the abbreviated forms can be categorized under initialisms.

On the other hand, when abbreviated loanwords are incorporated into Amharic, they can either be adapted as acronyms or as initialisms. For instance, the term ኤድስ *eds* ‘AIDS’ adapted and read as a word while terms such as ዲ.ዲ.ቲ. <di.di.ti.> (DDT), ጂ.ፒ.ኤስ <gi.pi.es.> (GPS) and ኤች.አይ.ቪ. <eč.ay.vi.> (HIV) are adapted as initialisms and pronounced letter by letter. Apart from abbreviating multiword sequences, abbreviation can also be formed by taking the initial and the

final letters, as in ደ.ር (<D.r>) < ደከተር *doktar* ‘Doctor’, ወ.ሮ (<w.ro>) < ወይዘሮ *woyzəro* ‘Mistress’, and ወ.ሪት (<w.rit>) < ወይዘሪት *woyzərit* ‘Miss’.

Even though it is not productive, blending is another mechanism of shortening words in Amharic. It is relatively widely used in the designation of Amharic scientific and technological concepts which are suggested by the Academy of Ethiopian Languages (1996).

(74)	Combination of words	Blending	Gloss
a.	ባእድ + እጽ ( <i>baʾid + ʾiss</i> ‘foreign + plant’)	→ ባድጽ <i>badiss</i>	‘exotic plant’
	ባክቴሪያ + በል ( <i>bakteriya + bəll</i> ‘bacteria + eater’)	→ ባክቴበል <i>baktebəll</i>	‘bacteriophage’
b.	ቁልቁል + ቆጠራ ( <i>qulqul + qot’əra</i> ‘downward + counting’)	→ ቁልጠራ <i>qult’əra</i>	‘counting down’
	ማንሻና + ማውረጃ ( <i>manša-nna + mawrəḡa</i> ‘hoist- and + reducer’)	→ ማንሻረጃ <i>manšarəḡa</i>	‘crane’
	ወንዴ + ብቻ ( <i>wonde + bičča</i> ‘male + only’)	→ ወንዴቻ <i>wondečča</i>	‘staminate’

In (74a) existing compounds, which have modifier-head relationship, are shortened to form a new word. For instance, in ባክቴሪያ + በል *bakteriya + bəll* (bacteria + eater) the first constituent (*bakteriya*) modifies the head *bəll* ‘eater’ and this compound more compressed to form a blended word ባክቴበል *baktebəll* ‘bacteriophage’. In contrast to the abbreviated compounds or blends in (74a), the constituents in (74b) are not identified as compounds in their full form. In the blended form the meaning comes from both elements, as in ማንሻረጃ *manšarəḡa* (uplifter-and + sth. to lower) ‘crane’. In this example, the meaning refers to both *manšanna* ‘uplifter’ and *mawrəḡa* ‘instrument to lower something down’. Semantically, such blends resemble copulative compounds in which the meaning of a compound comes from both constituents (see Plag, 2003:123).

The method of blending is not prevalent in lower grade level (grade 1-4) textbooks. In (75), except the blended form for the literature concept ‘setting’ some linguistic concepts are designated via blending for the higher level. Hence, the method of blending is not extensively used in lower grade level as compared to other methods of lexical elaboration. The following

data are extracted from Baye (2000 E.C) to exemplify mechanism of blending in Amharic linguistic terms:

(75)	ፍትግ + እግድ ( <i>fittig</i> + <i>iggid</i> ‘fricative + stop’)	→	ፍግድ <i>figgid</i>	‘affricate’
	ድህረ + ላንቃ ( <i>dihirə</i> + <i>lanqa</i> ‘post + palate’)	→	ድላንቃ <i>dilanqa</i>	‘alveo-palatal’
	መቼ + የት ( <i>məčē</i> + <i>yət</i> ‘when + where’)	→	መቹት <i>məčət</i>	‘setting’
	ከፍል + አናባቢ ( <i>kəfil</i> + <i>annababi</i> ‘semi + vowel’)	→	ከፍናቢ <i>kəfnabi</i>	‘semi vowel’

#### 4.3.2 Abbreviation and blending in Hadiyya

Abbreviation and blending usually appear in the written form. In Hadiyya, even though the methods are not as productive as another lexical enrichment mechanisms, there are some instances of using the methods. The data in (76), are some examples of abbreviation in Hadiyya:

(76)	English	Hadiyya full form	Abbreviation
a.	adjective	<i>caakkisaancho</i>	c.
	conjunction	<i>edansancho</i>	e.
	verb	<i>goollaancho</i>	g.
b.	et cetera	<i>mulkeeno</i>	mk.
	example	<i>kobi’lishsha</i>	kb.
	Miss	<i>Aayyichche</i>	Ay.
	Mister	<i>Abbaachchi</i>	Ab.
	plural	<i>duta</i>	dt.
	singular	<i>matandara</i>	mt.

In the example (76a) terms are abbreviated into single letter whereas in (76b) they are abbreviated into two letters. Some abbreviations have been written inconsistently. For instance, the term *mulkeen* ‘et cetera’ were abbreviated as *m.k.*, *mk.*, *M,k.*, *Mk.*, *MK*, and *M,K*. Of these forms *mk.* is appropriate form since the source of abbreviated word is one word and has similar

form with other words presented in (76b). The term of addressing *Abbaachchi* ‘Mister’ and *Aayyichche* ‘Miss’ were written as *Abb.* and *Ayy.* previously. However, recently these are replaced by *Ab.* and *Ay.*, respectively. The former abbreviation is unnecessarily long whereas the latter one is economic and regular one just like the abbreviated words which are mentioned in (76b).

Abbreviation<sup>64</sup> can also be formed in a complex word level which can alternatively be terms as acronyms. As to Bauer (2003:47), acronyms refer to the coinage of words from the initial letters of the words in a name, phrase or title. Examples of initialisms and acronyms are presented in (77a and b), respectively.

(77)	Acronym	Full form
a.	HZShOM	Hadiyyi Zoo’n Shiqqeen Oogaxxi Mine ‘Hadiyya Zone Higher Court’
	DGGMGQ	Dabuuphphi Giir Giichchi Minaadaphphi Gassi Qooxo’o ‘Southern Nation Nationality People Region’
	HZFA	Hadiyyi Zoo’n Fooliis Awwonsa ‘Hadiyya zoon Police Department’
	HZLM	Hadiyyi Zoo’n Losisaa’n Mateeyya ‘Hadiyya zoon Teachers’ Association’
b.	IFDI	Itophphe’i Federaalaam Dimokraase’aam Irippabiliika ‘Federal Democratic Republic of Ethiopia’
	AMX	Afriiqqi Mateeyyoo’m Xaaxxite ‘Organization of African Union’
	FEM	Fayya’oo’m Egechchi Ministeera ‘Ministry of Health’

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<sup>64</sup> Alphabetic abbreviation is also called initialisms.

In addition to the abbreviation technique of acronyms and initialisms, few instances of blending are attested in Hadiyya. Though this mechanism is not productive, the following blends have appeared in recently developed terms, as in (78):

(78)	Combination of words		Blending	Gloss
a)	<i>fir</i> imma ‘raising’ + <i>dill</i> imma ‘falling’	→	<i>firdilla</i>	‘intonation’
b)	<i>xiinxo</i> ‘o’ ‘syllable’ + <i>sag</i> ara ‘word’	→	<i>xiinxara</i>	‘morpheme’
c)	<i>kitaab</i> imma ‘writing’ + <i>seera</i> ‘rule’	→	<i>kit-seera</i> <sup>65</sup>	‘spelling’

The combination of parts of words can be illustrated by the formula of AB + CD, in which AB refers to the parts of the first word whereas CD stands for the parts of the second word. In (78a), the structure of blend has AC pattern where the initial syllables are combined. On the other hand, in (78b) the blend is formed by the combination of AD structure. In other words, the initial part of the first word is combined with the final part of the second word. In blending, one of the two forms could also appear in its full form, as in (78c) *kitaabimma* + *seera* → *kit-seera* ‘spelling’. According to this example, the word *seera* ‘rule’ is not shortened, thus, C is null.

#### 4.3.3 Comparison between abbreviation and blending in Amharic and Hadiyya

Abbreviation and blending often appear in the written language. Compared to other method of lexical elaboration, abbreviation and blending are less productive in Amharic and Hadiyya. The abbreviated forms of two or three words are usually written in Amharic with period whereas without period in Hadiyya. The genitive marker *yə-* will be dropped in the abbreviated forms in Amharic, which is not the case in Hadiyya since there is no prefix that denote the genitive marker. Blending is a compound like construction; but it is more compressed by dropping part of the constituents in both Amharic and Hadiyya. Amharic employed more instances of blending compared to Hadiyya for the reason that it is more developed regarding lexical enrichment as a result of its historical advantage. In both Amharic and Hadiyya, blending is less prevalent particularly in lower grade level (grade 1-4) school textbooks.

<sup>65</sup> The word *kit-seera* is hyphenated in order to avoid the confusion in reading due to the sequence of digraph *ts* /*s*/.

## CHAPTER FIVE: LANGUAGE EXTERNAL MEANS OF LEXICAL ELABORATION

This chapter presents language external means of lexical elaboration in Amharic and Hadiyya. The method enables a language to fill lexical gap by employing language external means such as borrowing and loan translation. Language external means is basically used when language internal means does not satisfy in the lexical elaboration processes. In the following sections, borrowing and loan translation in Amharic and Hadiyya are described.

### 5.1 Borrowing

Borrowing is one of the most productively used techniques of lexical elaboration in Amharic and Hadiyya. The term borrowing refers to the incorporation of features (e.g., lexical items) from other language (Winford, 2003:12). In borrowing, hence, there is a source language (also called *donor language*) that provides lexical items and a recipient language (also referred to as *target language*) which borrows lexical items (cf. Winford, 2003:12). The process of borrowing is basically more complex, however, the present study is only concerned with lexical elaboration. In borrowing, as opposed to semantic extension, compounding and blending, language external sources are used for the purpose of lexical elaboration.

There is adaptation or nativization process in the incorporation of loanwords to the recipient language. According to Sager & Nkwenti-Azeh (1989:22-23), in the nativization process of loanwords there are formal modifications which refer to an alternation of the phonological, morphological and orthographical forms to facilitate the integration of loanwords to the sound and spelling conventions of the recipient language.

The recipient languages, Amharic and Hadiyya, borrowed new concepts related to science, technology, mathematics, politics, etc. from various sources. Most loanwords conform to the phonological system of the recipient languages whereas some loanwords maintain the form of the source language. The motivation for the latter could probably be due to direct transliteration of the foreign terms. In the following sections, the mechanisms of loanword integration from various source languages are presented as methods of lexical enrichment in Amharic and Hadiyya.

### 5.1.1 Borrowing in Amharic

Amharic has borrowed a large number of words from different languages. According to Takkele (2000:91), Amharic has borrowed various words from English, Arabic, French and Greek through cultural contacts. The contact with Greek involves indirect or distant contact because Greek loanwords are incorporated into Amharic via Ge'ez (see 5.1.1.3.1.4). A number of Italian words are introduced into Amharic as the result of occupation (1935-1941) which involves direct language contact (Takkele, 2000:91). In other kind of language contacts such as foreign language instruction and mass media, the settings involve distant contact (cf. Winford, 2003:30-31). As similarly explained by Amsalu (1980:2), Amharic borrowed a number of lexical items from foreign languages due to the influence of religion and modern civilization. With regard to religion, Amharic has borrowed lexical items from Greek through Ge'ez. Various terms from English were borrowed mainly to express scientific and technological concepts. From Ethiopian languages, Ge'ez is the major source of borrowing in Amharic.

#### 5.1.1.1 Loanword integration mechanisms in Amharic

##### 5.1.1.1.1 Unmodified borrowing

One way of incorporating loanwords is borrowing without modification. For such loanwords, phonological adjustments are not required. The following examples which show unmodified loanwords in Amharic are taken from Amsalu (1980:6).

*Table 41: Unmodified foreign loanwords in Amharic*

Amharic	Source language	Source word	Gloss
ባንክ <i>bank</i>	English	<i>bank</i>	'bank'
ቦርሳ <i>borsa</i>	Italian	<i>borsa</i>	'bag'
ቴሌፎን <i>telefon</i>	English/French	<i>telephone</i>	'telephone'
አውቶሞቢል <i>awutomobil</i>	French	<i>automobile</i>	'a car or motorcar'
ክሌንደር <i>kalendär</i>	English	<i>calendar</i>	'calendar'
ካርታ <i>karta</i>	Italian	<i>carta</i>	'map'
ክላሰር <i>kilasär</i>	French	<i>classeur</i>	'folder'



Amharic	Source language	Source word	Gloss
ኮት <i>kot</i>	English	<i>coat</i>	‘coat’
ፊርማ <i>firma</i>	Italian	<i>firma</i>	‘signature’
ጋዝ <i>gaz</i>	English	<i>gaz</i>	‘gas’
ስልክ <i>silk</i>	Arabic	<i>silk</i>	‘telephone’

In Table 41, loanwords from English, French, Italian and Arabic are incorporated into Amharic without modification for the reason that the same phonological structure exists in the recipient and source languages.

#### 5.1.1.1.2 Modified borrowing

##### 5.1.1.1.2.1 Vowel adaptation

Non-existent English vowels are adapted to the phonological pattern of Amharic by replacing them with the nearest similar vowels in Amharic. For instance, the English vowel /æ/ is almost always replaced by /a/. In most of the cases, the English vowel /ə/ is replaced by /e/ though in some instances it is replaced by /a/, /i/, or /o/. The replacement of /ə/ with /o/ is probably due to vowel harmony, as in /teknɒlədʒi/ → ቱኬኖሎጂ <tekenolodʒi> ‘technology’. The vowel /i/ is replaced by /e/, /ə/ or /i/ as in Table 42:

*Table 42: Adaptation of English vowels in Amharic*

English	Amharic	Vowel replacement	Gloss
/brʌʃ/	→ ብሩሽ /biruʃ/	/ʌ/ → /u/	‘brush’
/bʌdʒɪt/	→ ባጀት /badʒət/	/ʌ/ → /a/, /ɪ/ → /ə/	‘budget’
/pækɪdʒ/	→ ፓኬጅ /pakedʒ/	/æ/ → /a/, /ɪ/ → /e/	‘package’
/kæpɪtəl/	→ ካፒታል /kapital/	/æ/ → /a/, /ɪ/ → /i/, /ə/ → /a/	‘capital’
/teləgræm/	→ ቱሌግራም /telegiram/	/ɛ/ → /e/, /ə/ → /e/, /æ/ → /a/	‘telegram’
/bæŋk/	→ ባንክ /bank/	/æ/ → /a/	‘bank’
/mægnət/	→ ማግኔት /magnet/	/æ/ → /a/, /ə/ → /e/	‘magnete’
/plæn/	→ ፕላን /plan/	/æ/ → /a/	‘plan’

English	Amharic	Vowel replacement	Gloss
/tɛknɒlədʒi/	→ ቲክኖሎጂ /teknolodʒi/	/ɛ/ → /e/, /ɒ/ → /o/, /ə/ → /o/	‘technology’
/bætəri/	→ ባትሪ /batiri/	/æ/ → /a/, /ə/ → /i/	‘battery’

As shown in Table 42, loanwords which end in consonant or in vowel *i* in English are adapted without modification. For instance, there is no change in a word final consonant (e.g., /pækɪdʒ/ vs ታክጅ /pakedʒ/) and in a word final vowel *i*, as in in /bætəri/ vs ባትሪ /batiri/ ‘battery’.

Diphthongs in Amharic are always vowel-glides sequences, but not phonemes as in English. Due to this, the English loanwords which includes diphthongs need to be integrated into Amharic structure. Therefore, this type of loanwords will be adapted through vowel reduction when entering Amharic. In the adaptation process of diphthongs, only a single vowel is realized as shown in the following examples.

*Table 43: Replacement of English diphthongs in Amharic*

English	Amharic	Diphthong replacement	Gloss
/prəʊdʒekt/	→ ፕሮጀክት /prodʒəkt/	/əʊ/ → /o/	‘project’
/prəʊgræm/	→ ፕሮግራም /progiram/	/əʊ/ → /o/	‘program’
/telɪfəʊn/	→ ቲሌፎን /telefon/	/oʊ/ → /o/	‘telephone’
/keɪk/	→ ኬክ /kek/	/eɪ/ → /e/	‘cake’
/iːmeɪl/	→ ኢሜል /imel/	/eɪ/ → /e/	‘email’
/deɪtə/	→ ዳታ /data/	/eɪ/ → /a/	‘data’

When the diphthong *eɪ* is adapted to Amharic it is expected to be replaced by *e* due to the influence of the first sound *e* in *eɪ*. On the contrary, the English word /deɪtə/ is adapted as ዳታ *data* in Amharic. The reason for this could be attributed to the influence of English orthographic form <data>. In other words, the adaptation is made not on the basis of the pronunciation of the word /deɪtə/ but rather based on the orthographic form <data>.

In addition to the replacement of diphthongs with single vowel, English diphthongs are adapted by glide insertion in Amharic. The glide *y* is the most productive in the adaptation of diphthongs whereas the glide *w* occur in some instances, as in:

(79)	English		Amharic		Gloss
a)	/bæktɪəriə/	→	ባክቴሪያ /bakteriya/	<i>ia</i> → <i>iya</i>	‘bacteria’
b)	/dɪzəm/	→	ዲዛይን /dizayin/	<i>ai</i> → <i>ayi</i>	‘design’
c)	/faməns/	→	ፋይናንስ /fayinans/	<i>ai</i> → <i>ayi</i>	‘finance’
d)	/ɪnflʊenzə/	→	እንፍሎዌንዛ /ɪnfɪlowenza/	<i>ue</i> → <i>owe</i>	‘influenza’
e)	/kaʊnsəl/	→	ካውንስል /kawinsil/	<i>ao</i> → <i>awi</i>	‘counsel’
f)	/kælsiəm/	→	ካልሲየም /kalsiyəm/	<i>iə</i> → <i>iyə</i>	‘calcium’
g)	/mjuːziəm/	→	ሙዚየም /muziyəm/	<i>iə</i> → <i>iyə</i>	‘museum’
h)	/reɪdiʃn/	→	ራዲዮሽን/ራዲዮኒን /radiyešn/	<i>iei</i> → <i>ie</i>	‘radiation’
i)	/reɪdiəs/	→	ራዲየስ /radiyəs/	<i>iə</i> → <i>iyə</i>	‘radius’
j)	/saɪəns/	→	ሳይንስ /sayins/	<i>aiə</i> → <i>ayi</i>	‘science’

As shown in (79), *ia* and *iə* are replaced by *iya* and *iyə*, as in 79a, f, g, and i, and *ai* by *ayi*, as in 79 b and c. In triphthongs like *iei* and *aiə*, the third vowel is dropped and the glide *y* is inserted. The glide *w* is inserted if one of the members of the diphthong is a back vowel. The first diphthong (*ei*) in the word /reɪdiəs/ ‘radius’ is replaced by *a* in Amharic due to the influence of the orthographic form <radius>.

#### 5.1.1.1.2.2 Consonant adaptation

The phonemes /p/ and /v/ were not part of the Amharic phonemic inventory (see 3.1.1.1). These phonemes are replaced by the nearest Amharic phoneme /b/ in the adaptation process of foreign loanwords, as in Italian loanwords such as ቦረንዳ *bərənda* ‘porch’ (< *veranda*) and ባቡር *babur* ‘train’ (< *vapeur*). Nowadays, however, /p/ and /v/ in foreign loanwords are written as such. Consider examples in (80):

(80)	Amharic		English
	ቴሌቪዥን <i>televižin</i>	<	‘television’
	ኢንቨስትመንት <i>ፆinvəstimənt</i>	<	‘investment’
	ኦዲዮቪዥዋል <i>ፆodiyovižuwal</i>	<	‘audiovisual’
	ዳይቨርሲፊኬሽን <i>dayvərsifikešin</i>	<	‘diversification’
	ፖሊስ <i>polis</i>	<	‘police’
	ቫይረስ <i>vayrəs</i>	<	‘virus’
	ቫይታሚን <i>vayitamin</i>	<	‘vitamin’

The non-existent English phoneme /θ/ is replaced by /t/ in Amharic, as in /θiətər/ → ትያትር <tiyatir> ‘theatre’, /θiəri/ → ትዎሪ <tiwori> ‘theory’ or /θəmpɒmɪtər/ → ቴርሞሜትር <termometir> ‘thermometer’.

#### 5.1.1.1.2.3 Adaptation of consonant clusters and morphemes

The modification of syllable structure is an important aspect in the loanword integration process. Generally, in Amharic word initial consonant cluster is not permissible. However, the initial consonant cluster is possible when words begin with labial or velar consonant + *r* or *l* (see 3.1.1.2). Hence, loanwords with initial *pl*-, *pr*- and *bl*- cluster attested, as in (81a):

(81a.)	ፕላዝማ <i>plazima</i>	‘plasma’
	ፕላትሌት <i>platilets</i>	‘platelet’
	ፕላን <i>plan</i>	‘plan’
	ፕሬስ <i>pres</i>	‘press’
	ፕሮብሌም <i>problem</i>	‘problem’
	ብሎኬት <i>bloket</i>	‘brick’
b.	ስፖርት ( <i>i</i> ) <i>sport</i>	‘sport’
	ስታንዳርዶች ( <i>i</i> ) <i>standardočč</i>	‘standards’

In some instances consonant cluster with word initial *sp-* and *st-* are written as *isp-* and *ist-*, respectively. The possible reason for the word initial unadapted *c<sub>1</sub>c<sub>2</sub>-* cluster is that those loanwords might be introduced to Amharic through educated bilinguals. In this case, the source language (i.e. English) probably influenced the spelling of such words. Moreover, the print media that the loanwords was adapted from could influence the spelling of those words.

Loanword integration of Amharic has the general tendency of replacement of derivational or inflectional morphemes with the native morphemes. In relation to hierarchy of borrowability, Winford (2003:51) stated that open-class items such as nouns and adjectives are most easily borrowable whereas close-class items like pronouns and affixes are resistant to borrowing. In relation to this, the English derivational morphemes are not borrowed when loanwords are incorporated into Amharic. In (82a) the nominalizing morpheme *-əñña* is attached to loanwords whereas in (82b) the adjectivisor *-awwi* is suffixed.

- |       |  |               |
|-------|--|---------------|
| (82a) | (እ)ስፖርተኛ ( <i>i</i> ) <i>sportəñña</i> | ‘sport’s man’ |
|       | <i>መርከበኛ mərəkəbəñña</i>               | ‘sailor’      |
|       | <i>ሙዚቀኛ muziqəñña</i>                  | ‘musician’    |
|       | <i>ፖለቲከኛ polətikəñña</i>               | ‘politician’  |
| (b)   | <i>ማግኔታዊ magnetawwi</i>                | ‘magnetic’    |
|       | <i>ሳይንሳዊ sayinsawwi</i>                | ‘scientific’  |

Words in (82) differ from previous loans, as they consist of a borrowed noun stem to which an Amharic suffix was attached. In the word *sayins-awwi*, for instance, the loanword is *sayins* ‘science’. Some loanwords are attested with derivational morphemes. This type of words are directly transliterated into Amharic, as in (እ)ስትራቴጂክ (*i*)*stirateḡik* ‘strategic’, or ቴኬኖሎጂካዊ *tekenoloḡikalawwi* ‘technological’. The second example, i.e. *tekenoloḡikal-awwi* consists of the English adjective plus Amharic adjective suffix.

The English plural marker is replaced by Amharic morpheme *-očč* when English loans entering Amharic, as in ባንኮች *bankočč* ‘banks’, ኢንተርፕራይዞች *ɪntərpɪrayizočč* ‘enterprises’, ሆቴሎች

*hoteločč* ‘hotels’ or ጀርሞች *ǵərmočč* ‘germs’. In some instances plural form of loanwords were incorporated without adaptation:

- (83a) ሎጅስቲክስ *loǵistiks* ‘logistics’  
 ፕሮሲዲንግስ *prosidingis* ‘proceedings’
- b) አውትግሮዎርስ *ǵawitǵirowors* ‘out growers’  
 ካርቦሃይድሬትስ *karbohaydirets* ‘carbohydrate(s)’  
 ፕላትሌትስ *platilets* ‘platelets’

In (83a), the loanwords are *pluralia tantum* which refer to the plural form only. Thus, they do not need to be adapted by replacing Amharic morpheme *-očč*. In (83b), the loanwords should be written by adapting to the Amharic morphological structure. For instance, the term *karbohaydirets* could be replaced by *karbohaydiretočč* or *platilets* by *platiletočč* to be fully integrated into the Amharic morphological structure.

#### 5.1.1.2 Superfluous borrowing

There are some loanwords in Amharic in the presence of genuine native words. These kind of loans are termed as *superfluous borrowing*, as in (84).

(84)	Loanword	Genuine word	Gloss
	ሜቶዶሎጂ <i>metodoloǵi</i>	ስነ-ዘዴ <i>sinəzadə</i>	‘methodology’
	ሪፎርም <i>reform</i>	ለውጥ <i>lawit</i>	‘reform’
	ባይላተራል <i>baylatəral</i>	ሁለትዮሽ <i>hulettiyyoš</i>	‘bilateral’
	ኮንስትራክሽን <i>konistirakšin</i>	ግንባታ <i>ǵinbata</i>	‘construction’
	ዲስትሪቢዩሽን <i>distiribiyušin</i>	ስርጭት <i>siričč’it</i>	‘distribution’

Moreover, some English loanwords are used in parallel with Amharic equivalents as depicted in Table 44 below.

*Table 44: The parallel use of loanwords and native equivalents in Amharic*

Parallel terms (Amharic)	Transcription	Gloss
a) ሞባይል/ተንቀሳቃሽ ስልክ	/mobayl/ ‘mobile’ or /tənqəsaqaš sɪlk/ ‘movable telephone’	‘cellphone’
b) ጂኦሎጂ/ስነምድር	/ǧiʔologɪ/ ‘geology’/sinəmidir/ ‘study of earth’	‘Geology’
c) ሰርተፍኬት/ የምስክር ወረቀት	/sərtɪfɪkɛt/ ‘certificate’ /yə-misikkir wərəqət/ ‘of witness paper’	‘certificate’
d) ስትራቴጂክ/ ስልታዊ	/stɪrategɪk/ ‘strategic’ /sɪltawwi/ ‘with mode’	‘strategic’
e) ስታንዳርድ/ደረጃ/ጥራት	/standard/ ‘standard’ /dərəǧǧa/ ‘level’ /t’irat/ ‘quality’	‘standard’
f) ኤክስፖርት/የወጪ ንግድ	/ʔeksɪport/ ‘export’ /yə-wəč’ nɪgd/ ‘of outgoing commerce’ expenditure	‘export’
g) ካርኩለም/ስርአተ ትምህርት	/karikuləm/ ‘curriculum’ /siriʔtə tɪmihirt/ ‘of system education’	‘curriculum’
h) ሬሽ/ምጣኔ <sup>66</sup> /ምጥጥን	/rešo/ ‘ratio’ /mitt’ane/ ‘proportion’ /mit’itt’in/ ‘balance’	‘ratio’
i) ኮፒራይት/የቅጂ መብት	/koppirayit/ ‘copyright’ /yə-qǧǧi məbt/ ‘of copy right’	‘copyright’
j) ፕሮግራም/ መርሀ-ግብር	/progɪram/ ‘program’ /məriha-gibir/ ‘guide of task’	‘program’
k) አይረን/ብረት	/ayrən/ ‘iron’ /birət/ ‘metal, steel’	‘iron’
l) ስፕሪንግ/ካጣሪ	/spɪrɪng/ ‘spring’ /nət’ari/ ‘bouncing’	‘spring’

In Table 44, the initial word for each term is loanword which is followed by native equivalent. In these examples, there are two or three alternative designations that stands for each term. In some instances, loanwords and short phrases are used, as in Table 44 *c*, *f*, and *i*. In Table 44 *b*, *g*

<sup>66</sup> The term ምጣኔ *mitt’ane* also designates ‘rate’.

and *j*, loanwords are also used in parallel with compound words. As described in Amsalu (1980:2), borrowing from Ge'ez is the first priority than borrowing from foreign languages since Amharic and Ge'ez are closely related languages. However, the English loans like *ǧiʔoloǧi* 'geology' and the Ge'ez compound *sinəmidir* 'study of earth' occur in parallel which is in the contrary to this principle. There are also simplex words which are presented in parallel with loanwords, as in Table 44 *d*, *e* and *h*. These examples show that there is parallel usage of loanwords and native equivalents in the designation of some Amharic terms.

It is not problematic when technological concepts or innovations are borrowed directly. For instance, the term for 'cellphone' is designated as ሞባይል *mobayl* 'mobile' or ተንቀሳቃሽ ስልክ *tənqəsasaš silk* 'movable telephone'. The first option refers to borrowing while the second one is loan translation. In this example, loanword (ሞባይል *mobayl* 'mobile') is frequently used by Amharic speakers and it is economical as compared to ተንቀሳቃሽ ስልክ *tənqəsasaš silk* 'movable telephone'. In fact, the term for 'cellphone' is reduced from ሞባይል ስልክ *mobayl silk* 'mobile telephone' to ሞባይል *mobayl* 'mobile' in oral usage and in written communication as well.

Parallel use of loanwords and native equivalents could have an implication for the standardization of terms since it could impede scientific and technical communication. From such alternatives, using native equivalents (simplex words, compounds or phrases) would have advantage over loanwords with regard to transparency of meaning. On the other hand, in some instances using loanwords could be more advantageous than using longer phrases when the goal of word economy is set to be attained in the designation of new concepts.

### 5.1.1.3 The source languages for lexical borrowing in Amharic

In the lexical elaboration of Amharic, various foreign or European<sup>67</sup> and Ethiopian languages have served as sources of lexical borrowing though the extent is different. In the following

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<sup>67</sup> European languages such as French, Italian, and English have played special roles in Ethiopia as media of instruction and carriers of 'Western' culture (BBCF, 1976:18).



section, the sources of loanwords from foreign languages, followed by Ethiopian languages, are described.

#### 5.1.1.3.1 Borrowing from foreign languages

In order to analyze the loanwords in Amharic, it is important to consider the historical situation of language contact in Ethiopia. In line with this, Cooper (1976b:300) noted that Italian and French were the principal languages of wider communication in Ethiopia at the end of the 19<sup>th</sup> century. These foreign languages, finally, were replaced by English. The English language has become influential as a language of international communication and education in Ethiopia. During the Imperial regime of Ethiopia, English was the dominant international language for the reason that Britain assisted the Emperor Haile Sellasie to drive Italians out of Ethiopia (Zelealem, 2012:19). Likewise, the language policy regarding the role of English in Derg and EPRDF was/is almost similar. English is still playing the role of an international language and widely used in high schools, colleges and Universities of Ethiopia (Zelealem, 2012:39). As a result of these policies, Amharic language has got in contact with the foreign languages such as English, French and Italian. And this language contact situation, in turn, paved the way for loanwords to become prevalent phenomena in the Amharic vocabulary.

##### 5.1.1.3.1.1 English loanwords in Amharic

From foreign languages, English is a primary source of borrowing in Amharic in the domain of science, technology, politics, administration, etc. It is extensively used particularly in the translation of scientific and technological concepts as compared to foreign languages such as French and Italian, as in (85):

(85)	Amharic	English	Amharic	English
a)	ካልሲየም <i>kalsiyəm</i>	‘calcium’	c) ሜትር <i>metir</i>	‘meter’
	ካርቦን <i>karbon</i>	‘carbon’	ቴርሞ ሜትር <i>termometir</i>	‘thermometer’
	ሰልፈር <i>salfər</i>	‘sulfur’	ኪሎ ሜትር <i>kilometir</i>	‘kilometer’
	ኦክሲጂን <i>ጎkxiḡin</i>	‘oxygen’	ፕሮትራክተር <i>pirotraktər</i>	‘protractor’

(85)	Amharic	English	Amharic	English
b)	ባክቴሪያ <i>bakteriya</i>	‘bacteria’	d) ትራክተር <i>tiraktər</i>	‘tractor’
	ጀርሞች <i>ǰərmočč</i>	‘germs’	ኤሌክትሪክ <i>ʔelektirik</i>	‘electric’
	እንፍሎዌንዛ <i>infilowenza</i>	‘influenza’	ጀኔሬተር <i>ǰeneretər</i>	‘generator’
	ቫይረስ <i>vayirəs</i>	‘virus’	ኮምፒውተር <i>kompīwitər</i>	‘computer’

Names of chemical element (in 85a), terms of environmental science (in 85b), terms of mathematics or measurement (in 85c) and terms of technological innovations (in 85d) were borrowed into Amharic to express foreign concepts.

#### 5.1.1.3.1.2 French loanwords in Amharic

According to BBCF (1976:19), “French was the European language used for government-sponsored education in modern Ethiopia; it has a special position also as ...a prestige language both internally and in international connections.” Due to this kind of historical situation, a number of lexical items from French were incorporated into Amharic vocabulary. Therefore, terms related to technological concepts (e.g. ብስክሌት *biskilet* ‘bicycle’), political terms (e.g. ሚሲዮን *misiyon* ‘mission’), terms related to profession (e.g. ሹፌር *šufər* ‘driver’ and ኢንጂነር *inǰinər* ‘engineer’) are some of the examples of French loanwords in Amharic. Consider (86) for additional examples (see also Bender (1972:320-321), and Yonas et al. (1966 E.C:32-33)).

(86)	Amharic	Source word	Gloss
	ሚሊዮን <i>miliyon</i>	<i>million</i>	‘million’
	ሜዳሊያ <i>medaliya</i>	<i>médaille</i>	‘medal’
	ሲጋራ <i>sigara</i>	<i>cigarette</i>	‘cigarette’
	ሳንቲም <i>santim</i>	<i>centime</i>	‘cent’
	ሬፑብሊክ <i>republik</i>	<i>république</i>	‘republic’
	ሽሚዝ <i>šəmiṣ</i>	<i>chemise</i>	‘shirt’
	ሹፌር <i>šufər</i>	<i>chauffeur</i>	‘driver’
	ሻምፒዮን <i>šampiwon</i>	<i>champion</i>	‘champion’

(86)	Amharic	Source word	Gloss
	ቢሮ <i>biro</i>	<i>bureau</i>	‘office’
	ባቡር <i>babur</i>	<i>vapeur</i>	‘train’
	ብስክሌት <i>biskilet</i>	<i>bicyclette</i>	‘cycle, bicycle’
	ቴምብር <i>tembir</i>	<i>timbrer</i>	‘stamp’
	ቴክኒክ <i>teknik</i>	<i>technique</i>	‘technique’
	ትራፊክ <i>trafik</i>	<i>trafic</i>	‘traffic policeman’
	ሬፑብሊክ <i>republik</i>	<i>république</i>	‘republic’
	ኩፖን <i>kuppon</i>	<i>coupon</i>	‘coupon’
	ኮላጅ <i>kollağ</i>	<i>collage</i>	‘collage’
	ኮሌኔል <i>kolenel</i>	<i>colonel</i>	‘colonel’

Some European loanwords could be borrowed into Amharic either from English or French. In other words, Amharic has borrowed some foreign loanwords either directly from French or via English. In relation to this, Amsalu (1980:6) has attributed the sources for loanwords such as ሞተር *motar* ‘motor’, ገራጃ *garaž* ‘garage’ and ቴሌፎን *telefon* ‘telephone’ to either English or French.

#### 5.1.1.3.1.3 Italian loanwords in Amharic

Italian is another important source of borrowing in Amharic. The reason for the language contact between Amharic and Italian and the incorporation of Italian loanwords into Amharic is related to occupation (Takkele, 2000:91). A number of Italian loans, therefore, were attested in different domains of Amharic vocabulary. From the areas of borrowing, food items (e.g. ፓስታ *pasta* ‘pasta’, ማካሮኒ *makaroni* ‘macaroni’), technological terms (e.g. ማኪና *makina* ‘car’, ጎማ *gomma* ‘tire, rubber’), place names (e.g. ፒያሳ *piyassa* ‘piazza’, ማርኬት *mārkato* ‘marketplace’) are some of the examples. The following additional examples are given in (87) to show some instances of Italian loanwords in Amharic (see also Bender (1972:320-321), and Yonas et al. (1966 E.C:32-33)).

(87)	Amharic	Source word	Gloss
	መርከቶ <i>mərkato</i>	<i>mercato</i>	‘marketplace’
	መኪና <i>məkina</i>	<i>macchina</i>	‘car, automobile’
	ሲሙንት <i>siminto</i>	<i>cemento</i>	‘cement’
	ሲባ <i>sibago</i>	<i>spago</i>	‘string’
	ቦርሳ <i>borsa</i>	<i>borsa</i>	‘bag’
	አውቶብስ <i>ṗawtobis</i>	<i>autobus</i>	‘(auto)bus’
	ካርታ <i>karta</i>	<i>carta</i>	‘map, card’
	ጎማ <i>gomma</i>	<i>gomma</i>	‘tire, rubber’
	ጣሳ <i>t’asa</i>	<i>tacere</i>	‘can, tin’
	ፋርኖ <i>furno</i> <sup>68</sup>	<i>forno</i>	‘bread baked in the oven’
	ፋብሪካ <i>fabrika</i>	<i>fabbrica</i>	‘factory’
	ፒያሳ <i>piyassa</i>	<i>piazza</i>	‘piazza’ (place name)
	ፒዛ <i>piza</i>	<i>pizza</i>	‘pizza’
	ፖለቲካ <i>polətika</i>	<i>politica</i>	‘politics’
	ፖስታ <i>posta</i>	<i>posta</i>	‘letter, mail, envelop’

#### 5.1.1.3.1.4 Greek loanwords in Amharic

Greek is also one of the foreign languages which serves as a source of borrowing in Amharic even though it is primarily used in religious domain. After the introduction of Christianity to Aksum (around 370 A.D), various religious literatures had been translated into Ge’ez from Arabic and Greek. Since Ge’ez was the primary language to receive Greek loanwords through translation (and also literary language), Greek loanwords were introduced to Amharic through Ge’ez (see Yonas et al., 1966 E.C:23; Baye, 2000 E.C:xvi). Examples in (88) illustrate Greek loanwords in Amharic.

<sup>68</sup> It came probably into Amharic through Arabic *furn* since the baker of this kind of bread had been mostly Arabs (Leslau 1957:234).

(88)	Amharic	Source word	Gloss
	ጳጳስ <i>p'app'as</i>	<i>papás</i>	‘priest’
	ኢትዮጵያ <i>Ityopp'iya</i>	<i>Aithiopía</i>	‘Ethiopia’
	ታቦት <i>tabot</i>	<i>tóxo</i>	‘arc of covenant’
	ክርስቲያን <i>kristiyan</i>	<i>christianós</i>	‘Christian’
	ዲያቆን <i>diyaqon</i>	<i>diákonos</i>	‘deacon’
	ጠረጴዛ <i>t'arpp'eza</i>	<i>trapézi</i>	‘table’
	ውቅያኖስ <i>wiqyanos</i>	<i>okeanós</i>	‘ocean’

#### 5.1.1.3.1.5. Arabic loanwords in Amharic

There are considerable number of Arabic loanwords in Amharic. Most of the terms seem originally part of Amharic lexicon, but in a closer examination they are borrowed from Arabic. According to Leslau (1957:221), Amharic speakers have had close contact with Arabs and Moslems since commercial activities has been partly in the hands of Arabs. Arabians and Yemeni traders were one of the active participants in regional and international trade such as gold and ivory trade from Ethiopia particularly since the twelfth century (Abbink, 1998:112). The Arabs had also contact with other Ethiopian Semitic or Cushitic languages for the same reason and there are also many loanwords almost in all these languages. Hence, usually it is difficult to determine precisely whether an Arabic loanwords entered Amharic directly from Arabic or via another Ethiopian Semitic or Cushitic languages for the reason that Amharic speakers also have close contact with the speakers of other Ethiopian Semitic and Cushitic languages (Leslau, 1957:221).

A number of Arabic loanwords from various domains such as food, drink, vegetation, clothing, materials, products, furniture, commerce, money, possessions, warfare etc. were borrowed by Amharic. As shown in the list by Leslau (1957), majority of the terms are related to different items and commercial activities. The following are some of the examples of Arabic loanwords that have entered Amharic (see Leslau, 1957):

*Table 45: Examples of Arabic loanwords in Amharic*

Domain	Amharic	Gloss
Food, drink, vegetation	ኦረቄ <i>ʔarəqe</i>	‘liquor, alcohol’
	መረቅ <i>mərəq</i>	‘soup’
	ሙዝ <i>muz</i>	‘banana’
	ቅሽር <i>qīšir</i>	‘coffee in peel’
Clothing	ኦቡጅዲ <i>abuǧədi</i>	‘cotton cloth’
	ባርኖስ <i>bərnos, barnos</i>	‘cloak’
	ኪስ <i>kis</i>	‘pocket’
	ቀሚስ <i>qəmis</i>	‘shirt’
	ሸራ <i>šəra</i>	‘canvas’
Materials, products	ክብሪት <i>kībrit</i>	‘match’
	ኖራ <i>nora</i>	‘lime’
	ናስ <i>nas, nəhas</i>	‘brass, copper’
	ርሳስ <i>risas, irsas</i>	‘lead, bullet’
	ጡብ <i>t’ub</i>	‘tile’
	መቀስ <i>məqəs</i>	‘scissors’
House, furniture	ፋኖስ <i>fanos</i>	‘lantern’
	ፍራሽ <i>/fīraš/</i>	‘mattress’
	ሻማ <i>šama</i>	‘candle’
	አውታር <i>awtar</i>	‘cord of the tent’
Commerce, money, possessions	ክራይ <i>kiray</i>	‘rent’
	ሚዛን <i>mīzan</i>	‘weight, pair of scales’
	ሱቅ <i>suq</i>	‘market, shop’
	ከሰረ <i>kəssərə</i>	‘lose’

Arabic is also served as an intermediary language for Turkish loanwords such as *t’əbənǧa* ‘rifle’, *bašša* ‘a military title’ and *səndəq* ‘flagpole’ to be incorporated into the Amharic lexicon. Though it is occasional, Greek loanwords are also entered Amharic through Arabic (Appleyard, 1979:75).

#### 5.1.1.3.2 Borrowing from Ethiopian languages

Ge’ez and Oromo, among Ethiopian languages, have been serving as primary sources of loanwords in Amharic. Ge’ez as a literary and liturgical language has had a great contribution in the development of Amharic vocabulary. And, due to language contact phenomena between Amharic and Oromo speakers, a number of Oromo lexical items are also integrated into

Amharic. Hence, examples from Ge'ez and Oromo are presented in the following section as a source of expansion of Amharic vocabulary.

#### 5.1.1.3.2.1 Ge'ez loanwords in Amharic

The role of Ge'ez as literary and liturgical language precedes the development of Amharic as a literary language. As a result of this, Ge'ez has been functioning as a major source of lexical enrichment for Amharic. One of the possible reasons for the prevalence of Ge'ez loanwords in Amharic is that both languages are genetically related (cf. Amsalu, 1980:18). Furthermore, it is also rich in its vocabulary.

Many Ge'ez loanwords seem to be part of Amharic native vocabulary due to frequency of use and the incorporation of Ge'ez loans for a longer period. Some of the Ge'ez loanwords such as ህዳሴ *hiddase* 'transformation' and ሙስና *mussinna* 'corruption' are added to Amharic very recently. Area of knowledge productively coined in Amharic by borrowing the Ge'ez ሥነ *sinə* 'logy or study' as the first constituents in compound words (see example 47 for detail). Terms from environmental or natural science (e.g. እጽዋት *ʾis'wat* 'plants', ሕዋስ *hiwas* 'cell'), social science (e.g. ሰብአዊ *səbiʾawwi* 'human', ምግባር *migbar* 'virtue/character'), mathematics (e.g. ዘዌ *zəwe* 'angle', ታህታይ *tahitay* 'lower') were borrowed from Ge'ez to represent those concepts, as in (89).

(89)	እጽዋት <i>ʾis'wat</i>	'plants'	ሰብአዊ <i>səbiʾawwi</i>	'human'
	ሕዋስ <i>hiwas</i> <sup>69</sup>	'cell'	አሃድ <i>ʾahad</i>	'unit'
	ዘዌ <i>zəwe</i>	'angle'	መርህ <i>mərīh</i>	'principle'
	ታህታይ <i>tahitay</i>	'lower'	ማህደር <i>mahidər</i>	archive
	ክሂል <i>kihil</i>	'skill'	ማዕቀፍ <i>maʾiqəf</i>	framework
	ዐውድ <i>ʾawid</i>	'context'	አብዮት <i>ʾabiyot</i>	'revolution'
	እሴት <i>ʾisset</i>	'value'	ብዙሃኑት <i>bizəhannət</i>	'diversity'

<sup>69</sup> The term ሕዋስ *hiwas* 'cell' has got semantically extended meaning which refers to 'small groups', particularly in political domain.

ራእይ <i>raʔiyy</i>	‘vision’	ምግባር <i>migbar</i>	‘virtue/character’
ግብዓት <i>gibiʔat</i>	‘input’	ነዋይ <i>nəway</i>	‘money or property’

#### 5.1.1.3.2.2 Oromo loanwords in Amharic

Oromo is also a source of loanwords in Amharic. Following the incorporation of Cushitic loanwords, phonemes such as /š/, /ǧ/, /č/, /čʼ/, /ñ/ are added to the Amharic phonological systems (Baye 2000 E.C:xvi). This implies that language contact between Amharic and Cushitic languages (particularly Oromo) has had influence on the phonology of Amharic. The following are some of the examples of Oromo loanwords in Amharic.

(90) Oromo		Amharic	Gloss
<i>mala</i>	→	መለ <i>məla</i>	‘idea of solving problem’
<i>irreeččaa</i>	→	ፊቻ (i) <i>rečča</i>	‘thanks giving day’
<i>baatu</i>	→	ባቱ <i>batu</i>	‘name of mountain’
<i>ʔangafa</i>	→	አንጋፋ <i>ʔangaffa</i>	‘first, foremost’
<i>karra</i>	→	ካራ <i>karra</i>	‘gate, name of a mountain’
<i>korma</i>	→	ኮርማ <i>korma</i>	‘bull’
<i>dabo</i>	→	ደቦ <i>dəbo</i>	‘communal labour’
<i>daalačča</i>	→	ዳለቻ <i>dalačča</i>	‘gray’
<i>damakasee</i>	→	ዳመከሴ <i>daməkəse</i>	‘plant used as a medicine’
<i>ǧigii</i>	→	ጅጌ <i>ǧige</i>	‘communal labour’
<i>guddifaččaa</i>	→	ጉድፈቻ <i>guddifačča</i>	‘adoption’
<i>gaammaa</i>	→	ጋማ <i>gamma</i>	‘lion’s mane’
<i>č’oomaa</i>	→	ጮማ <i>č’oma</i>	‘fat (meat)’

Some Oromo loanwords are incorporated into Amharic without modification, as in ካራ *karra* ‘gate, mountain’ and ኮርማ *korma* ‘bull’. On the other hand, for the phonological adjustment long vowels of Oromo loanwords are replaced by short counterpart in Amharic (e.g. ጋማ *gamma* <



*gaammaa* ‘lion’s mane’). The Oromo vowels /i/ and /a/ are replaced by Amharic central vowels /i/ and /ə/, respectively, as in ገደፈሩ *guddifəčča* < *guddifaččaa* ‘orphan’.

Even though it is not significant, there are few loanwords from Highland East Cushitic languages. The basic vocabulary items such as *wiha* ‘water’ and *wišša* ‘dog’ are mentioned in (Bender, 1972:321) as loanwords from “Sidamo”, i.e. today’s Omotic languages. In fact, these words are existent in Highland East Cushitic languages such as Hadiyya and Kambaata.

#### 5.1.1.4 Summary of borrowing in Amharic

In general, borrowing as a means of lexical elaboration is productively used in Amharic particularly in scientific and technical vocabulary. Based on the sample loanwords<sup>70</sup>, which were collected for the analysis of borrowing in Amharic, the general picture of the source languages is shown in Table 46.

*Table 46: Summary of loanwords in Amharic*

Language	No. of loanwords	Percent
English	193	52%
Ge’ez	65	17.5%
Arabic	40	10.8%
French	27	7.3%
Italian	22	5.9%
Oromo	12	3.2%
Greek	12	3.2%
Total	371	100%

According to the data presented in Table 46, Amharic has borrowed lexical items from five foreign languages and two Ethiopian languages. As can be observed from the summarized data, English, followed by Arabic is the primary source of borrowing for Amharic. From foreign languages, French and Italian come next. From Ethiopian languages, on the other hand, Ge’ez is predominantly used source of borrowing which is followed by Oromo.

<sup>70</sup> See Appendix IV for the list of loanwords.

Generally, as a principle of lexical expansion mechanisms of Amharic, basic approach has been stated in Amsalu (1980:2). He mentions four ways of lexical elaboration mechanisms in their order of importance. As a first option, when foreign concepts (terms) are encountered, Amharic searches for words from its vocabulary which directly or indirectly express the concept. The second option of incorporating foreign concepts is borrowing from Ge'ez which is more developed literary language. Thirdly, when the two options are failed to satisfy the need of designating new concepts, words will be borrowed from foreign languages with modification so as to be fitted into the phonological system of Amharic. Fourthly, foreign words are adopted without modification when they confirm to the phonological system of Ethiopian language (Amharic).

As can be understood from the mechanisms or principles of incorporating foreign concepts, borrowing from foreign sources is not the first option in the enrichment of Amharic vocabulary (at least in principle). In other words, borrowing from Ethiopian language (Ge'ez) is the first option when borrowing is mandatory to fill lexical gaps. Even though borrowing from Ge'ez is mentioned as the first preference (see Amsalu, 1980:2), Ge'ez is the second most important source as indicated in the sample loanwords (see Table 46). Practically, the incorporation of loanwords from English is predominant especially in the domain of science and technology concepts. As compared to other Ethiopian languages, however, the role of Ge'ez is significant in the lexical elaboration of Amharic. The Ge'ez language is preferable for the reason that i) it has rich vocabulary as a literary language as compared to Amharic (at least in the initial stage of lexical expansion of Amharic) ii) it can also easily be adapted to Amharic since they are closely related languages.

### 5.1.2 Borrowing in Hadiyya

#### 5.1.2.1 Loanword adaptation mechanisms in Hadiyya

When Amharic or English loanwords are introduced into Hadiyya, they are adapted to the phonological system of the target language by applying mechanisms such as vowel addition, non-existent vowel replacement, vowel length, consonant addition or deletion, consonant cluster

modification, etc. These kinds of adjustments make loanwords to be part of the vocabulary of the target language. In the following sections, the integration of Amharic and English loanwords are discussed since both languages are the primary sources of lexical borrowing in Hadiyya.

#### 5.1.2.1.1 Vowel adaptation

Hadiyya nominals always end in vowels /a/, /o/, or /e/ (see 3.2.1.2). Loanwords ending in consonant sound in the source language are adjusted in Hadiyya by adding terminal vowels as shown in (91).

(91)	Hadiyya		English (gloss)
	<i>sentaaksa</i>	<	‘syntax’
	<i>siiviksa</i>	<	‘civics’
	<i>veeyina</i>	<	‘vein’
	<i>viitaamiina</i>	<	‘vitamin’
	<i>vaayireesa</i>	<	‘virus’
	<i>pileena</i>	<	‘plane’
	<i>paaralala</i>	<	‘parallel’

In the data (91), the English words end in consonants. Therefore, in order to fit to the Hadiyya word structure, the loanwords receive the terminal vowel /a/ in citation form. Similarly, loanwords from Amharic behave in the same manner. In other words, when words end in consonant in Amharic, they are also adjusted by adding terminal vowel (most commonly, /a/) in Hadiyya. Consider (92):

(92)	Amharic		Hadiyya	Gloss
	ፍራሽ <i>fīraš</i>	→	<i>fīraasha</i>	‘mattress’
	ክብሪት <i>kibrit</i>	→	<i>kibiriita</i>	‘match’
	መነጽር <i>mənass’ir</i>	→	<i>manaxxira</i>	‘eye glass’
	መርዝ <i>mərɯ</i>	→	<i>marza</i>	‘poison’

(92)	<b>Amharic</b>		<b>Hadiyya</b>	<b>Gloss</b>
	መስቀል <i>məsqəl</i>	→	<i>masqala</i>	‘cross’
	ሞራድ <i>morəd</i>	→	<i>moorada</i>	‘file’
	ጥምቀት <i>t’imqət</i>	→	<i>ximqata</i>	‘baptism’

In addition to word final vowel addition, non-existent vowels are replaced by native vowels in Hadiyya. With regard to this, the Amharic central vowels /i/ and /ə/, which are nonexistent in Hadiyya, are always replaced by the native vowels of the language as portrayed in Table 47:

*Table 47: Replacement of Amharic central vowels with Hadiyya vowels*

Vowel replacement	Amharic	Hadiyya	Gloss
/i/ → /i/	ፍደል <i>fīdəl</i>	→ <i>fīdala</i>	‘letter/alphabet’
	ግብር <i>gībīr</i>	→ <i>gībira</i>	‘tax’
	ምስል <i>misil</i>	→ <i>misila</i>	‘picture’
/ə/ → /a/	መጋዝ <i>məgəz</i>	→ <i>magaaza</i>	‘sow’
	ቀለም <i>qələm</i>	→ <i>qalama</i>	‘color’
	መዝገብ <i>məzgəb</i>	→ <i>mazgaba</i>	‘file’

As see in Table 47, the Amharic central vowels /i/ and /ə/ are replaced by /i/ and /a/, respectively. However, there is an exception to this general rule. In few loanwords, the vowel /i/ is realized as /e/, /a/, /u/ whereas /ə/ is realized as /o/. The following examples illustrate this fact:

(93)	<b>Vowel replacement</b>	<b>Amharic</b>	<b>Hadiyya</b>	<b>Gloss</b>
	/i/ → /e/, /a/, /u/	ቴምብር <i>tembir</i>	→ <i>tembera</i>	‘stamp (postage)’
		ምላሮ <i>mīlač</i>	→ <i>malaaca</i>	‘razor’
		ሸጉጥ <i>šiggut</i>	→ <i>shugguxa</i>	‘pistol’
	/ə/ → /o/	ወርቅ <i>wərq</i>	→ <i>worqa</i>	‘gold’

In (93), the vowel /i/ is changed into /e/, /a/ and /u/ due to vowel harmony. In other words, the vowel /i/ is progressively assimilated to /e/ when /i/ is preceded by /e/, regressively assimilated to /a/ when it is followed by /a/ and assimilated to /u/ when it immediately precedes /u/. The central vowel /ə/ is replaced by /o/ in Hadiyya due to the influence of labio-velar phoneme /w/ as in,  $\omega\zeta\phi$  *wərq* → <*worqa*> ‘gold’.

Another productive strategy of loanword adaptation is vowel length. Since vowel length is typical feature of Cushitic languages, loanword with a short vowel of the source language is changed into longer vowel version in the recipient language (Hadiyya). The data in (94) illustrate phonological adjustment of Amharic loans through vowel length.

(94)	Amharic		Hadiyya	Gloss
	ሱፍ <i>suf</i>	→	<i>suufa</i>	‘wool’
	ሰሌን <i>səlen</i>	→	<i>saleena</i>	‘straw mat’
	ሙዝ <i>muṣ</i> (Amh. < Ar.)	→	<i>muuza</i>	‘banana’
	ካሮት <i>karot</i>	→	<i>kaaroota</i>	‘carrot’
	ሆቴል <i>hotel</i> (Amh. < Eng.)	→	<i>hooteela</i>	‘hotel’
	ባጀት <i>baḡet</i> (Amh. < Eng.)	→	<i>baajeeta</i>	‘budget’

In the contexts where there are vowels in both the source and recipient languages, short vowels are usually replaced by long vowels, as in *kaaroota* < ካሮት *karot* ‘carrot’, *muuza* < ሙዝ *muṣ* ‘banana’, etc. In Hadiyya, vowel length occurs only in word medial position. Thus, the loanword adaptation also confirms to this pattern when adaptation by vowel length is applied.

There are no diphthongs in Hadiyya vowel system. As a result, loanwords which include diphthongs are subjected to adaptation when entering Hadiyya. Accordingly, loanwords with diphthongs are adapted either by inserting glides or by replacing them with single vowels. The examples in (95) show that how the English diphthongs are adapted in Hadiyya.

(95) English		Hadiyya	
anemia /ənimia/	→	<i>aniimiya'a</i>	ia → iya
bacteria /bæktəriə/	→	<i>baakteere'e</i>	iə → e, ia → e'e
geometry /dʒiametri/	→	<i>joomeetire'e</i>	ia → o
ovary /əʊvəri/	→	<i>oovaare'e</i>	əʊ → o
piano /pianou/	→	<i>piyaano'o</i>	ia → iya, ou → o
theory /θiəri/	→	<i>tiwore'e</i>	iə → iwo
ratio /reɪʃiʊ/	→	<i>reesho'o</i> <sup>71</sup>	eɪ → e, iou → o
zero /zɪərəʊ/	→	<i>zeero'o</i>	iə → e, əʊ → o

As can be seen from (95), the English diphthongs or triphthong such as *ia*, *əʊ*, *iə*, *iou* and *əu* are replaced by existing Hadiyya pure vowels. For instance, the English *ia* and *əʊ* are replaced by long *oo* in Hadiyya, as in /dʒiametri/ → *joomeetire'e* /dʒoomeetireʔe/ 'geometry' and /əʊvəri/ → *oovaare'e* /oovaareʔe/ 'ovary', respectively. In some loanwords the English diphthongs are adapted by glide insertion. For example, the glide <y> is inserted between the two vowels /iə/, as in /ənimia/ → *aniimiya'a* /ʔaniimiyaʔa/ 'anemia'. Moreover, the English /iə/ is replaced by <iwo> by inserting the glide (<w>) between vowels, as in *tiwore'e* /tiworeʔe/. As shown in (95), the non-existent consonant /θ/ is replaced by /t/ in Hadiyya whereas the non-existent consonants /v/ and /p/ are used without modification (see Section 5.1.2.1.2 for consonant adaptation).

Generally, when words end in vowel in the source language, they are adjusted by *vowel-glottal-vowel* (/vʔv/ <v'v>) pattern word finally. Loanwords, for instance, *enerje'e* 'energy' and *indastire'e* 'industry' end in vowel /i/ in the source language. Hence, when this type of words are borrowed into Hadiyya, they are adjusted by /vʔv/ <v'v> pattern in word final position. On the other hand, Amharic loanwords which end in vowel /i/ are also adapted in Hadiyya by changing

<sup>71</sup> In Hadiyya phonological system, there is no word that begins with /r/ phoneme. However, the writing of words such as *reesho'o* 'ratio' and *reedo'o* 'radio' is not congruent with the phonological system of Hadiyya. Therefore, such loanwords are partially adapted.

the word final vowel /i/ to /e/. In Hadiyya /i/ does not occur in word final position. Due to this, the word final /i/ in the source language is replaced by front vowel <e> in Hadiyya as shown in (96).

(96)	Amharic		Hadiyya	Gloss
	ሱሪ <i>surri</i>	→	<i>sure'e</i>	‘trousers’
	ሲኒ <i>sini</i>	→	<i>siine'e</i>	‘coffee cup’
	ታዛቢ <i>tazzabi</i>	→	<i>taazzaabe'e</i>	‘political commentator’
	ትሪ <i>tiri</i>	→	<i>tire'e</i>	‘large plate’
	ጋሪ <i>gari</i>	→	<i>gaare'e</i>	‘carriage’
	ጋቢ <i>gabi</i>	→	<i>gaabe'e</i>	‘tunic’

When Hadiyya borrows words from other languages such as Amharic and English, in the context where there is shared vowels in both languages (*a, u, i, e, o*), the loanwords are adapted most commonly by lengthening the short vowels (see example 94). However, the vowel length is restricted to the word medial position. As shown in (97), when Amharic loanwords are incorporated into Hadiyya, short and existent vowels in both languages become long at word medial position. In order to adjust impermissible word final vowel length, glottal stop /ʔ/ <'> is inserted intervocalically at word final position; consider the following data (97):

(97)	Amharic		Hadiyya	Gloss
	ብርሃቆ <i>birč'iqqo</i>	→	<i>burcuqo'o</i>	‘glass’
	ዳቦ <i>dabbo</i>	→	<i>daabbo'o</i>	‘bread’
	ድራማ <i>dirama</i> (Amh. < Eng.)	→	<i>diraama'a</i>	‘drama’
	ዶሴ <i>dose</i> (Amh. < Fr.)	→	<i>doose'e</i>	‘file’
	ቀበሌ <i>qəbəle</i>	→	<i>qabale'e</i>	‘kebele’
	ቁምጣ <i>qumt'a</i>	→	<i>qonxa'a</i>	‘shorts’
	ቆርቆሮ <i>qorqorro</i>	→	<i>qorqoro'o</i>	‘tin’

(97)	Amharic	Hadiyya	Gloss
	ስምንቱ <i>simmino</i> (Amh.<It.)	→ <i>simmino</i> 'o	'cement'

As shown in (97), the geminated /rr/ in Amharic /qorqorro/ 'tin' is replaced by un-geminated /r/ in Hadiyya since there is no geminated /rr/ in the phonological system. The word *qonxa* 'a (Amh. < /qumt'a/) is adapted by the assimilation of /m/ to /n/ in Hadiyya when occur before /t'/ sound.

The vast majority of loans with word final vowels in the source languages are adjusted in such a way that glottal stop is inserted between two identical vowels. There is an exception to this rule of loanword integration which operates without any modification in the recipient language with regard to word final vowel. Compare the following examples in (98):

(98)	Amharic	Hadiyya	Gloss
	ደቂቃ <i>dəqīqa</i>	→ <i>daqīīqa</i>	'minute'
	ገሳ <i>gašša</i>	→ <i>gaashsha</i>	'40 hectare land'
	ገበያ <i>gabəta</i>	→ <i>gabata</i>	'large wooden bowl'
	ዐደራ <i>ʔadəra/</i>	→ <i>hadara</i>	'something entrusted to someone'
	ነጠላ <i>nət'əla</i>	→ <i>naxala</i>	'a kind of shawl-like garment'
	ኖራ <i>nora</i>	→ <i>noora</i>	'gypsum'

#### 5.1.2.1.2 Consonant adaptation

The phonemes /p/, /v/, /s'/, /ʒ/ and /ɲ/ were not part of Hadiyya phonemic inventory. These phonemes were introduced into Hadiyya through lexical borrowing in school textbooks so as to designate mainly scientific and technological concepts. In Hadiyya phonology the sound /ɲ/ <ny> is marginal and occurs in a limited instances. It occurs with ideophones, as in *hanynyi* /haɲɲi/ 'to bite', *hanynyi hanynyi* /haɲɲi haɲɲi/ 'repeatedly bite'. Therefore, the non-existent consonants such as /p/ <p>, /v/ <v>, /s'/ <ts> and /ʒ/ <zh> were written without replacement in the target language (Hadiyya), as show in (99).



(99)	Hadiyya	Source language	Gloss
	<i>poo<i>li</i>isa</i> /poo <i>li</i> isa/	Eng./Amh.	‘police’
	<i>vaayiresa</i> /vaayiresa/	Eng./Amh.	‘virus’
	<i>verteksa</i> /verteksa/	Eng.	‘vertex’
	<i>tsaaloota</i> /s’aaloota/	Amh.	‘prayer’
	<i>televiizhina</i> /televiizina/	Eng./Amh.	‘television’

The occurrence of /p/ and /v/ is very frequent in loanwords whereas /s’/ and /ʒ/ is very limited. Even loanwords which include the consonant /s’/ and /ʒ/ could occur in free variation, as in /ʒaant’ila/ or /dʒaant’ila/ or /zaant’ila/ ‘umbrella’ and /s’aaloota/ or /t’aaloota/ ‘prayer’. In the written form of the language the non-native consonants seem to be the preferred one.

Hadiyya does not have labio-velar sounds (/k<sup>w</sup>/, /g<sup>w</sup>/, /q<sup>w</sup>/). Due to this, the Amharic loanwords which include those sounds, are adapted into velar counterpart in Hadiyya. The influence of Amharic rounded /w/ is reflected in the preference of Hadiyya vowels, as in:

(100)	Amharic		Hadiyya	Gloss
	ስኳር <i>sikk<sup>w</sup>ar</i>	→	<i>sukkaara</i>	‘sugar’
	ጎንቲ <i>g<sup>w</sup>ant</i>	→	<i>guwanta</i>	‘glove’
	ጨጓራ <i>č’əg<sup>w</sup>arra</i>	→	<i>coggaara</i>	‘stomach’
	ቋንጣ <i>q<sup>w</sup>ant’a</i>	→	<i>qoonxa</i>	‘dried meat’
	አቋም <i>ʔaq<sup>w</sup>am</i>	→	<i>aqooma</i>	‘stand’

As in (100), the vowels that occur following velar sounds are back vowels /u/ or /o/. The sounds are changed from labio-velar to velar sounds to fit into the Hadiyya phonological system.

#### 5.1.2.1.3 Segment or syllable deletion

Consonants such as /h/ and /j/ tend to get lost between vowels when Amharic loanwords are incorporated into Hadiyya. Consider data (101) for deletion of /h/ or /hi/ in Hadiyya:

(101)	Amharic	Hadiyya	Gloss
	/bahirzaf/	→ <i>baarzaafa</i>	‘eucalyptus tree’
	/mahibər/	→ <i>maabara</i>	‘association’
	/mahitəm/	→ <i>maatama</i>	‘seal’
	/məs’ihaf/	→ <i>maxaafa</i> <sup>72</sup>	‘book’

The deletion of the glottal fricative /h/ segment is followed by compensatory lengthening of the vowel /a/ which occurs preceding or following the deleted segment /h/. As a result of the deletion of /h/ and vowel lengthening, the Amharic vowel /i/ is deleted. In the case of Amharic /məs’ihaf/ ‘book’, the vowel that appears after the segment /h/ became long when adapted to Hadiyya, as in *maxaafa* ‘book’. In the word *maxaafa*, which is used in the Hadiyya Bible translation, the phoneme /s’/ is replaced by /t’/ <x>. In contrary to this, the phoneme /s’/ <ts> has already been acquired through school system particularly via Amharic loanwords.

On the other hand, the syllable /-iy-/ is reduced or replaced by <v’v><sup>73</sup> word finally when Amharic loanwords are adapted into Hadiyya phonological system, as shown in (102).

(102)	Amharic	Hadiyya	Gloss
	ማንኪያ <i>mankiya</i>	→ <i>maanka</i>	‘spoon’
	መለኪያ <i>mələkkiya</i>	→ <i>malakka (malakke’e)</i>	‘cup’
	ማንቆፍፍያ <i>manqorqoriya</i>	→ <i>manqorqora (manqorqoro’o)</i>	‘jug’
	ሚያዝያ <i>miyaziya</i>	→ <i>maaze’e</i>	‘April’
	ቃርሚያ <i>qarmiya</i>	→ <i>qarme’e</i>	‘gleanings’

<sup>72</sup> *Kitaaba* is designated in school or secular context to refer to book. However, in religious contexts the word *maxaafa* is used particularly with the Holy Bible.

<sup>73</sup> The vowels that appear in this position are /e/, /o/, and /a/.

#### 5.1.2.1.4 Adaptation of consonant clusters and morphemes

In Hadiyya, word initial consonant cluster is not permissible. Due to this, English loans which begin with word initial *cc* consonant cluster are adapted in Hadiyya phonological system by inserting a syllable consisting of a glottal stop and /i/ word initially. The data in (103) show the adjustment of impermissible word initial consonant cluster in Hadiyya.

(103)	<i>isfeera</i> /ʔisfeera/	‘sphere’
	<i>iskeela</i> /ʔiskeela/	‘scale’
	<i>iskuweera</i> /ʔiskuweera/	‘square’
	<i>islayida</i> /ʔislajida/	‘slide’
	<i>ispoorta</i> /ʔispoorta/	‘sport’
	<i>istaanza</i> /ʔistaanza/	‘stanza’
	<i>istaarcha</i> /ʔistaartʃa/	‘starch’
	<i>isteppilara</i> /ʔisteppilara/	‘stapler’

As can be seen from (103), word initial *sf-*, *sk-*, *sl-*, *sp-*, and *st-* consonant cluster in the source language (English) is adjusted by the word initial insertion of /ʔi/ which is represented by <i> in the orthography. As phonemic transcription shows, Hadiyya words always begin with consonant though this phenomenon is not reflected in the orthographic representation of glottal stop in word initial position.

The *pl-* and *pr-* word initial consonant cluster is also modified by simplification of cluster in Hadiyya. This has been done by inserting /i/ in between the *cc-* cluster. Consider some examples of the *pl-* and *pr-* cluster modification in (104).

(104)	<i>pilaaneeta</i>	‘planet’
	<i>pilaazma</i>	‘plasma’
	<i>pileena</i>	‘plane’
	<i>pirobileema</i>	‘problem’

(104)	<i>pilaaneeta</i>	‘planet’
	<i>pirootoona</i>	‘proton’
	<i>piroporshinaala</i>	‘proportional’

In contrast to this, in some instances the word initial consonant cluster of the source language (English) is directly transferred into Hadiyya without simplification of the impermissible consonant cluster, as in:

(105)	<i>priinsippila</i>	‘principle’
	<i>progiraama</i>	‘program’
	<i>projesteeroona</i>	‘progesterone’
	<i>tyoore’e</i>	‘theory’

The term <*tyoore’e*> is alternatively written as <*tiwore’e*>. In this example, the first option (<*tyoore’e*>) does not maintain the rule of consonant cluster which is not in conformity of the Hadiyya syllable structure.

In Hadiyya, the phoneme /r/ does not appear in word initial position (Tadesse, 2015:22), it is always preceded by syllables /ʔi-/ , /ʔe-/ , /ʔo-/ as can be recognized from the phonemic transcription. Since the word initial glottal stop is not represented in the Hadiyya orthography, it would be expected to begin those words with the vowels <*i*>, <*e*>, <*o*> in orthographic level. However, loanwords with word initial /r/ were integrated with partial adaptation in Hadiyya (see also Section 3.2.6.1). The following way of writing loanwords which begin with /r/ show maintaining source language form.

(106)	<i>raadiyeesa</i>	‘radius’
	<i>reedo’o</i>	‘radio’
	<i>reesho’o</i>	‘ratio’
	<i>rengeeeja</i>	‘rain gauge’

(106)	<i>raadiyeesa</i>	‘radius’
	<i>riipoorta</i>	‘report’
	<i>riiversa</i>	‘reverse’

If the loanwords listed in (106) are written in adapted form, they will have forms such as *ireedo’o* ‘radio’, *ereesho’o* ‘ratio’, *erengeeja* ‘rain gauge’, *iriipoorta* ‘report’, etc. Basically the epenthetic vowel in Hadiyya is [i]. The possible reason for the occurrence of /e/ and /o/ before /r/ is due to vowel harmony. For instance, the Amharic loanword *orooba* (< ረቡዕ /rəbuʔ/) ‘Wednesday’ was basically <*irooba*>, but when it is fully adapted to phonological system, /i/ assimilated to /o/ word initially due to the second vowel <*o*>.

Borrowed nominals behave like native nominals in relation to grammatical features such as number and definiteness. When the plural marker /-uww-(a)/ and the definiteness marker /-oom/ are attached to the borrowed nominal, the words are inflected as native nominal, as in:

( 107a)	Singular	Plural	Definiteness (SG)
	<i>kitaaba</i> ‘book’	<i>kitaabbuwwa</i> ‘books’	<i>kitaaboom</i> ‘the book’
	<i>irsaasa</i> ‘pencil’	<i>irsaassuwwa</i> ‘pencils’	<i>irsaasoom</i> ‘the pencil’
	<i>eeditera</i> ‘editor’	<i>eeditelluwwa</i> ‘editors’	<i>editeroom</i> ‘the editor’
	<i>xaraphpheeza</i> ‘table’	<i>xaraphpheezuwwa</i> ‘tables’	<i>xaraphpheezoom</i> ‘the table’

A derivational morpheme in the source language is also adapted in the recipient language (Hadiyya). For example, the derivational morpheme *-aan*<sup>74</sup> in *misil-aan-o* ‘illustrators’ (< Amh. ሰዓሊዎች *səʔaliwočč*) shows the adaption of native morpheme in a loanword. On the contrary to the adaptation of morphemes in (108), the English derivational morphemes *-ist* and *-er* are not replaced by the Hadiyya equivalent morphemes, as in:

<sup>74</sup> When *-aan-* occurs without the singulative marker *-chch-*, it also shows plurality.

- (108) *taaypista* 'typist'  
*diizaaynera* 'designer'

These loanwords could be written by substituting the native morpheme, for instance, *taayippaan-cho* 'typists' and *diizaayineechcho* 'designer'.

### 5.1.2.2 Superfluous borrowing

Some loanwords are unnecessarily borrowed from source languages as genuine words are existing in target language. Compare English or Amharic loanwords and the genuine Hadiyya words in Table 48:

*Table 48: Superfluous borrowing from English/Amharic*

Loanword	Source language	Genuine word	Gloss
<i>diyaabeetsa</i>	English	<i>sukka'l jabbo</i>	'diabetes'
<i>heeksaagoona</i>	English	<i>lohmidadao</i>	'hexagon'
<i>karniveresa</i>	English	<i>maaritaano</i>	'carnivores'
<i>lingustiika</i>	English	<i>suu'm sorooba</i>	'linguistics'
<i>paaralala</i>	English	<i>lalamme'e</i>	'parallel'
<i>persenta</i>	English	<i>anga</i>	'percent'
<i>poola</i>	English	<i>xinta</i>	'pole'
<i>qalama</i>	Amharic	<i>hagara</i>	'color'
<i>qarme'e</i>	Amharic	<i>fishsha</i>	'straw'
<i>tiraansiileeshina</i>	English	<i>tirato</i>	'translation'

Some Hadiyya terms semantically occur in parallel indicating the same concept. The occurrence is either in alternatives of native words or phrases or loanwords. This kind of usage could create confusion in the designation of terms for a single concept. In addition, it would create inconsistency in expressing a single concept. This could also result in the problem of

standardization of the language. For terms that are semantically parallel, the following suggestions have been made by the researcher to avoid lexical inconsistency.

(109)	Parallel terms	Suggested term	Gloss
	<i>aadgosha/uulli hixixxaato/giraviite'e</i>	<i>aadgosha</i>	'gravity'
	<i>baandira /qalaanja</i>	<i>qalaanja</i>	'flag'
	<i>dabuuba /sawuza/ woroo'n qara</i>	<i>woroo'n qara</i>	'south'
	<i>kilaaymeeta /ayye'l amaxxa</i>	<i>ayye'l amaxxa</i>	'climate'
	<i>madaabara /harshisaanchcho</i>	<i>harshisaanchcho</i>	'fertilizer'
	<i>moodeela /kobi'la/ labiso'o</i>	<i>kobi'la</i>	'model'
	<i>sameena /noorza /hanaa'n qara</i>	<i>hanaa'n qara</i>	'north'
	<i>xambi kitaabcho /gaazeexa</i>	<i>xambi kitaabcho</i>	'newspaper'

As shown in (109), in some cases two native terms are used in parallel with loanword. For instance, in *aadgosha/uulli hixixxaato/giraviite'e* the first two terms are native equivalent for the term 'gravity'. From these words, the first one (<*aadgosha*> 'dragging down') is economic and transparent in describing the concept 'gravity'. In a situation where there is a precise native equivalent for a concept, borrowing is not advisable. From *baandira/qalaanja* the term *baandira* is Italian loanwords introduced into Hadiyya via Amharic. Even though this word is used alternatively, the term *qalaanja* is frequently used term in school textbooks.

Terms representing geographical direction, i.e., 'north' and 'south', are inconsistently used. Three alternative designations were assigned to each, as in *dabuuba/sawuza/woroo'n qara* 'south' and *sameena/noorza/hanaa'n qara* 'north'. In each designation, the first two terms are Amharic and English loans respectively whereas the third term is a native equivalent. For these designation i.e., for 'north' and 'south' the native equivalent is suggested to be used since it is transparent in expressing the meaning or direction. If the first suggestion is not preferred, the second option should be borrowing from Amharic since it is second language for Hadiyya speakers and more transparent than English in describing the concept.

### 5.1.2.3 The source languages for lexical borrowing in Hadiyya

#### 5.1.2.3.1 Direct loanwords in Hadiyya

Hadiyya borrowed loanwords for various concepts from different source languages. For some loanwords, it is not easier to identify the precise source language particularly when certain loanwords exist in different languages. Hence, some languages such as English could serve as direct sources as well as indirect sources of borrowing in Hadiyya, as depicted in the following sections.

##### 5.1.2.3.1.1 Loans from Amharic and English

English and Amharic are the most important sources of borrowing for Hadiyya lexical elaboration. In fact, the majority of English loanwords entered Hadiyya via intermediary language, Amharic. The main reason for this is that Amharic had an opportunity to be developed for a longer period of time as compared to Hadiyya. In other words, Amharic enriched its lexicon for different scientific and technological concepts by incorporating mainly English loanwords. The development of Amharic as a language of administration, media, and medium of instruction provides model for the development of other Ethiopian languages like Hadiyya. Therefore, it is possible to say that the majority of foreign loanwords (e.g., English, Italian and French) have been incorporated into Hadiyya mainly via Amharic. In addition to the role of Amharic as an intermediary language, it is also possible to perceive that some of the English loanwords are introduced into Hadiyya through educated bilinguals, particularly in school text-books development.

##### 5.1.2.3.1.2 Loans from Arabic

The contact of Hadiyya people with Arabs had started from 7<sup>th</sup> century, which latter became a base for the people to accept Islam and to form Islamic state. After a long period of contact, therefore, from 10<sup>th</sup> to 12<sup>th</sup> century the Hadiyya Islamic state was established (Alebachew & Samuel, 2002 E.C:18-20). Due to cultural contact, it could be assumed that a number of Arabic loanwords entered Hadiyya. Though some Arabic loanwords are found commonly in both Amharic and Hadiyya, there are also some Arabic loanwords found only in Hadiyya. This shows



that some Arabic loanwords are incorporated into Hadiyya without an intermediary language. The following are some of the examples<sup>75</sup> of direct loans from Arabic:

(110)	Arabic		Hadiyya	Gloss
	<i>fadžr</i>	→	<i>afeejaara</i>	‘early in the morning’
	<i>ʔal ʔahira</i>	→	<i>aheera’a</i>	‘kingdom of god’
	<i>ajam</i>	→	<i>ayyaamo</i>	‘day’
	<i>dʒimat</i>	→	<i>Jimaata</i> <sup>76</sup>	‘Friday’
	<i>dʒinn</i>	→	<i>jina</i>	‘spirit’
	<i>ħams</i>	→	<i>Kamsa</i> <sup>77</sup>	‘Thursday’
	<i>kataba</i>	→	<i>kitaab</i> - <sup>78</sup>	‘write’
	<i>k’ahwa</i>	→	<i>qaawwa</i>	‘coffee’
	<i>subħ</i>	→	<i>suphe’e</i>	‘early morning’
	<i>tum</i>	→	<i>tuma</i>	‘garlic’
	<i>ʕumr</i>	→	<i>umura</i>	‘age’

As shown in (110), week days (e.g., *Jimaata* ‘Friday’, *Kamsa* ‘Thursday’), food items (e.g., *qaawwa* ‘coffee’, *tuma* ‘garlic’), and religious terms (e.g. *aheera’a* ‘kingdom of god’, *jina* ‘spirit’) show the influence of Arabic in Hadiyya lexicon due to cultural contact. The Arabic word *kitaab*- ‘write’ is productively employed in the designation of concepts related to print

<sup>75</sup> The examples are adapted from Leslau (1956).

<sup>76</sup> The Arabic word *jimaata* and the Amharic word *Harba* < ሳርብ *ʔarb* are being used in Hadiyya for the term ‘Friday’ alternatively, particularly in spoken form. However, in school domains or in written forms, the Amharic loan (*Harba*) is used.

<sup>77</sup> The word *Hamusa* ‘Thursday’ is also used in Hadiyya; it is shared by Amharic as well. The word *Hamusa* is also used as standard form in Hadiyya.

<sup>78</sup> In Hadiyya, the term *kitaaba* ‘book’ or ‘neck let’ developed from the Arabic verb *kataba*. The term ከተብ *kattəbə* ‘wrote’ is also used sometimes in Amharic in parallel with the native equivalent ጻፈ *s’afə*.

through derivation in Hadiyya, as in *kitaabaancho* ‘writer’, *kitaabichcho* ‘magazine’, *kitaabo’o* ‘text’, etc. In these examples, *-aanch*, *-ichch*, and *-o* are derivational morphemes, respectively.

Some Arabic loanwords also occur in both Hadiyya and Amharic. For Arabic loanwords that occur in both languages, it is not easy to precisely show the direction of borrowing. However, it could be assumed that such Arabic loanwords were incorporated into Hadiyya via Amharic.<sup>79</sup> The following are some of the examples of Arabic loanwords that occur in both Amharic and Hadiyya.

*Table 49: Arabic loanwords both in Hadiyya and Amharic*

Hadiyya	Amharic	Gloss
<i>abola</i>	አቦል <i>ʔabol</i>	‘first (for coffee)’
<i>adaba</i>	አደብ <i>ʔadəb</i>	‘good manners’
<i>akiima</i>	ሀኪም <i>hakiim</i>	‘physician’
<i>alkoola</i>	አልኮል <i>ʔalkool</i>	‘alcohol’
<i>farasulla</i>	ፈረሱላ <i>fərasulla</i>	‘items of 17 Kg’
<i>hanqa</i>	ሀቅ <i>həqq</i>	‘truth’
<i>irsaasa</i>	ርሳስ ( <i>i</i> ) <i>rsaas</i>	‘lead’
<i>jaanjibeela</i>	ዝንጅብል <i>zingibil</i>	‘ginger’
<i>jabana</i>	ጃበና <i>ǧəbəna</i>	‘jug or kettle of coffee pot’
<i>kiisa</i>	ኪስ <i>kis</i>	‘pocket’
<i>koora</i>	ኮርቻ <i>koričča</i>	‘saddle’
<i>maqasa</i>	መቀስ <i>məqəs</i>	‘scissors’
<i>markaba</i>	መርከብ <i>mərkəb</i>	‘boat’
<i>masgiida</i>	መስግድ <i>məsgid</i>	‘mosque’
<i>miizaana</i>	ሚዛን <i>mizān</i>	‘balance’
<i>qishira</i>	ቅሽር <i>qišir</i>	‘coffee grain without peel’

<sup>79</sup> The higher status that Amharic had got (as a *lingua franca*, medium of instruction, language of administration, etc.) in Ethiopian context could be the possible reason for this assumption.

Hadiyya	Amharic	Gloss
<i>qurunfuda</i>	ቅሩንፋድ <i>qirunfud</i>	‘clove’
<i>saamuna</i>	ሳሙና <i>samuna</i>	‘soap’
<i>sa’aata</i>	ሰዓት <i>səʔat</i>	‘watch’
<i>woraqata</i>	ወረቀት <i>wəraʔat</i>	‘paper’
<i>zayita</i>	ዘይት <i>zəyit</i>	‘oil’
<i>zinnaara</i>	ዝናር <i>zinnar</i>	‘cartridge-poach’

### 5.1.2.3.1.3 Loans from Kambaata

Though Kambaata is closely related to Hadiyya, only few Kambaata loanwords were found in Hadiyya. According to the interview conducted with Hadiyya key informants, the major sources of borrowing for school textbooks’ development are English and Amharic. The interviewee has asserted that Kambaata does not have a better old literary tradition than Hadiyya<sup>80</sup>. Due to this, loanwords from Kambaata are very rare even though both languages are closely related and are in contact with each other in the border areas. The following are some of the examples of Kambaata loanwords in Hadiyya:

- (111) *tokke* ‘drink at once’  
*haasaawwo* ‘chat’  
*angaa’laancho* ‘a vessel used for washing’

In the example, the loanword *tokke* ‘drink at once’ is borrowed from Kambaata *ballishsha*<sup>81</sup> terms. The terms *haasaawwo* has been borrowed unnecessarily since there is Hadiyya equivalent word *chaayite* or *wossoo’limma*. On the other hand, the term *angaa’laancho*<sup>82</sup> is a genuine

<sup>80</sup> Interview with Expert E, May 25, 2014 (see Appendix V, 22).

<sup>81</sup> *Balliishsha* refers to the term of avoidance in Kambaata (Treis, 2005:309).

<sup>82</sup> *angaa’laancho* is a compound word (< *ang-a-ta* ‘hand’ + *aa’ll-* wash). The morpheme *-aan* is attached to the compound word functions as a derivational morpheme or shows instrumental nominal (Treis, 2008)

borrowing since it refers to an item made of clay, and which is prepared by Kambaata speaking low cast group and introduced into Hadiyya vocabulary through the import of the material.

#### 5.1.2.3.2 Indirect loanwords in Hadiyya

Some loanwords entered Hadiyya directly from source languages while some other words are borrowed indirectly via intermediate languages. With regards to this, Amharic played a great role since it has been medium of instruction (at primary level), language of administration, etc. in the whole of Ethiopia (until 1991). For its lexical enrichment, Amharic has employed mechanisms of lexical borrowing from foreign languages such as English, French, Italian, etc. Hadiyya, on the other hand, used those loanwords to enrich its lexicon. Hence, a great majority of foreign loanwords have entered Hadiyya via Amharic.

##### 5.1.2.3.2.1 Indirect loans from English

Various English terms related to scientific and technological concepts are borrowed into Hadiyya usually via Amharic. Of these terms, terms of chemical elements (112a), terms of Environmental science (112b), terms of technological innovations (112c), etc. are some of the domains of terms borrowed through the intermediary language (Amharic). Consider example in (112):

(112)	Amharic		Hadiyya	Gloss
a)	ፎስፎረስ <i>fosforəs</i>	→	<i>fosferesa</i>	‘phosphorus’
	ፖታሲየም <i>potasiyəm</i>	→	<i>potaasiyeema</i>	‘potassium’
	ክሎሪን <i>kilorin</i>	→	<i>kilooriina</i>	‘sulfur’
	ኦክሲጂን <i>oksiğin</i>	→	<i>oksijiina</i>	‘oxygen’
b)	ቬኑስ <i>venus</i>	→	<i>veenuusa</i>	‘Venus’
	አሜባ <i>ameba</i>	→	<i>ameeba</i>	‘amoeba’
	ቫይረስ <i>vayirəs</i>	→	<i>vaayiresa</i>	‘virus’
c)	ኮምፒውተር <i>kompiyutər</i>	→	<i>kompiyuutera</i>	‘computer’

(112)	Amharic		Hadiyya	Gloss
	ኤሌክትሪክ <i>ʔelektirik</i>	→	<i>elektiriika</i>	‘electric’
	ቴክኖሎጂ <i>teknoloḡi</i>	→	<i>teknoolooje’e</i>	‘technology’

#### 5.1.2.3.2.2 Indirect loan from Italian

Majority of the Italian words are borrowed through the intermediary language (Amharic). Only one instance is attested as direct loan, i.e., *abokaato’o*<sup>83</sup> ‘lawyer’ which is not attested in Amharic as a loanword. In other cases, as can be seen from data (113), the Italian loanwords were borrowed into Hadiyya via Amharic.

(113)	Amharic	Source language		Hadiyya	Gloss
	-----	<i>avvocato</i>	→	<i>abokaato’o</i>	‘lawyer’
	ባንዲራ <i>bandira</i>	<i>bandiera</i>	→	<i>baandira</i> <sup>84</sup>	‘flag’
	በረንዳ <i>bərənda</i>	<i>veranda</i>	→	<i>baranda</i>	‘veranda’
	ቦርሳ <i>borsa</i>	<i>borsa</i>	→	<i>borsa’a</i>	‘bag’
	ጄሶ <i>ḡesso</i>	<i>gesso</i>	→	<i>jeesso’o</i>	‘gypsum’
	ካሚዎን <i>kamiwon</i>	<i>camion</i>	→	<i>kaame’e</i>	‘car’, ‘lorry’
	ፓስታ <i>pasta</i>	<i>pasta</i>	→	<i>paasta’a</i>	‘pasta’
	ፖስታ <i>posta</i>	<i>posta</i>	→	<i>poosta’a</i>	‘post’
	ሲባጎ <i>sibago</i>	<i>spago</i>	→	<i>sibaago’o</i>	‘string’
	ሲምንቶ <i>simminto</i>	<i>cemento</i>	→	<i>simminto’o</i>	‘cement’
	ታሪፍ <i>tarif</i>	<i>tariffa</i>	→	<i>taariifa</i>	‘price, rate’

<sup>83</sup> The Amharic term ጠበቃ *t’əbəqa* is also used as alternative form. The term *abokaato’o* ‘lawyer’ is probably the only direct loan from Italian.

<sup>84</sup> The term *qalaanja* is most commonly used form in school domains currently. However, both terms were used in the dictionary as independent entries.

The Italian loanwords entering Hadiyya via Amharic are adapted to Hadiyya phonological system. As can be seen from (113) some loanwords are adjusted by replacing Amharic central vowel /ə/ which does not exist in Hadiyya with the nearest Hadiyya vowels, as in *baranda* < ቤረንዳ *bərənda* ‘veranda’. Some loanwords are adapted by adding final vowel and through vowel length, as in *taariifa* < ታሪፍ *tarif* ‘price’, and some other loanwords by word final *v’v* pattern, as in *borsa’a* < ቦርሳ *borsa* (see also examples 96 and 97).

#### 5.1.2.3.2.3 Indirect loan from French

French is another important source of loanword for the enrichment of Amharic vocabulary. Hadiyya has also indirectly borrowed French loanwords via Amharic. The following examples (in 114) are French loanwords that entered Hadiyya through Amharic.

(114)	Amharic	Source language		Hadiyya	Gloss
	ሳንቲም <i>santim</i>	<i>centima</i>	→	<i>saantiba</i>	‘cent’
	ሸሚዝ <i>šəmiiz</i>	<i>chemise</i>	→	<i>shamiiza</i>	‘shirt’
	ቢሮ <i>biro</i>	<i>bureau</i>	→	<i>biiro’o</i>	‘office’
	ካሴት <i>kasset</i>	<i>cassette</i>	→	<i>kaaseeta</i>	‘cassette’
	ክራቫት <i>kiravat</i>	<i>cravate</i>	→	<i>kiraabaata</i>	‘tie’
	ኮሚቴ <i>komite</i>	<i>comité</i>	→	<i>komiite’e</i>	‘committee’
	ፓርላማ <i>parlama</i>	<i>parlement</i>	→	<i>paarlaama’a</i> <sup>85</sup>	‘parliament’

#### 5.1.2.3.2.4 Indirect loan from Greek

Hadiyya has borrowed mainly religious terms from Greek via Amharic. Some loanwords, for instance, ሳሙና *samuna*<sup>86</sup> also occur in Arabic which itself has originally borrowed them from Greek. This indicates that Amharic borrowed words from Greek either directly or indirectly via

<sup>85</sup> Amharic borrowed the term ፓርላማ *parlama* ‘parliament’ either from English or French (see Bender, 1976)

<sup>86</sup> See Leslau (1957:237)

Arabic. The data mentioned in (115) show examples of Greek loanwords that entered Hadiyya through Amharic.

(115)	Amharic		Hadiyya	Gloss
	ዲያቆን <i>diyaqon</i>	→	<i>daaquuncho</i>	‘deacon’
	ጠረጴዛ <i>t’ərəpp’ēza</i>	→	<i>xaraphpheeza</i>	‘table’
	ክርስቲያን <i>kristiyan</i>	→	<i>kirstaancho</i>	‘Christian’
	ሳሙኛ <i>samuna</i>	→	<i>saamuna</i>	‘soap’
	ታቦት <i>tabot</i>	→	<i>taaboota</i>	‘arc of covenant’

#### 5.1.2.4 Summary

Generally, in addition to exploiting language internal resources, Hadiyya has also used the method of borrowing to expand its vocabulary. Following the 1991 reform of Education and Training Policy, text-books on different subjects for grade 1-6 were prepared in Hadiyya<sup>87</sup> in the summer of 1992 and 1993. This was the crucial stage for the development and standardization Hadiyya language. According to Cohen (2000:138), the very low level of development of languages of SNNPR in relation to specialized vocabulary was a challenge to meet the purpose of education in local languages. The problem was acute particularly in the field of science due to lack of vocabulary or technical terms (Cohen, 2000). In order to assist the development of local languages for media of instruction in the region, the Science and Technology Terminology Project (STTP)<sup>88</sup> was set up in order to develop the necessary terminology in the local languages. Therefore, STTP produced guidelines to guide translation of the text-books or technical terms in the local languages.

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<sup>87</sup> During the second phase of textbook preparation, Hadiyya was one of the languages of SNNPR together with Kambaata and Gedeo (see Cohen, 2000:134).

<sup>88</sup> The project was funded by UNDP and most of the staff of STTP were members of the Language Academy of Addis Ababa University (Cohen, 2000:138).

The theme of the guideline for the translation and development of textbooks was summarized in Cohen (2000:138-139) as follows. The first suggestion was to coin new terms based on the existing vocabulary of the local languages. The second suggestion in the guideline was employing borrowing and literal translation where no terms in the local languages were available. When borrowing is mandatory, Amharic was the first preference particularly for the widely understood terms in the language. Where no terms are readily available in Amharic, borrowing from English was the second alternative.

The first suggestion in the guideline implies that exhausting language internal resources such as semantic extension and compounding has been given priority in the designation of new concepts or terms. In general, when the guideline for the designation of new terms is compared, Amharic and Hadiyya share similar pattern. In relation to borrowing, however, in Hadiyya there is no suggestion so as to search loanwords from related languages such as Kambaata, Oromo and Sidaama. On the contrary, in Amharic the first priority is to borrow from Ge'ez when borrowing is mandatory. (See description under Table 46 for principles or guidelines of borrowing in Amharic).

### 5.1.3 Comparison between borrowing in Amharic and Hadiyya

Loanwords from different sources are integrated into Amharic and Hadiyya phonological system. Amharic adapted loanwords in two ways: with modification and without modification. In Hadiyya, however, every loanword is adapted with modification i.e., unmodified borrowing is not attested in Hadiyya. When loanwords are integrated into the target languages (Amharic and Hadiyya), non-existent vowels are subjected to replacement with the nearest vowels. Similarly, diphthongs which are existent in English loanwords will be replaced either by simple vowels or by glide insertion in both Amharic and Hadiyya.

As a result of massive borrowing for the designation of scientific and technological concepts, some of the non-native consonants are introduced to both languages. For instance, the phonemes /p/ and /v/ were not part of phonological system of both Amharic and Hadiyya but they are



incorporated via loanwords. On the contrary, a phoneme /θ/ is replaced by nearest consonant /t/ in both Amharic and Hadiyya.

With regard to the adaptation of consonant clusters, the word initial consonant cluster is not permissible in Amharic and Hadiyya. In most of the loanwords, however, Amharic has violated the impermissible word initial consonant cluster ( $c_1c_2-$ ) when loanwords with the word initial  $c_1c_2-$  cluster enter the language. This is frequently attested in the written form of Amharic. On the other hand, [i] is inserted word initially in the spoken form of Amharic and in some instances of written form, as in /(i)sport/ ‘sport’ though the use of the epenthetic vowel [i] is optional. In contrast to Amharic, in Hadiyya the impermissible word initial consonant cluster is adjusted by epenthetic vowel [i] though there are few exceptions.

Derivational and inflectional morphemes of source languages are not usually borrowed to Amharic and Hadiyya; rather they are being replaced by native equivalent morphemes. In some instances, for example, the English plural morpheme /-s/ is used without modification in the integration of some loanwords. On the other hand, superfluous borrowings are attested in the existence of native equivalents in both Amharic and Hadiyya. Moreover, parallel use of loanwords and native equivalents, which have implications for the standardization of those terms, also occur in both languages.

There is source language preference for Amharic and Hadiyya to incorporate loanwords. From foreign language sources, Amharic tends to borrow significantly from English followed by Arabic, French and Italian. Loanwords from Greek is minimal. From Ethiopian languages, Ge’ez is the first preference for Amharic to borrow lexical items. Next to Ge’ez, Oromo is also the second vital source of borrowing for the lexical expansion of Amharic.

Amharic and English are vital sources of lexical borrowing for Hadiyya. Amharic has also been serving as an intermediary language for Hadiyya’s borrowing from foreign languages such as English, Italian, French and Greek. However, some English loanwords have directly been entering Hadiyya probably by educated bilinguals. The possible justification for this argument is

that some loanwords, which did not occur in Amharic, are attested only in Hadiyya. Moreover, the incorporation of Arabic loanwords is considered as direct borrowing due to cultural contacts between the Arabs and the Hadiyya people. As opposed to Amharic which exploited Ge'ez as a source of loanwords, Hadiyya did not exploit the sources from related languages except few Kambaata loanwords.

## 5.2 *Loan translation*

Another productive method of lexical elaboration in Amharic and Hadiyya is loan translation, also known as *calquing* or *paraphrasing*. Loan translation refers to the designation of new terms by translating the meaning of foreign terms into the target language (Van Huyssteen, 2003:115). According to Sager & Nkwenti-Azeh (1989:23), loan translation can be categorized into literal and conceptual. Literal loan translation refers to the word-for-word replacement of the lexical components of a foreign term into a host language. Apart from the word-for-word substitution, the meaning of a concept can also be translated from a foreign language into a recipient or target language. In the following sections, the method of loan translation in Amharic and Hadiyya is described.

### 5.2.1 Loan translation in Amharic

#### 5.2.1.1 Literal loan translation

Loan translation is one of the productive ways of designation of foreign concepts in Amharic. With regard to this, a number of mathematics, social science, political, economic, administrative, etc. terms are designated by loan translation method. As can be observed from the collected data on loan translation, in the majority of the cases literal loan translation is predominantly used followed by non-literal (conceptual) loan translation. The following are examples of literal loan translation from English:

(116)	Term	Literal loan translation	Gloss
	addition property	የመደመር ባህሪ <i>yə-mə-dəmmər bahiri</i> GN-VNM-addition property	‘of addition property’
	empty set	ባዶ ስብስብ <i>bado sibsib</i> empty set	‘empty set’
	equivalent sets	አቻ ስብስቦች <i>ፖላርሳ sibsib-očč</i> equivalent set-PL	‘equivalent sets’
	multiplication property	የማባዛት ባህሪ <i>yə-ma-baz-at bahiri</i> GN-VNM-multiply-NMZR property	‘of multiplication property’
	number line	የቁጥር መስመር <i>yə-qut’ir məsmər</i> GN-number line	‘of number line’
	food chain	የምግብ ሰንሰለት <i>yə-migib sənsələt</i> GN-food chain	‘of food chain’
	grassland	የሳር ምድር <i>yə-sar midir</i> GN-grass land	‘of grass land’
	principle of pressure	የግፊት መርህ <i>yə-ggiffit mərih</i> GN-pressure principle	‘of pressure principle’
	red cross	ቀይ መስቀል <i>qəyy məsqəl</i> red cross	‘red cross’

In the majority of the cases the structure of loan translation is genitive construction which is expressed by the morpheme የ- *yə-*, as in የሳር ምድር *yə-sar midir* (of grass+land) ‘grassland’. In some instances, the compound structure and loan translation overlap. For instance, the terms for ቀይ መስቀል *qəyy məsqəl* (red+cross) ‘red cross’ structurally compound at the same time it is the direct translation from English.

Amharic has continually developed its lexicon to the newly emerging socio-economic and political concepts or ideologies. For instance, following the takeover of the EPRDF government in 1991, new terms have been introduced into the language to express socio-economic and political ideologies. Of course, some terms which were used in the *derg* regime are still active in use (for example, ሚና መጫወት *mina məčč’awət* ‘playing a role’). The data presented in Table 50

is just to show some examples of literal translation of English terms<sup>89</sup> into Amharic in socio-economic and political sphere.

*Table 50: Literal loan translation from English into Amharic*

Term	Literal loan translation	Gloss
capacity building	አቅም ግንባታ <i>ḥaqim ginb-ata</i> capacity build-NMZR	‘capacity building’
dry port	ደረቅ ወደብ <i>dəraq wədab</i> dry port	‘dry port’
free market economy	የነጻ ገበያ ኢኮኖሚ <i>yə-nəs’a gəbəya ḥikkonomi</i> GN-free market economy	‘of free market economy’
green economy	አረንጓዴ ኢኮኖሚ <i>ḥarəngʷade ḥikkonomi</i> green economy	‘green economy’
mobile phone	ተንቀሳቃሽ ስልክ <i>tənqəsasaš silk</i> mobile phone	‘mobile phone’
playing a role	ሚና መጫወት <i>mina mə-čč’awət</i> role VNM-play	‘to play a role’
poverty line	የድህነት መስመር <i>ye-dih-innət məsmər</i> GN-poor-NMZR line	‘of poverty line’
poverty reduction	የድህነት ቅነሳ <i>yə-dih-innət qinnəs-a</i> GN-poor- NMZR reduce-NMZR	‘of poverty reduction’
rent seeking	ኪራይ ሰብሳቢነት <i>kiray səbsab-innət</i> rent collect- NMZR	‘rent collecting’
single digit	ነጠላ አሀዝ <i>nət’əla ḥahaz</i> single digit	‘single digit’
taking measure	ርምጃ መውሰድ <i>(i)rmiğṣa mə-wisəd</i> measure VNM-take	‘taking measure’
value added	ተጨማሪ እሴት <i>tə-č’əmmari ḥisset</i> PS-add.AGT value	‘value added’

<sup>89</sup> The examples are taken from the document of MOFED (2010).

As shown in Table 50, some concepts such as ተንቀሳቃሽ ስልክ *tənqəsaqaš silk* ‘mobile phone’ are recently added terms following the introduction of technology. The term ሞባይል *mobayl* ‘mobile’ is also used in the loanword level by reducing the phrase ሞባይል ስልክ *mobayl silk* ‘mobile phone’. On the other hand, terms such as e.g. አቅም ግንባታ *aqim ginbata* ‘capacity building’, ተጨማሪ እሴት *təč’əmmari ʔisset* ‘value added’, ኪራይ ሰብሳቢነት *kiray səbsabinnət* ‘rent seeking’, ነጠላ አሀዝ *nət’əla ʔahaz* ‘single digit’, etc. have been used in political and economic discourse of the current Government of Ethiopia.

### 5.2.1.2 Non-literal (conceptual) loan translation

Apart from word-for-word translation, various concepts of English terms have been translated into Amharic. The following examples are provided to illustrate the non-literal (conceptual) loan translation from English into Amharic.

*Table 51: Non-literal loan translation from English into Amharic*

Term	Non-literal loan translation	Gloss
balanced scorecard (BSC)	ወጤት ተኮር ስርአት <i>witt’et təkkor siriʔat</i> result oriented system	‘result oriented system’
business process reengineering	መሰረታዊ የስራ ሂደት ለውጥ <i>məsərat-awwi yə-sira hidət ləwit’</i> base-ADJR GN-work process change	‘basics of business process reform’
inflation	የዋጋ ጎረት <i>yə-waga nir-ət</i> GN-price rise-NMZR	‘of price raise’
integer	ድፍን ቁጥር <i>difin qut’ir</i> solid number	‘solid number’
microorganisms	በአይን የማይታዩ ጥቃቅን ተህዋሲያን <i>bə-ʔayn yə-m-a-yi-t-ayy-u t’iqaqqin tahiwas-iyan</i> INST-eye GN-NMZR-NEG-3PL-PS-see-DF minute cell-PL	‘invisible small cells’
simultaneous equation	ጣምራ እኩልታ <i>t’amra ʔikkul-ta</i> dual equal-NMZR	‘dual equation’
speedy resolutions	ሰበር ውሳኔዎች <i>səbbər wisane-wočč</i> break decision-PL	‘broken decisions’

Term	Non-literal loan translation	Gloss
square root	ካሬ ዘር <i>kare zər</i> quare seed	‘square root’
zebra crossing	ዝንጉርጉር የመንገድ ማቋረጫ <i>zingurgur yə-məngəd maqʷarəč’a</i> motley GN-road crossing	‘zebra like of road crossing’

Table 51 illustrates the conceptual or non-literal translation of English terms into Amharic. In this method, a concept is paraphrased in the Amharic way. Hence, it is more transparent to the speaker than literal translation. In other words, it will also be more transparent particularly to the Amharic monolingual speakers than literal translation.

Some phrases such as በአይን የማይታዩ ጥቃቅን ተህዋሲያን *bəḷayn yəmayitayyu t’iqaqqin tahiwasiiyan* ‘microbes’, and ዝንጉርጉር የመንገድ ማቋረጫ *zingurgur yəməngəd maqʷarəč’a* ‘zebra’ have longer expressions for English short terms. For the concept ‘zebra’ the loanword *zebra* is used side by side with loan translation. In this case, using the loanword *zebra* is better than using loan translation since it is economical and has already been used widely in the spoken form. Terms such as የዋጋ ንረት *yəwaga nīrət* and የዋጋ ግሽበት *yəwaga gīšbət* are alternatively used for the concept ‘inflation’. When the two expressions are compared, the latter (የዋጋ ግሽበት *yəwaga gīšbət*) is recently added to the language. This kind of usage has implication for the standardization of such terms exist in parallel.

## 5.2.2 Loan translation in Hadiyya

### 5.2.2.1 Literal loan translation

In Hadiyya, English and Amharic are the primary sources for the method of loan translation. In some instances, it is difficult to identify whether the source language is Amharic or English for the translation of some terms. The role of English as international language or language of science and technology has an impact on the development of Ethiopian languages. On the other hand, the status of Amharic as a working language and a medium of instruction for a long period in Ethiopia has also an impact in the development of Ethiopian languages like Hadiyya. A

number of Mathematics, Social science and language terms have been borrowed by literal loan translation from English into Hadiyya as stated in Table 52.

*Table 52: Literal loan translation from English into Hadiyya*

English term	Literal loan translation	Gloss
disjoint set	<i>ed-anchi-bee'i wixxite</i> add-NMZR.PS-less set	'disjoint set'
equivalent fraction	<i>akeek-ammi sibirixxa</i> compare-PS fraction	'equivalent fraction'
equivalent equations	<i>akeek-ammi gud-is-ans-uwwa</i> compare-PS be.equal-CS-FRQ-PL	'equivalent equations'
equivalent set	<i>akeek-ammi wixxite</i> compare-PS set	'equivalent set'
full stop	<i>uull-ishshi mare'e</i> stop-CS mark	'of stop mark'
infinite set	<i>tungi bee'i wixxite</i> end less set	'infinite set'
intersecting point	<i>ed-anchi tako'o</i> intersect-NMZR point	'intersecting point'
irregular polygon	<i>beyyamu bee'i dut midaado</i> place- PS-PV less many side	'irregular polygon'
Polygon	<i>dut midaad misila</i> many side diagram	'polygon'
single quotation mark	<i>matandar aggiishshi mare'e</i> single borrowing mark	'single quotation mark'
homogeneous mixture	<i>matamaxxi hamaaro'o</i> of homogeneous mixture	'homogeneous mixture'
life cycle	<i>heechchi do'o</i> of life cycle	'life cycle'
modern time civilization	<i>doollab hig qoor-ooma</i> modern passed wise-NMZR	'modern time civilization'

As can be seen from Table 52, morphemes of the donor language are adjusted into the host language (Hadiyya) in the process of loan translation. For instance, the negative marker which is a prefix in English is a suffix in Hadiyya as in, *disjoint* vs *edanchibee'i* (joint+-less). However, the use of a negative marker suffix *bee'i* 'less/not' is not consistent in the loan translation of terms. In some terms, for instance, *tungi bee'i* 'infinite', *edanchibee'i* 'disjoint', *beyyammu bee'i* 'irregular', etc. the suffix *bee'i* is sometimes written as part of the base word and in another instance it is written as a separate lexical item. However, the pronunciation of those terms and the meaning suggest that they are single term rather than separate terms. Therefore, in the loan translated items such as *beyyamu bee'i* 'irregular', *tungi bee'i* 'infinite', etc. the constituents should be written as a single lexical item so as to be consistent and meaningful.

The term for 'polygon' *dut+midaado* (many+side) also should be written in compound word structure in the same way to *sas+midaado* (three+side) 'triangle'. Moreover, in the loan translated phrases for the term 'polygon' *dut midaad misila*, the word *misila* is unnecessary or extra to express the basic concept.

In the loan translated terms for 'single quotation mark' *matandar aggiishshi mare'e*, the word *matandar* should be replaced by *mataqqi*. The term *matandar* is designated for meta-language concept 'singular' and *mataqqi* is more appropriate than *matandar* for the English term 'single'. Moreover, this term is also productive in designating similar terms such as *mataqqi fidala* 'monograph', *mataqqi weyyakka* 'garment made of single layer of cloth', etc. It goes also with the pattern of *mataqqa* vs. *lamaqqa* which is equivalent to 'single' vs. 'double'.

The designated Hadiyya term for 'quotation mark' i.e., *aggiishshi mare'e* (of borrowing + mark) also seems inappropriate. The Hadiyya term *aggiishsha* is designated for the term 'borrowing (of word)'. On the other hand, there is exact word to represent 'quotation' or 'citation' in the language. Thus, the term *qaddite* 'citation' is more appropriate to replace *aggiishsha* 'borrowing' since it vividly shows the concept 'citation or quotation' in addition to minimizing an overuse of the same term for different concepts.



In addition to English, Amharic is also used as a source for literal loan translation to elaborate Hadiyya vocabulary. As shown in Table 53 below, terms for Mathematics, Environmental science, language, etc. are designated based on the Amharic designation. Amharic had been medium of instruction in Ethiopia particularly at primary school level until 1991. When the policy of Amharic medium of instruction is changed into mother tongue medium instruction, school textbooks were translated from Amharic into Hadiyya in the summer of 1992 and 1993 for grade 1-6. Therefore, this has contributed to the prevalence of literal loan translation from Amharic into Hadiyya, as in Table 53:

*Table 53: Literal loan translation from Amharic into Hadiyya*

Term	Amharic loan	Literal loan translation in Hadiyya	Gloss
commutative property	<i>yəqiyiyyir t'əbay</i>	<i>daba'lanchi aalo'o</i>	'of exchanging property'
exclamation mark	<i>qalə ʔagganno</i> <sup>90</sup>	<i>maalallaxxi mare'e</i>	'of exclamation mark'
minute	<i>qalə gubaʔe</i>	<i>dummichchi sagara</i>	'of meeting word'
question mark	<i>t'iyyaqe milikkīt</i>	<i>xa'michchi mare'e</i>	'of question mark'
second digit	<i>yəʔassir bet</i>	<i>tommi mine</i>	'of ten house'
whole number	<i>mulu qut'ir</i>	<i>wo'm xigo</i>	'full number'
blood circulation	<i>yədəm ʔudət</i>	<i>xiiqqi do'o</i>	'of blood circulation'
driving license	<i>məŋga fiqad</i>	<i>ushechchi eeyyite</i>	'of driving license'
green plants	<i>ʔarənguwade təkiločč</i>	<i>shaano'i mutaano</i>	'green plants'
large intestine	<i>tilliqu ʔangǧət</i>	<i>lob hilleenna</i>	'large intestine'
ombudsman	<i>inba t'əbbaqi</i>	<i>indiidda egeraancho</i>	'tear keeper'
rift valley	<i>simt' šələqo</i>	<i>surixxi cebba</i>	'of lowering valley'

<sup>90</sup> In Amharic, the term ትዕምርተ ኣኻር *tiʔimmirtə ʔankiro* is alternative designation for the English 'exclamation mark'. The translation of the Hadiyya term *maalallaxxi mare'e* is also based on this term (i.e. ትዕምርተ ኣኻር *tiʔimmirtə ʔankiro*).

The word *mine* ‘house’ is very productive to designate almost any institution in Hadiyya. Most of the terms coined by using the word *mine* ‘house’ are structurally compound words. However, they are basically translated from Amharic. Accordingly, various establishments were designated by using very productive term *mine*<sup>91</sup> ‘house’ as one of the compound<sup>92</sup> constituents in the loan translation. The following Hadiyya examples (in 117) demonstrate the designation of institutional terms by literal loan translation from Amharic.

(117)	Amharic	Hadiyya	Gloss
	<i>betā māngist</i> (house +king)	<i>adi ’l mine</i> (of king + house)	‘palace’
	<i>hakim bet</i> (physician+house)	<i>akii ’m mine</i> (of physician+house)	‘hospital’
	<i>mikir bet</i> (counsel + house)	<i>aranchi mine</i> (counsel + house)	‘parliament’
	<i>s’ihifāt bet</i> (writing+house)	<i>kitaaphphi mine</i> (of writing + house)	‘office’
	<i>timihirt bet</i> (lesson+house)	<i>losa ’n mine</i> (of lesson + house)	‘school’
	<i>fīrd bet</i> (judgment + house)	<i>oogaxxi mine</i> (of judgment + house)	‘court’
	<i>posta bet</i> (post+house)	<i>posta ’i mine</i> (of post + house)	‘post office’
	<i>betā kiristiyan</i> (house+Christian)	<i>uunxaxxi mine</i> (of prayer + house)	‘church’
	<i>mādihanit bet</i> (medicine+house)	<i>qaraa ’l mine</i> (of medicine+house)	‘pharmacy’

<sup>91</sup> Similarly, Oromo also uses loan translation from Amharic by using the term *mana* ‘house’ for the designation of almost any establishment (Baye, 1994:65).

<sup>92</sup> The distinction between compounding and loan translation is sometimes far from clear-cut (Van Huyssteen, 2003:115).

### 5.2.2.2 Non-literal (conceptual) loan translation

Some concepts are non-literally translated from English into Hadiyya. In this way, the basic concept is represented in Hadiyya by combining lexical items as indicated in the following examples:

(118)	Term	Non-literal loan translation	Gloss
	dash	<i>bon beyyi mare'e</i> empty of space mark	'of empty space mark'
	comma	<i>giphite mare'e</i> pause mark	'mark of pause'
	semi-colon	<i>shiqqeen giphixxi mare'e</i> bigger of pause mark	'a bigger pause mark'
	nonfiction	<i>qoocco'i ihu-bee'i kitaabo'o</i> creative being-not writing	'non-creative writing'
	colon	<i>caakkishshi mare'e</i> of description mark	'mark of description'
	probability	<i>ihimmi saamo</i> state of being chance	'chance of state of being'
	invertebrate	<i>miqbee'i soko'o</i> bone-less animal	'bone-less animal'
	animal kingdom	<i>mikmikoo soko'i haayyite</i> moving of animal population	'of moving animal's population'

As indicated in (118), the basic concepts of English terms are translated into Hadiyya non-literally. The translation for the term 'animal kingdom' has unnecessarily become long. The first word *mikmikoo* 'moving' is unnecessary in *mikmikoo soko'i haayyite* 'animal kingdom'. When the translated expression for the term 'plant kingdom' is compared to 'animal kingdom'; it is clear that the term has unnecessarily become long. For instance, the term *mutaa'n haayyite* is designated through loan translation for the concept 'plant kingdom' that could share the same pattern with 'animal kingdom'. Therefore, if the same pattern is followed with *mutaa'n haayyite* 'plant kingdom', *soko'i haayyite* would be adequate to represent 'animal kingdom'.

As can be seen from the discussion in previous sections, Amharic and English are the basis for borrowing and loan translation in the lexical expansion and modernization of Hadiyya. This was reflected during the textbook development or translation process in 1992 and 1993 following the 1991 Education and Training Policy reform. During the preparation of textbooks in mother tongue, the developers were using Amharic textbooks and English references for the translation of grade 1-6 textbooks.<sup>93</sup> Therefore, the development of Hadiyya textbooks<sup>94</sup> through the translation could be the reason for the similarity of the strategies in Amharic and Hadiyya. Consider the examples in Table 54 which show the mechanism of borrowing and loan translation employed in both languages.

*Table 54: Designation method of some English terms in Amharic and Hadiyya*

English terms	Amharic	Hadiyya
line graph	loan translation + loanword የመስመር ግራፍ <i>yəməsmər giraf</i>	loan translation + loanword <i>ogo 'l giraafa</i>
parabola	loanword ፓራቦላ <i>parabola</i>	loanword <i>paaraboola</i>
positive	loanword ፖዘቲቭ <i>pozətiv</i>	loanword <i>poozaatiiva</i>
rhombus	loanword ሮምቦስ <i>rombos</i>	loanword <i>oroombasa</i>
straight line	loan translation ቀጥታ መስመር <i>qətt 'ita məsmər</i>	loan translation <i>xabeen ogora</i>
teaching aid	loan translation መርጃ መሰሪያ <i>mərgə məssariya</i>	loan translation <i>tamo 'i mu 'uta</i>
thermometer	loanword ቴርሞ ሜትር <i>termometir</i>	loanword <i>termoomeetira</i>

<sup>93</sup> Interview with Expert F, May 26, 2014 (see Appendix V, 16).

<sup>94</sup> The prepared or translated textbooks were Hadiyya, Mathematics, Environmental science and Aesthetics.

English terms	Amharic	Hadiyya
trapezium	loanword <i>ትራፕዚየም tirappiziyəm</i>	loanword <i>tiraappiiziyeema</i>
word problem	loan translation + loanword <i>የቃላት ፕሮብሌም yəqalat probilem</i>	loan translation + loanword <i>saga'l pirobileema</i>

Mathematical concepts were designated in both languages by the method of lexical borrowing and loan translation rather than using mechanisms of derivation or semantic extension. As shown in Table 54, short words were adopted by lexical borrowing whereas short phrases or expressions were designated by equivalent translation. For some phrases, borrowed items were used within the pattern of loan translation, for instance, in *የመስመር ግራፍ yəməsmər giraf* (of line+graph) ‘line graph’ the second word is the English loanword. In general, Amharic has an impact in choosing mechanisms of lexical elaboration or terminology development of Hadiyya.

### 5.2.3 Comparison between loan translation in Amharic and Hadiyya

Literal loan translation is primarily used in Amharic and Hadiyya followed by non-literal or conceptual loan translation. The use of non-literal loan translation avoids possible confusion of understanding designated expressions for mother tongue speakers since concepts are translated into a target language. English has been used as a source language of loan translation for Amharic whereas Amharic and English have been used as source languages for Hadiyya. Scientific and technological terms are first translated from English to Amharic, and then Hadiyya uses the developed expressions from Amharic via loan translation. Moreover, English terms or expressions are also directly translated into Hadiyya when educated people have been engaged in the textbook development. In some instances, the method of loan translation and compounding overlap in Amharic and Hadiyya. In Hadiyya, loan translation is productively used to designate any establishment using the word *mine* ‘house’. This productive pattern functions as loan translation for Hadiyya, however, it is a compounding strategy for Amharic itself. Moreover, the translated form has similar structure with Hadiyya compound words. But semantically it is identified as loan translation.

## CHAPTER SIX: SUMMARY AND RECOMMENDATIONS

### 6.1 *Summary*

This research was conducted with the aim of describing ways of lexical standardization and elaboration in Amharic and Hadiyya. The description is based on Haugen's (1983) conceptual framework which comprises standardization and elaboration as parts of corpus planning.

Amharic has a longer written tradition compared to Hadiyya. The Amharic script, which evolved from the Ge'ez script, had gone through important processes. Amharic has developed symbols for palatalized and labialized sounds (see 3.1.3). The Amharic script, however, has been criticized for many years for representing extra symbols. To this end, the result from FGDs, documents and interviews also confirmed that the major problem of the Amharic script is inconsistency of spelling due to the presence of extra symbols. The Academy of the Ethiopian Languages had proposed the reduction of redundant symbols to make spelling more efficient, consistent and economical. However, the proposal still has not been practically implemented in domains such as education, administration and print media due to resistance from different scholars and the Ethiopian Orthodox Church. This implies that ideological, historical and psychological issues overweigh the linguistic principles in script development and reform. Hence, the consideration of linguistic principles alone does not make a successful script reform.

Hadiyya appeared in writing for the first time in a modified Ethiopic script by missionaries' effort (see Section 3.2.2). Following the downfall of the Derg, the current Roman-based script was chosen for Hadiyya in 1985 E.C, which was revised in 1996 E.C after serving for eleven years. As in Amharic, the reforms of the Hadiyya alphabet were concerned with the addition of symbols, namely <p> [p], <v> [v], <ts> [s'], <ny> [ɲ] and <zh> [ʒ]. These consonants are still in the process of becoming part of consonant phonemes in Hadiyya as a result of linguistic contacts with Amharic and English. The palatal nasal <ny> does not exist in Hadiyya except in the geminated form of few ideophones.

The assessment of the Roman-based Hadiyya orthography shows that there are gaps in the principles of economy and transfer of reading and writing skills (see Section 3.2.8). In Hadiyya, a problem of economy arises in the gemination of digraphs, which are represented by full reduplication, as in <chch>, <shsh>, etc. Such representation is time taking for writing in addition to having cost implication for printing. With regard to the principle of transfer, there are graphemes in which different phonetic values were assigned in Hadiyya compared to English. Particularly, the Hadiyya ejectives <x> [tʰ], <q> [kʰ], <c> [tʃʰ] and <ph> [pʰ] are problematic for Hadiyya children when they read English words containing these graphemes.

The capital letters in the Hadiyya orthography, like <CH>, <SH>, <PH>, <NY> and <TS>, do not reflect a natural way of writing. These forms also overlap with the abbreviation of Hadiyya lexical items. In Hadiyya orthography, consonant clusters of glottal stop plus *l*, *m*, *n*, *w*, and *y* are followed by vowel [i], but the vowel <i> is not represented orthographically in final positions of words occurring in the possessive form. Furthermore, inconsistencies of word division was attested in Hadiyya that might negatively affect standardization of the orthography.

Regarding lexical elaboration strategies, both Amharic and Hadiyya extensively use language internal and external resources. From language internal means, semantic transfer, and compounding are prominent methods of lexical expansion whereas abbreviation and blending are less common. Borrowing and loan translation are identified as the most productive language external means of lexical elaboration.

From the semantic transfer method, conversion is not identified in Amharic and Hadiyya whereas extensions from human body parts, from farming and animal breeding activities, from parts of plants, from sociocultural practices, reuse of special designation and redefinition of general vocabulary are commonly attested mechanisms in both languages (see Section 4.1). On the other hand, Hadiyya, more than Amharic, employs the semantic transfer method, e.g. semantic broadening (i.e., part-to-whole relationship), which was not attested in Amharic data.

Both Amharic and Hadiyya employed compounding as another major method for lexical elaboration (see Section 4.2). In both languages, the constituents of compounds involve nouns, adjectives, verbs and ideophones. Adpositions as one constituent of compounds are attested in Hadiyya, but not in Amharic. Of the compound types, nominal compounds are most common in both languages, followed by adjectival and verbal compounds. Verbal compounds in both languages are of composite type (i.e., ideophone + verb ‘to say / to do’). As regards formal changes or phonological modifications, Hadiyya, compared to Amharic, employs more strategies on word boundaries. Both languages used endocentric, exocentric and appositional compounds though the degree of productivity is different. Amharic has right-headed and left-headed endocentric compounds while Hadiyya has only right-headed compounds.

In addition to language internal resources, Amharic and Hadiyya extensively borrowed from Ethiopian and foreign languages (see Section 5.1). Amharic borrowed words mainly with modifications and only in some instances without modifications. Unmodified borrowing was not attested in Hadiyya. As a result of borrowing, non-native phonemes (e.g., /p/ and /v/) were incorporated into both Amharic and Hadiyya. In Hadiyya, impermissible word initial consonant clusters are adjusted by inserting the epenthetic vowel [i] whereas in Amharic loanwords with word initial consonant cluster are commonly written without epenthetic  $\lambda$  [i], which is sometimes optionally used. Derivational and inflectional morphemes of the source languages are usually replaced by equivalent native morphemes in Amharic and Hadiyya. Superfluous borrowings are attested in the presence of equivalent native words in both languages. Moreover, loanwords and native equivalents are attested in parallel usage in Amharic and Hadiyya which call for standardization of such terms.

As regards source languages, both Amharic and Hadiyya mainly depend on foreign languages, such as English, Arabic, French and Italian, which are well developed in expressions of scientific and technological concepts rather than Ethiopian languages. Amharic used more diverse sources than Hadiyya due to wider linguistic contacts between Amharic and European languages. Most of the European loanwords entered Hadiyya via Amharic since Amharic had been the medium of instruction in primary schools until 1991, in addition to its role as a language of wider



communication in Ethiopia. From the foreign languages, incorporation of Arabic loanwords into Hadiyya is considered direct borrowing due to religious or cultural contact. From the Ethiopian languages, Amharic exploited Ge'ez, which is a genetically related language, for the designation of a number of concepts. However, Hadiyya did not exploit related languages such as Kambaata and Oromo as a source of borrowing as much as Amharic exploited Ge'ez.

Loan translation is also used as a language external means of lexical elaboration in Amharic and Hadiyya (see Section 5.2). English has been used as a source language of loan translation for Amharic whereas English and Amharic have been source languages for Hadiyya. As compared to other Ethiopian languages, the role of Amharic is paramount in developing the Hadiyya language as a source of lexical expansion especially through borrowing and loan translation.

Hadiyya could share vital experiences from the development of Amharic. Amharic has established lexical and terminological development principles as shown in Amsalu (1980:2). In Hadiyya, however, there are no clearly stated or established lexical and terminological development principles. In other words, the use of language internal and external resources is explicitly mentioned for the development of Amharic while it is not for Hadiyya. Thus, there is a need of principles of lexical elaboration for the future standardization of Hadiyya. Moreover, the existence of vast literature in Amharic is considered as one of the challenges for the orthography reform, particularly to drop extra symbols. In the case of Hadiyya, however, there is still no vast literature until now.

## 6.2 Recommendations

This study makes the following recommendations on the problems identified in lexical standardization and elaboration in Amharic and Hadiyya:

Orthography development or reform is not always linguistic or pedagogical; it is also ideological. A sociolinguistic force has a great role in orthographic standardization. In order to propose and implement an orthography reform, a careful assessment of sociolinguistic situations should be done. Otherwise, it is difficult to make an orthography reform practical. In the case of Amharic and Hadiyya, careful sociolinguistic analysis and ample discussions should be made for future standardization activities.

In order to ease the problem of inconsistency of Amharic spelling due to extra symbols, concerning bodies such as the Ministry of Education, the Ethiopian Orthodox Church and the Academy of Ethiopian Languages and Cultures should work together. The first option to improve the Amharic spelling is maintaining extra symbols for church education or religious purposes, but dropping them in all other official domains, e.g. in formal education, administration, mass media. If this is not preferred due to ideological reasons, another option is maintaining the redundant symbols to write Ge'ez loanwords. In this case, manuals with a glossary of Ge'ez loanwords should be developed to indicate the standard way of using Amharic spelling.

In the revised Roman-based Hadiyya orthography, the grapheme *zh* [ʒ] is unnecessary and should be replaced by the grapheme *j* [dʒ] or *z* [z]. The palatal nasal *ny* [ɲ] could be retained in the geminated form <nyny> to write the only ideophone containing this sound. In Amharic loanwords such as *sanna* <ሰኞ/ səñño/ 'Monday', *daanna* <ዳኛ/ dañña/ 'judge', etc., the native phoneme /n/ should be used.

The doubling of digraphs (e.g., *ch*, *sh*, *ph*, etc.) to represent gemination affects the economy of the orthography. In order to alleviate this problem, geminated digraphs could be represented as follows:

(119)	Non-geminated form	Currently used geminated form	Recommended geminated form
	<i>ch</i>	<i>chch</i>	<i>chh</i>
	<i>sh</i>	<i>shsh</i>	<i>shh</i>
	<i>ph</i>	<i>phph</i>	<i>phh</i>
	<i>zh</i>	<i>zhzh</i>	<i>zhh</i>
	<i>ts</i>	<i>tsts</i>	<i>tss</i>
	<i>ny</i>	<i>nyny</i>	<i>nyy</i>

As to the proposal in (119), the digraph is written with a repeated second letter to mark gemination. The repetition of the initial letter for geminated digraph, like *cch* for *chch*, could misguide readers to interpret the *cc* sequence as gemination of <*c*> not <*ch*>. If <*chh*> is used, however, the initial sequence *ch* in <*chh*> clearly suggests the [tʃ] sound. Thus, the first alternative is better to represent the gemination of digraphs in Hadiyya. This could balance the principle of economy as well as transparency of the orthography.

Another option is replacing digraphs and ejectives by designating new graphemes. This change could resolve the problem of economy and transfer of skills during reading and writing English. As has been discussed in Section 3.2.8.4, the ejective symbols have a pedagogically negative impact on the transfer of reading skills. Hence, the ejectives <*x*>, <*q*>, <*c*>, <*ph*> could be replaced by <*t'*>, <*k'*>, <*c'*>, and <*p'*>, respectively. There are two options to represent gemination of these graphemes: to repeat the first letter without apostroph, or to repeat the entire digraph, like <*k'ott'e*> or <*k'ot't'e*> 'be strong', <*witt'ite*> or <*wit't'ite*> 'assembly'. In these examples, the first option is more economic than the second one. The graphemes for [tʃ] <*ch*> and [ʃ] <*sh*> could be maintained, as there is no problem with regard to transfer of skills. Finally, economy could be enhanced by not marking gemination of digraphs, as in Oromo

Capitalization of digraphs should follow the normal way of writing. Hence, the capital letters in the graphemes <*CH*>, <*SH*>, <*PH*>, <*NY*> and <*TS*> should be replaced with <*Ch*>, <*Sh*>, <*Ph*>, <*Ny*> and <*Ts*>. Furthermore, following the consonant clusters in the context of glottal

stop plus *l, m, n, w*, and *y*, a vowel <i> should be represented in word final position when words occur in the possessive form, as in *la'm* → *la'mi* [laʔmi] ‘of first’ and *ga'n* → *ga'ni* [gaʔni] ‘of address’.

Moreover, inconsistencies that have been observed in Hadiyya in using word division need to be normalized through consistent orthographic rules. In the textbooks, which were recently changed for Hadiyya subject from grade 1-8, orthographic rules were explicitly stated and used. However, the Environmental science, Mathematics, Aesthetics textbooks were not changed yet in accordance with the modified writing conventions. Hence, the teaching-learning materials for grade 1-4 should be revisited to maintain consistency of language use and enrichment of standard.

In lexical expansion mechanisms, superfluous borrowings should be avoided and replaced by equivalent native words in Amharic and Hadiyya. Furthermore, the parallel usage of loanwords and native equivalents must be standardized by giving priority to language internal sources.

In Hadiyya, corpus planning activities such as orthographic reform, dictionary making and pedagogical grammar development needs to be done in collaboration with linguists. If language change is propagated once to the language community without careful planning, it might not be easy to introduce reforms. Moreover, orthography or script reforms could be challenging when there is a vast number of publications in a language as is in the case of Amharic. In this regard, Hadiyya has a good opportunity to revise its orthography since there are not many publications yet compared to Amharic.

Thus, for future standardization and development, the Hadiyya zonal administration should establish a language standardization committee (as a short term goal) which could be the base for the foundation of a Hadiyya Language Academy in the long run. The committee should comprise specialists from various disciplines such as science, mathematics, aesthetics, literature, linguistics, mass media (e.g. radio program). The Hadiyya language standardization committee in consultation with linguists should develop principles and guidelines which promote and guide

language standardization and elaboration processes. Experiences could be shared from the Amharic language for the lexical and terminological elaboration.

The standardization committee may also consider the following aims: developing and standardizing new terminology, compiling general and special purpose dictionaries, and promoting the use of suggested standard forms in schools, colleges and university. Moreover, the use of new terms in the media (at least currently in radio) should be encouraged, and awards in recognition of best authors should be given to encourage literary works. Furthermore, they could engage in follow up and identification of problem areas after the implementation of the recommended standard form.

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## **APPENDICES**

### **Appendix I: Interview guidelines**

#### **A. Interview questions for Amharic expert**

1. Would you tell me your participation on the development or revision of grade 1-4 Amharic textbooks?
2. Was there training that you had received before you embarked on the textbook preparation? If there was training have you benefited from the training?
3. When new concepts are encountered during textbook development or revision, did you have discussion sessions with language experts? If there were discussions, how do you evaluate them?
4. Did you have books or dictionaries or a guideline that you referred to designate new concepts?
5. Would you tell me if you encountered language related problems in the development of new Amharic textbooks?
6. Did you have criteria help to designate new concepts? For instance, if you had written or unwritten conventions to designate terms in Amharic that come from English?
7. What are the methods you use to fill lexical gaps or mechanisms for lexical enrichment?
8. When borrowing is mandatory, which language is preferred for the team? Why it is preferred?
9. There are newly coined words in grade 1-4 Amharic textbooks. Is there any mechanism to check whether they are accepted or not? Is there any chance to replace or improve inappropriate word or term from the newly coined ones?
10. Are there any efforts or follow up to maintain spelling uniformity for terms or words that appeared in grade 1-4 Amharic textbooks? Would you explain if there were some efforts?
11. What is your position in relation to redundant symbols during preparation of Amharic textbooks? Do you suggest to drop or to maintain those symbols?
12. Were there any occasion in relation to assessing and editing the language aspect when Environmental science and Mathematics textbooks were prepared?



13. Would you please mention if there are changes in the newly prepared Amharic textbooks?
14. How do you explain teachers' and other language users' reactions regarding the change?
15. What do you suggest for further development and standardization of Amharic?

**(Amharic version)**

1. ከ1-4ኛ ክፍል በተዘጋጁት የአማርኛ መማሪያ መጻህፍት በዝግጅም ሆነ በማሻሻል ስራ የተሳተፉባቸው ኢጋጣሚዎች ከነበሩ ቢነግሩኝ?
2. የመጽሀፉ ዝግጅት ሳይጀመር በፊት የወሰዱት (የተሰጠው) ስልጠና ነበር? ስልጠናው ከነበረ ለመጻህፍት ዝግጅቱ ያገኙት ጥቅም (ያበረከተ አስተዋጽኦ) ከነበረ ቢጠቁሙኝ?
3. እርስዎ ባዘጋጁት/ኤዲት ባደረጉት የመማሪያ መጽሀፍ አዲስ ጽንሰ-ሀሳብ ሲያጋጥም ከሌሎች የቋንቋ ባለሙያዎች ጋር የመወያያ ጊዜ ነበረዎ? የውይይት ጊዜ ከነበረ፣ ውይይቱን እንዴት ይገመግሙታል?
4. መጽሀፍ ሲያዘጋጁ የሚያጋጥሞትን አዳዲስ ጽንሰ-ሀሳቦች ለመሰየም እንደ መመሪያ ሆኖ የሚያገለግል መጽሀፍ/መዝገበ ቃላት ወይም መመሪያ (guideline) ነበር?
5. በአዲሱ የአማርኛ መማሪያ መጻህፍት ዝግጅት ወቅት ቋንቋ ነክ የሆኑ ያጋጠሙ ችግሮች ከነበሩ ቢነግሩኝ?
6. መማሪያ መጻህፍት ውስጥ ጽንሰ-ሀሳቦችን ለመሰየም የሚያግዝ መስፈርት ነበራችሁ? በእንግሊዝኛ ያሉ ቃላት ወደ አማርኛ ሲመጡ ስያሜ ለመስጠት እንደ መስፈርት የሚቆጠሩ የተጻፈ ወይም ያልተጻፈ ስምምነት ከነበረ ያስረዱኝ::
7. የቃላት እጥረት (ክፍተት) ሲያጋጥም ጽንሰ ሀሳብን ለመወከል ወይም ቃላትን ለማበልጸግ የምትጠቀሙባቸው ስልቶች ካሉ የትኞቹ ናቸው?
8. ውስት የግድ ሲሆን ከየትኛው ቋንቋ ለመዋስ ነው ቅድሚያ የምትሰጡት? ያ ቋንቋ ለውስት ለምን ተመራጭ ሆነ?
9. ከ1-4 የተዘጋጁ የአማርኛ መማሪያ መጻህፍት ላይ አዳዲስ የተሰየሙ ቃላት አሉ:: እነዚያ ቃላት ተቀባይነት ማግኘት አለማግኘታቸው የሚረጋገጥበት መንገድ አለ ወይ? የማያረካ ቃል ሲገኝ ለማሻሻል እድል አለ?
10. በአማርኛ ከ1-4 ለአንድ ጽንሰ ሀሳብ የሚሰጥ ስያሜዎች ወይም ቃላት በፊደላት አጻጻፍ አንድ ወጥ እንዲሆኑ የተደረገ ጥረት (ክትትል) አለ ወይ:: በሌላ አነጋገር፣ አንድን ቃል በተመሳሳይ ፊደል በመጻፍ ሁኔታ የሚደረግ ክትትል ከነገረ ቢገልጹልኝ?

11. ሞክሼ ፊደላትን በተመለከተ እናንተ ከመጻህፍት ዝግጅት አንጻር ያላችሁ አስተሳሰብ (አቀቋም) ምንድነው? ይቅሩ ትላላችሁ ወይስ ይጠበቁ ትላላችሁ?
12. ሌሎች አካባቢ ሳይንስና ሂሳብ መጻህፍት ሲዘጋጁ፣ ከቋንቋ፣ ከአጻጻፍ ስርአት አንጻር ወይም ከእርማት አንጻር አዘጋጆቹ እናንተን የሚያስገመግሙበት አጋጣሚ ከነበረ ቢያስረዱኝ?
13. በቅርብ ጊዜ በአዲስ መንገድ በተዘጋጀው የአማርኛ መማሪያ መጻህፍት የተደረጉ ለውጦች ካሉ ይጠቁሙኝ፡፡
14. ለውጡ ካለ መምህራንና ሌሎች የቋንቋ ተጠቃሚዎች ለውጡን የተቀበሉበት መንገድ ምን ይመስላል?
15. የአማርኛ ቋንቋ እድገትንና መደበኛነትን ለማሳደግና ለማስጠበቅ መደረግ አለበት የምሉት ካለ?

## **B. Interview questions for Environmental science expert**

1. Would you tell me about your participation on the development or revision of grade 1-4 Environmental science textbooks? What was your role (if you have participated)?
2. Have you received any training before you embarked on the textbook preparation? If there was a training, have you benefited from it?
3. When new concepts are encountered during textbook development or revision, did you have discussion sessions with language experts? If there was discussion, how do you evaluate?
4. Was there any efforts that you made to work with the Ethiopian Language Academy?
5. Was there any occasion the Academy showed interest to work with your office to develop the standard of Amharic language in the educational domains?
6. Would you tell me if you had a guideline or dictionary that you referred to designate new concepts?
7. Would you tell me if you encountered language related problems in the textbook development?
8. When you designate Environmental science concepts, have you preferred to look for the words from Amharic or preferred borrowing? Which one was your first option?
9. When borrowing is mandatory, which language is preferred for the team? Why it is preferred?
10. How do you check whether the newly coined words or terms have got acceptance or not? Is there any way to replace when you come across with better words?
11. Is there any follow up mechanisms to keep consistency of spelling in grade 1-4 Environmental science textbooks?
12. Are there any efforts or follow up to maintain spelling uniformity for terms or words that appeared in grade 1-4 Environmental science textbooks? Would you explain me if there were some efforts?
13. What is your position in relation to redundant symbols during textbook development? Do you suggest to drop or to maintain those symbols?

14. What do you recommend in relation to using words which have Ge'ez etymology in Amharic spelling in a standardized way?
15. Are there problems related to Amharic spelling during the preparations Environmental science textbooks? If so, what measures should be taken to improve Amharic spelling?

**(Amharic version)**

1. ከ1-4ኛ ክፍል በአማርኛ በተዘጋጁት አካባቢ ሳይንስ የመማሪያ መጻህፍት በዝግጅም ሆነ በማሻሻል ስራ የተሳተፉባቸው አጋጣሚዎች ከነበሩ ቢነግሩኝ? ከተሳተፉ የስራ ድርሻዎ ምን ነበር?
2. የመጽሀፉ ዝግጅት ሳይጀመር በፊት የወሰዱት (የተሰጠው) ስልጠና ነበር? ስልጠናው ከነበረ ለመጻህፍት ዝግጅቱ ምን ያህል ጠቀመዎ?
3. እርስዎ ባዘጋጁት ወይም ባሻሻሉት የመማሪያ መጽሀፍ አዲስ ጽንሰ-ሀሳብ ሲያጋጥም ከቋንቋ ባለሙያዎች ጋር የመወያያ ጊዜ ነበረዎ? የውይይት ጊዜ ከነበረ፣ የውይይት ጊዜን እንዴት ይገመግሙታል?
4. እናንተ (ትምህርት ቢሮ) ከአዲስ አበባ ዩኒቨርሲቲ የቋንቋዎች አካዳሚ ጋር አብራችሁ ለመስራት የሞከራችሁበት አጋጣሚ አልነበረም?
5. አካዳሚውስ የአማርኛ ቋንቋ መደበኛነትን በትምህርት አውዶች ከማሳደግ አንጻር ከቢሮአችሁ ጋር አብረን እንስራ ብለው የሚመጡበት አጋጣሚ ካለ?
6. መጽሀፍ ሲያዘጋጁ የሚያጋጥሙትን አዳዲስ ጽንሰ-ሀሳቦች ለመሰየም የሚያገለግል መዝገበ ቃላት ወይም መመሪያ (guideline) ነበር?
7. መጽሀፉን ሲያዘጋጁ ያጋጠሙ ቋንቋ ነክ ችግሮች ከነበሩ ይግለጹ/ይጥቀሱ፡፡
8. የሳይንስ ጽንሰ ሀሳቦችን ለመሰየም በአብዛኛው ስትከተሉ የነበረው ስልት ከአማርኛ መፈለግ ነው ወይስ ወደ ውስት መሄድ ነው ሚዛወታለው? የትኛው ቅድሚያ ይሰጥ ነበር፡፡
9. ውስት ግድ ሲሆን ወደ የትኛው ቋንቋ ነው የሚያዘነብሉት? ያ ቋንቋ ለውስት ለምን ተመራጭ ሆነ?
10. በመማሪያ መጽሀፍ ዝግጅት ወቅት የተፈጠሩ አዳዲስ ቃላት በተጠቃሚዎች ዘንድ ተቀባይነት ማግኘት አለማግኘቱ የሚረጋገጥበት መንገድ አለ? አስቀድሞ ከተሰየሙት ቃላት ውስጥ የማያረካ ሲኖር በሌላ ቃል የሚተካበት መንገድ አለ?

11. ከ1-4 ባሉት የአካባቢ ሳይንስ ትምህርት መግሪያ መጻህፍት ለአንድ ጽንሰ-ሀሳብ የተሰጠው ስያሜ (term) በቃላት ወይም በፊደል አጻጻፍ አንድ ወጥ እንዲሆን ለማድረግ የሚደረግ የክትትል ስልት አለ?
12. በአካባቢ ሳይንስ ትምህርት ከ1-4 ባሉት መጻህፍት ለአንድ ጽንሰ-ሀሳብ የተሰጠው ስያሜ (term) በቃላት ወይም በፊደል አጻጻፍ አንድ ወጥ እንዲሆኑ ለማድረግ የሚደረግ የክትትል ስልት አለ?
13. ሞክሼ ፊደላትን በተመለከተ እናንተ ከመጻህፍት ዝግጅት አንጻር ያላችሁ አስተሳሰብ (አቋም) ምንድነው? ይቅሩ ትላላችሁ ወይስ ይጠበቁ ትላላችሁ?
14. በግዕዝ ስርወ ቃላት ያላቸውን በአማርኛ የአጻጻፍ ስርአት ወጥነት ባለው ሁኔታ በትምህርት አውድ እንዲተገበር ምን መደረግ አለበት ይላሉ?
15. በአማርኛ ቋንቋ በተዘጋጀው የአካባቢ ሳይንስ መጽሀፍ ሲያዘጋጁ የአጻጻፍ ስርአትን በሚመለከት የሚያጋጥም ችግር ካለ ይጠቁሙ፡፡ የአጻጻፍ ስርአትን ለማሻሻል መወሰድ ስላለበት ርምጃ ይጠቁሙ፡፡

### C. Interview questions for Mathematics expert

1. Would you tell me if you have participated on the development or revision of grade 1-4 Mathematics textbooks?
2. If you had a chance to participate in development or revision of textbooks, have you come across with the concept designation (terminology) related problems in grade 1-4 Mathematics textbooks?
3. Would you tell me if you encountered language related problems in grade 1-4 Mathematics textbooks?
4. When you designate Mathematics concepts, have you preferred to look for the terms from Amharic or you preferred borrowing. Which one was your first option?
5. When borrowing is mandatory, which language(s) is (are) your preference?
6. After the implementation of the prepared textbooks in schools, is there any way to get feedback or questions from teachers? How do you entertain their questions or feedbacks?

7. Are there any efforts or follow up to maintain spelling uniformity for terms or words that appeared in grade 1-4 Mathematics textbooks? Would you explain me if there were some efforts?
8. Is there any writing convention regarding the writing of Amharic redundant symbols?

**(Amharic version)**

1. ከ1-4 በተዘጋጀው የሂሳብ መግሪያ መጻህፍ ውስጥ በዝግጅት ወይም በማሻሻል ስራ የተሳተፉባቸው አጋጣሚዎ ከነበሩ?
2. ከ1-4 ባሉ የሂሳብ መጻህፍት ዝግጅትም ሆነ በማሻሻል አንዳንድ ጽንሰ ሀሳቦች ሲሰየሙ (ሲወክሉ) ችግሮች ከነበሩ ቢነግሩኝ?
3. ከ1-4 ያሉትን መግሪያ መጻህፍቱን ሲገመግሙ ያጋጠመዎ ዋነኛ ነክ ሌሎች ችግሮች ካሉ ቢገልጹልኝ?
4. የሂሳብ ጽንሰ ሀሳቦችን ለመሰየም በአብዛኛው ስትከተሉ የነበረው ስልት ከአማርኛ መፈለግ ነው ወይስ ወደ ውስት መሄድ ነው ሚዛወተረው፤ የትኛው ቅድሚያ ይሰጥ ነበር?
5. ወደ ውስት መሄድ የግድ ከሆነ ወደየትኛው(ኞቹ) ዋናዋ (ዎች) ነው የሚታመዝኩት
6. መጻህፍት ተዘጋጅተው ወደ ትምህርት ቤት ሲበተኑ ከመምህራን አስተያየት ወይም ጥያቄ የሚሰበሰብበት መንገድ አለ? አስተያየቶች ወይም ጥያቄዎች ካሉ እንዴት ይስተናገዳሉ?
7. በሂሳብ መግሪያ መጻህፍት ከ1-4 ለአንድ ጽንሰ ሀሳብ የሚወክሉ ስያሜዎች ወይም ቃላት በፊደላት አጻጻፍ አንድ ወጥ እንዲሆኑ የተደረገ ጥረት (ክትትል) አለ? በሌላ አነጋገር፣ አንድን ቃል በተመሳሳይ ፊደል በመጻፍ ሁኔታ የሚደረግ ክትትል ከነበረ ቢገልጹልኝ?
8. የአማርኛ ሞክሼ ፊደላትን የያዙ ቃላት የሚጻፉበት መመሪያ ወይም ስምምነት ይኖራል?

#### **D. Interview questions for Hadiyya expert**

1. When or in what situation has Hadiyya become a written language?
2. Hadiyya previously was written in Ethiopic or Ge'ez script until the Derg regime. Would you explain the situation in which the Roman-based alphabet has been introduced?
3. When committee was assigned for the script choice, who rendered the committee authority or responsibility?
4. What were the specializations of study of the participants during the script choice meeting?
5. What was the criteria when Roman script was chosen?
6. Wasn't there counter argument supporting the use of Ethiopic script during the discussion held in Addis Ababa and Hosa'ina?
7. Was there any challenges after you started using the Roman-based script? Was there any reform that you made?
8. Other symbols such as <ny>, <p>, <ts>, <v>, and <zh> were added in the alphabet list. When and by whom were these changes made?
9. Is there any effort other than educational domains that would facilitate the language development regarding lexical elaboration or standardization in Hadiyya Zone?
10. Which of the lexical elaboration techniques do you use frequently to designate foreign concepts that are introduced to Hadiyya during textbook development?
11. When new terms are proposed or emerged after textbooks are prepared, do you prefer the term already in use or replace the new term instead of the previous one?
12. Which language is mostly used when lexical borrowing is needed? Why?
13. Is there any circumstance that you borrow words from Cushitic languages?
14. Is there any effort to maintain spelling consistency during material preparation?

(Amharic version)

1. ሀዲይሳ የጽሁፍ ቋንቋ የሆነው ለመጀመሪያ ጊዜ መቼ ወይም በምን አይነት ሁኔታ ነበር?
2. ሀዲይሳ ቀደም ሲል በግእዝ/አማርኛ በሚጠቀመው ፊደል ሀዲይሳ ይጠቀም ነበር። በተለይ በደርግ ዘመንም በመሰረተ ትምህርት ይጠቀም ነበር። ከዚያ በኋላ በላቲን ስክርፕት መጠቀም የተጀመረበትን ሁኔታ/ሂደት ቢያስረዱኝ።
3. የፊደል ምርጫ ላይ ኮሚቴ ሲቋቋም ለፊደል ምርጫ ስልጣን ወይም ሀላፊነት የሰጠው አካል ማን ነበር?
4. በፊደል ምርጫ ውይይቱ ላይ የነበሩ ተሳታፊዎች የሙያቸው ምን ምን ነበር?
5. የላቲን የአጻጻፍ ስርአት ሲመረጥ የፊደል ቀረጽ መስፈርቱ ምን ነበር?
6. በዚህ ክርክር (ውይይት) ሲደረግ የግዕዝን ፊደል እንጠቀም ብለው በአዲስ አበባም በሆሳእናም የተከራከሩ አልነበሩም?
7. ላቲንን መጠቀም ከጀመራችሁ በኋላስ ያጋጠሙ የአጻጻፍ ችግሮች ነበሩ? ያሻሻላችሁስ ነገር ነበር?
8. ሌሎች ቀድሞ ሲል ያልነበሩ እና ኝ፣ ፕ፣ ጽ፣ ቭ እና ሹ መቼና በማን ነበር የተጨመሩት?
9. በሀዲያ ዞን ከትምህርት አውድ ውጭ ቋንቋን ለማሳደግ ጥረት የሚያደርግ፣ በቃላት ፈጠራና መደበኛነትን (እስታንዳርድን) በማስጠበቅ የሚሰራ አለ?
10. በመጽሀፍ ዝግጅት ወቅት የቃላት እጥረት (ክፍተት) ሲያጋጥም የውጭ ጽንሰ-ሀሳብን ለመስየም ምን አይነት ዘዴ (ስልት) ትከተሉ ነበር? ወይም ቃላትን ለማበልጸግ ብዙውን ጊዜ የምትጠቀሙበት ስልት የትኛው/የትኞቹ ናቸው?
11. አዳዲስ ስያሜዎች ሲመጡ መጽሀፍ ካዘጋጃችሁ በኋላ ሌላ የተሸለ ስያሜ ሲመጣ የተለመደው ይቆይ ትላላችሁ ወይስ አዲሱን ታስተናግዳላችሁ?
12. ከሌላ ቋንቋ ቃላትን መዋስ ሲያስፈልግ፣ አብዛኛውን ጊዜ የውሰት ምንጭ ሆኖ የሚያገለግል ቋንቋ የትኛው ነው? ያ ቋንቋ ለምን ተመራጭ ሆነ?
13. ከኩሽ ቋንቋዎች የምተዋሉበት አጋጣሚ አለ?
14. መጽሀፍትን ስታዘጋጁ ቃላት የፊደላት ወጥነትን ጠብቀው እንዲጻፉ የምታደርጉት ጥረት አለ?



#### **E. Interview questions for Environmental science expert**

1. Have you received training before textbook/dictionary preparation?
2. Was there any training that had been provided to the subject area dictionary compilers? What was the criteria to select those participants in the dictionary compilation?
3. Have you faced challenges to designate new concepts in Hadiyya? If so how did you solve them?
4. Was there any guideline to designate new concepts when you were developing textbooks or compiling a dictionary?
5. What was your priority from language internal resources and borrowing in designating new concept during textbook development or dictionary compilation for technical terms?
6. When borrowing is mandatory which language is your preference for borrowing? Why?
7. Do you have principle for your preference of borrowing from English, Amharic and Cushitic languages? If you have order of preference please mention.
8. Was/is there any way that you check whether a newly designated term got acceptance among users or not?
9. Was there any follow up mechanisms to maintain consistency of terms during dictionary compilation and/or the development of grade 1-4 Environmental science and Mathematics textbooks?
10. What do you recommend to develop Hadiyya in different contexts for different purposes?

(Amharic version)

1. የመጽሀፉ/የመዝገበ ቃላት ዝግጅት ሳይጀመር በፊት የወሰዱት ስልጠና ነበር?
2. በየሳብጅክት ኤሪያ የተዘጋጀውን መዝገበ ቃል ሲዘጋጅ አዘጋጆቹ ምን አይነት ስልጠና ወሰዱ? የተመረጡ ሰዎችስ የተመረጡበት መስፈርት ከነበረ ይንገሩኝ?
3. አዳዲስ ጽንሰ ሀሳቦችን ከመሰየም አንጻር ተግዳሮት አላጋጠመም? ካጋጠመ እንዴት መፍታት ቻላችሁ?
4. በሀዲይሳ መማሪያ መጽሀፍ/መዝገበ ቃላት ሲያዘጋጁ የሚያጋጥሙትን አዳዲስ ጽንሰ ሀሳቦች ለመሰየም እንደ መመሪያ ሆኖ የሚያገለግል መጽሀፍ ወይም መመሪያ (guideline) ነበር?
5. በመዝገበ ቃላት ሆነ በመማሪያ መጽሀፍት ዝግጅት ወቅት ወደ ቋንቋው አዲስ ጽንሰ ሀሳብ ሲመጣ በተለይ ቴክኒካዊ ቃላት ስትሰይሙ ብዙ ጊዜ ቀድሞችሁ የምታዘኩበሉት ወደ ውስት ነው ወይስ በቋንቋው ውስጥ ካሉት ቃላት ገጣጥማችሁ ለመፍጠር የምትሞክሩት?
6. ከሌላ ቋንቋ ቃላትን መዋስ ሲያስፈልግ፣ አብዛኛውን ጊዜ የውስት ምንጭ ሆኖ የሚያገለግል ቋንቋ የትኛው ነው? ያ ቋንቋ ለውስት ምንጭነት ለምን ተመራጭ ሆነ?
7. እንግሊዝኛ፣ ከአማርኛና የኩሽ ቋንቋዎች የውስት ምንጭ ሊሆኑ ይችላሉ። ከእነዚህ ውስጥ እንደ ምርጫ (preference) በቅደም ተከተል ማስቀመጥ ቢያስፈልግ እንደ መርህ የምትጠቁሙት አሰላለፍ ካለ ይጥቀሱ።
8. በመማሪያ መጽሀፍ/መዝገበ ቃላት ዝግጅት ወቅት የተፈጠሩ አዳዲስ ቃላት በተጠቃሚዎች ዘንድ ተቀባይነት ማግኘት አለማግኘቱ የሚረጋገጥበት መንገድ አለ/ነበረ?
9. መዝገበ ቃላትም ይሁን መማሪያ መጽሀፍት በሚዘጋጅበት ጊዜ በተለይ ደግሞ በአካባቢ ሳይንስም ሆነ በሂሳብ አንድ ቃል ሲኖር ከ1ኛ ክፍል እስከ 4ኛ ክፍል ወጥነቱን እንዲጠብቅ የምትጠቁሙበት/የምትከታተሉበት መንገድ ነበር?
10. ሀዲይሳ ቋንቋን በተለያዩ አውዶች ይበልጥ ለማሳደግ እንዲህ ቢደረግ የተሸለ ነው የሚሉት ካለ?

## F. FGD guiding questions for teachers

1. Please discuss terminology or word related problems that you encounter when you teach \_\_\_\_\_ subject.
2. What are reasons for the lexical problems observed in \_\_\_\_\_ textbook?
3. The terms/lexical items that are written in textbooks should be *clear, simple, consistent* and *short*. In relation to this criteria how do you evaluate lexical items that are used in \_\_\_\_\_ subject?
4. Explain if there are terms that do not represent concepts clearly in \_\_\_\_\_ subject?
5. Would you suggest effective ways of designating new terms in \_\_\_\_\_ subject?
6. Are there frequently occurring word/terminology related problems in \_\_\_\_\_ subject? What are they?
7. Explain in brief, if there are spelling related problems in the subject you are teaching?

## (Amharic version)

1. የ\_\_\_\_\_ ትምህርት ሲያስተምሩ በ\_\_\_\_\_ ትምህርት ውስጥ ባሉት ቃላት የሚያጋጥሙ ችግሮች ካሉ ጠቁሙ፡፡
2. በ\_\_\_\_\_ ትምህርት (መማሪያ መጽሀፍ) ውስጥ ለሚታዩ የቃላት ችግሮች ምክንያቶቹ ምንድናቸው?
3. በመማሪያ መጽሀፍት ውስጥ የሚኖሩ ስያሜ ቃላት በፍቻቸው የማያሻሙ፣ ቀላል፣ ወጥነት ያላቸው እና ሲጻፉ በታ የማይፈጁ ሊሆኑ ይገባቸዋል፡፡ ከዚህ መስፈርት አንጻር በ\_\_\_\_\_ ትምህርት ውስጥ ያሉትን ቃላት እንዴት ትገመግማላችሁ፡፡
4. በ\_\_\_\_\_ ትምህርት ውስጥ ሀሳብን በትክክል የማይወክሉ ስያሜ ቃላት ካሉ ያስረዱ፡፡
5. በ\_\_\_\_\_ ትምህርት ውስጥ አዳዲስ ቃላትን ለመፍጠር ለአዳዲስ ቃላት ስያሜ ለመስጠት ውጤታማ መንገድ የሚሉት ካለ ይጠቁሙ፡፡
6. የ\_\_\_\_\_ ትምህርት ተማሪዎች ሲማሩ ብዙ ጊዜ የሚገጥማቸው ቃላትን የተመለከቱ ችግሮች ካሉ ምን አይነት ናቸው?
7. እርስዎ በሚያስተምሩት ትምህርት የአጻጻፍ ስርአትን በሚመለከት ተማሪዎች የሚገጥማቸው ችግሮች ካሉ ባጭሩ ይግለጹ፡፡

## Appendix II: Amharic script

### A. Transcription of the Amharic script

For the purpose of transcription of Amharic data, a phonemic transliteration in IPA is followed:

Ethiopic	Transcription (IPA)	Transliteration
ሀ	/h/	h
ለ	/l/	l
ሐ	/h/	ħ
መ	/m/	m
ሠ	/s/	ś
ረ	/r/	r
ሰ	/s/	s
ሸ	/ʃ/	š
ቀ	/kʰ/	q
በ	/b/	b
ተ	/t/	t
ቸ	/tʃ/	č
ኀ	/h/	x
ነ	/n/	n
ኸ	/ɲ/	ñ
አ	/ʔ/	ʔ
ከ	/k/	k
ኸ	/h/	h
ወ	/w/	w
ዐ	/ʔ/	ʕ
ዘ	/z/	z
ዝ	/ʒ/	ž
የ	/j/	y
ደ	/d/	d
ጀ	/dʒ/	ǰ
ገ	/g/	g
ጠ	/tʰ/	tʰ
ጪ	/tʃʰ/	čʰ
አ	/pʰ/	pʰ
ጸ	/sʰ/	sʰ
ፀ	/sʰ/	zʰ
ፈ	/f/	f
ፐ	/p/	p

Vowels are transliterated as:

“Order”	1	2	3	4	5	6	7
Transcription	ə	u	i	a	e	ɨ	o

**Note:**

**ሀ, ሐ, ኀ** represented as *h* in the present day Amharic. When it is necessary to represent the historical value of *ሀ*, *ሐ* and *ኀ*, they are represented by *h*, *ħ* and *x*, respectively.

**ሰ, ሠ** Both are represented as <s>, but to differentiate between the two Ge'ez words *ሠ* is represented by *ś*.

**አ, ዐ** Both are not distinctive in Amharic and they are represented by ʔ. When it is necessary to differentiate, ʔ stands for *አ* whereas ʕ stands for *ዐ* particularly represented in the historical (etymological) representation of graphemes. Both sounds are distinctive in Ge'ez.

**ሄ, ፀ** Both are represented by <s'> and they have identical sound in the present day Amharic. When distinction is required to differentiate between two Ge'ez words *ፀ* is represented as <z'>.

The glottalized or ejectives sounds which are characteristics of Amharic and are not existent in English, are written with apostrophes <'>, as in *አ* <p'>, *ጠ* <t'>, *ሄ* <s'>, *ጪ* <č'> and the grapheme for *ቀ* is represented as <q>.

The labialized consonant graphemes (*ቂ, ኀጐ, ከጐ, ጐ*) are represented as q<sup>w</sup>, h<sup>w</sup>, k<sup>w</sup> and g<sup>w</sup>, respectively.

## B. The Amharic characters (fidel)

Consonant	Order						
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>
	ə	u	i	a	e	i	o
h	ሀ	ሁ	ሂ	ሃ	ሄ	ህ	ሆ
l	ለ	ሉ	ሊ	ላ	ሌ	ል	ሎ
ḥ	ሐ	ሑ	ሒ	ሓ	ሔ	ሕ	ሖ
m	መ	ሙ	ሚ	ማ	ሜ	ም	ሞ
ś	ሠ	ሡ	ሢ	ሣ	ሤ	ሥ	ሦ
r	ረ	ሩ	ሪ	ራ	ሪ	ር	ሮ
s	ሰ	ሱ	ሲ	ሳ	ሴ	ስ	ሶ
š	ሸ	ሹ	ሺ	ሻ	ሼ	ሽ	ሾ
q	ቀ	ቁ	ቂ	ቃ	ቄ	ቅ	ቆ
b	በ	ቡ	ቢ	ባ	ቤ	ብ	ቦ
t	ተ	ቱ	ቲ	ታ	ቲ	ት	ቶ
č	ቸ	ቹ	ቺ	ቻ	ቼ	ች	ቼ
x	ኀ	ኁ	ኂ	ኃ	ኄ	ኅ	ኆ
n	ነ	ኑ	ኒ	ና	ኔ	ን	ኖ
ñ	ኸ	ኹ	ኺ	ኻ	ኼ	ኽ	ኾ
ʔ	አ	ኡ	ኢ	ኣ	ኤ	አ	ኦ
k	ከ	ኩ	ኪ	ካ	ኬ	ከ	ኮ
h	ኸ	ኹ	ኺ	ኻ	ኼ	ኽ	ኾ
w	ወ	ዉ	ዐ	ዑ	ዒ	ወ	ዐ
ʕ	ዐ	ዑ	ዒ	ዓ	ዔ	ዐ	ዑ
z	ዘ	ዙ	ዚ	ዛ	ዞ	ዘ	ዙ
ž	ዠ	ዡ	ዢ	ዣ	ዤ	ዠ	ዡ
y	የ	ዩ	ደ	ያ	ዮ	ይ	ዮ
d	ደ	ዱ	ዲ	ዳ	ዴ	ድ	ዶ
ǧ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ
g	ገ	ጉ	ጊ	ጋ	ጌ	ግ	ገ
t'	ጠ	ጡ	ጢ	ጣ	ጤ	ጥ	ጦ
č'	ጨ	ጨ	ጨ	ጨ	ጨ	ጨ	ጨ
p'	ጸ	ጹ	ጺ	ጻ	ጼ	ጽ	ጾ
s'	ጸ	ጹ	ጺ	ጻ	ጼ	ጽ	ጾ
z'	ፀ	ፁ	ፂ	ፃ	ፄ	ፅ	ፆ
f	ፈ	ፋ	ፊ	ፋ	ፌ	ፍ	ፎ
p	ፐ	ፑ	ፒ	ፓ	ፔ	ፕ	ፖ

### Appendix III: Amharic spelling variation

#### A. Spelling variations of Amharic homophones

	Lexical item/spelling variation	Sources (pages)	Total
a)	ውሃ <i>wiha</i> ‘water’	Env.Sc. Grade 2: p. 11 (2 times), p. 24, p. 61, p. 62 (3 times), p. 63 (6 times), p. 64, p. 65 (2 times), p. 73 (2 times), p. 76, p. 92, p. 94, p. 96 (2 times), p. 97 (2 times), p. 101 (8 times), p. 102, p. 104, p. 108, p. 109 (4 times), p. 110 (5 times), p. 111, p. 112, p. 113, p. 115 (2 times), p. 116 (4 times), p. 119 (2 times), p. 120, p. 121 (3 times), p. 122 (3 times), p. 123 (3 times), p. 138 (2 times), p. 153	69
		Env.Sc. Grade 3: p.11 (2 times), p.12 (2 times), p. 13 (2 times), p. 14, p. 15, p. 17 (2 times), p. 18 (2 times), p. 24 (2 times), p. 26 (13 times), p. 27 (9 times), p. 28 (11 times), p. 29, p. 30 ( 2 times), p. 34 (4 times), p. 38 (5 times), p. 39, p. 40 (2 times), p. 41 (3 times), p. 44 (2 times), p. 45 (13 times), p. 46 (6 times), p. 47 (8 times), p. 48 (12 times), p. 49, p. 52, p. 54 (7 times), p. 57, p. 58 (4 times), p. 59 (2 times), p. 74 ( 2 times), p. 75, p. 78 (8 times), p. 79, p. 80 (5 times), p. 82 (5 times), p. 83, p. 84, p. 89, p. 90, p. 26 (6 times), p. 93 (6 times), p. 94 (2 times), p. 95, p. 97, p. 99 (2 times), p. 100 (3 times), p. 101 (2 times), p. 108, p. 109	173
		Env.Sc. Grade 4: p.15, p. 48, p.58, p. 59 (3 times), p. 60, p. 63, p. 64, p.68, p.69 (2 times), p. 74 (2 times), p. 76 (2 times), p. 77, p. 79, p. 95 (2 times), p. 97 (2 times), p. 99, p. 100, p.103, p. 104 (12 times), p. 105 (17 times), p. 106 (12 times), p. 107 (10 times), p. 108 (5 times), p. 109, p. 110 (2 times), p. 111, p. 112, p. 113, p. 121, p. 134, p. 153, p. 155	91
		Amh. Grade 2: p. 41, p. 50, p. 53, p. 53, p. 60, p. 73 (2 times), p. 75, p. 85, p. 86, p. 90 (2 times), p. 126 (2 times)	14
		Amh. Grade 3: p. 1, p. 4 (4 times), p. 9, p.10 (11 times), p. 78 (3 times), p. 115	21
		Amh. Grade 4: p. 6, p.14, p. 20 (3 times), p. 22, p. 30, p. 47, p. 69, p. 70 (2 times), p. 71, p. 73, p. 81 (10 times), p. 82 (4 times), p. 83 (6 times), p. 84 (5 times), p. 85 (21 times), p. 86 (5 times), p. 87 (5 times), p. 88 (7 times), p. 89 (7 times), p. 90 (21 times), p. 91 (7 times), p. 92 (6 times), p. 93 (5 times), p. 121, p. 122, p. 131, p. 133 (2 times).	127
		Math Grade 2: p. 49 (4 times), p. 51	5
		Math Grade 3: p. 33, p.34 (8 times)	9

		Math Grade 4: p. 37, p. 82	2
		Aesthetics grade 2: p. 52 (10 times), grade 3: p. 36 (8 times), p. 37 (11 times), p. 38 (5 times), p. 39 (2 times), p. 40 (2 times), p. 51 (3 times); grade 4: p. 7, p. 37, p. 54 (5 times), p. 79, p. 106	50
	<i>ውሀ wuha</i>	Env.Sc. Grade 2: p. 103 Env.Sc. Grade 3: -- Env.Sc. Grade 4:	1
		Amh. Grade 2: - Amh. Grade 3: p. 25 Amh. Grade 4: p. 14 (2), p. 19	1 3
		Math Grade 2: p. 50 Math Grade 3: p. 33 (2 times), p. 34, p. 107 Math Grade 4: p. 32 (5 times), p. 65, p. 70	1 4 7
	<i>ውኃ wixā</i>	Env.Sc. Grade 2: ---- Env.Sc. Grade 3: p. 28 (3 times), p. 29 Env.Sc. Grade 4: p. 15, p. 100, p. 121, p. 139	4 4
		Amh. Grade 2: p. 58, p. 124, p. 125 (2 times) Amh. Grade 3: __ Amh. Grade 4: __	4 - -
		Math Grade 2: p. 48, p. 49 (4 times), p. 50 (7 times), p. 51 (4 times), p. 52 (6 times), p. 55 (2 times), p. 98 Math Grade 3: __ Math Grade 4: __	27 - -
	<i>ውሐ wihā</i>	Env.Sc. Grade 2-3: __ Env.Sc. Grade 4: p. 104 Amh. Grade 2-4: __ Math (Grade 2-4): __	- 1 - -
		Total	619



b)	ኃይል <i>xayl</i> ‘power’	Env.Sc. Grade 2: p. 4, p. 7, p. 15 (2 times), p. 138, p. 140, p. 153	7
		Env.Sc. Grade 3: p. 37 (2 times), p. 38, p. 65 (3 times), p. 66 (5 times), p. 67 (6 times), p. 81 (6 times), p. 83 (2 times), p. 84	26
		Env.Sc. Grade 4: p. 48 (2 times), p. 102, p. 103, p. 121, p. 142	6
		Amh. Grade 2: p. 64	1
		Amh. Grade 3: p. 29 (2 times)	2
	Amh. Grade 4: p. 33, p. 86, p. 87, p. 88	4	
	ሀይል <i>hayl</i>	Env.Sc. Grade 2: p. 95	1
		Env.Sc. Grade 3: p. 35	1
		Env.Sc. Grade 4: ---	-
		Amh. Grade 2: -- Amh. Grade 3: p. 42, p. 69 Amh. Grade 4:---	- 2 -
	Total	50	
c)	ሂሳብ <i>hisab</i> ‘Mathematics’	Math Grade 2: p. 12 (2 times)	2
		Math Grade 3: p.1 (2 times), p. 2, p. 4 (3 times), p. 7, p. 9, p. 11, p. 12, p. 14, p. 24 ( 2 times), p. 35 ( 2 times), p. 48, p. 52, p. 78	18
		Math Grade 4: p. 12, p. 22, p. 27, p. 28, p. 30, p. 62, p. 69, p. 93, p. 98, p. 100	10
	ሒሳብ <i>hisab</i>	Math Grade 2: cover p., p. 17, p. 44 (2 times), p. 46, p. 52	6
		Math Grade 3: p. 18, p. 28, p. 88, p. 93	4
		Math Grade 4: p. 1, p. 74, p. 76, p. 98, p. 99 (2 times), p. 100	7
	ሒሳብ <i>hisab</i>	Math Grade 2: footer, p. 15	2
		Math Grade 3: p. 6 (2 times), p. 39	3
		Math Grade 4: -	-
	ሂሳብ <i>hisab</i>	Math Grade 2: -	-
Math Grade 3: -		-	
Math Grade 4: p. 86		1	
	Total	53	

d)	ዕፅዋት ናፒዝ 'wat 'plants'	Env.Sc. Grade 2: p. 85 (3times), p. 86 (2times), p. 87, p.91, p. 94, p. 95, p.103, p. 110, p. 115 (4 times), p.119, p. 121, p. 123,  Env.Sc. Grade 3: p. 23, p. 41, p. 44  Env.Sc. Grade 4: p. 58, p. 59, p. 63, p.75 (5 times), p. 76 (2 times), p. 77, p. 86, p. 88 (14 times), p. 89 (7 times), p. 90 (7 times), p. 94 (2 times), p. 95 (6 times), p. 108 (3 times), p. 109 (2 times), p. 111	18  3  54
		Amh. Grade 2: ____  Amh. Grade 3: p. 92  Amh. Grade 4: p. 90	-  1  1
		Aesthetics Grade 4: p. 31, p. 34, p. 38, p. 56	4
	እፅዋት ሸፒዝ 'wat	Env.Sc. Grade 2: p.8, p.9, p.95, p.120  Env.Sc. Grade 3: p. 23 (2 times), p. 24, p. 35, p. 41 (2 times), p. 62  Env.Sc. Grade 4: ____	4  7  -
		Amh. Grade 2: p. 72, p. 77  Amh. Grade 3: ____  Amh. Grade 4: p. 60, p. 61 (3 times), p. 62, p. 65	2  -  6
		Aesthetics Grade 4: p. 33 (4 times), p. 34 (4 times)	8
	እጽዋት ሸፒዝ 'wat	Env.Sc. Grade 2: p.43  Env.Sc. Grade 3: p. 88 (5 times), p. 89, p. 90, p. 108  Env.Sc. Grade 4: ____	1  8  -
		Amh. Grade 2: ____  Amh. Grade 3: ____  Amh. Grade 4: p. 11, p.12	-  -  2
	ዕጽዋት ናፒዝ 'wat	Env.Sc. Grade 2: p.49  Env.Sc. Grade 3: ____  Env.Sc. Grade 4: ____	1  -  -
		Aesthetics Grade 4: p. 1 (2 times)	2
		Total	122

e)	ብርሃን <i>birhan</i> 'light'	Env.Sc. Grade 2: p. 61 (2 times), p. 62, p. 65 (2 times), p. 80 (2 times), p. 84 (3 times), p. 109	11
		Env.Sc. Grade 3: p. 37, p. 55, p. 56 (3 times), p. 59 (4 times), p. 60 (8 times), p. 61 (6 times), p. 62, p. 80 (2 times), p. 83, p. 84, p. 97	29
		<b>Env.Sc. Grade 4:</b> p.9 (2 times), p. 10, p. 23, p. 97 (6 times), p. 103 (3 times), p. 110, p. 141	15
		Amh. Grade 2: p. 72	1
	ብርሐን <i>birhan</i>	Amh. Grade 3: --	-
		Amh. Grade 4: p. 43, p. 96 (2 times), p. 103	4
		Env.Sc. Grade 2: p. 84 (2 times), p. 86, p. 92, p. 109 (3 times), p. 110 (5 times), p. 121, p. 123	14
		Env.Sc. Grade 3: ----	-
	ብርሃን <i>birhan</i>	Env.Sc. Grade 4: p. 16, p. 81, p. 88	3
		Amh. Grade 2, 3 and 4: ---	-
f)	ንጽሕፍ <i>nis'ihinna</i> 'sanitation'	Env.Sci. Grade 2: --	-
		Env.Sci. Grade 3: p. 59	1
		Env.Sci. Grade 4:	-
		Amh. Grade 2: --	-
	ንጽሕፍ <i>nis'ihinna</i> 'sanitation'	Amh. Grade 3: --	-
		Amh. Grade 4: p. 99	1
		Total	79
	ንጽሕፍ <i>nis'ihinna</i> 'sanitation'	Env.Sc. Grade 2: p. 20 (4 times), p. 21 (14 times), p. 22 (7 times), p. 24 (7 times), p. 25 (4 times), p. 26 (3 times), p. 27 (3 times), p. 28 (3 times), p. 29 (2 times), p. 30, p. 32 (3 times), p. 119	52
		Env.Sc. Grade 3: p. 36, p. 98 (2 times), p. 100, p. 101 (2 times), p. 109	7
		Amh. Grade 2: -	-
		Amh. Grade 3: p. 5	1
		Amh. Grade 4: p. 88, p. 92	2
		Aesthetics Grade 2: p. 59 (3 times), p. 60 (2 times), p. 61 (3 times), p. 62, p. 64 (2 times), p. 66	12

	ንፅህና <i>niz'ihinna</i>	Env.Sc. Grade 2: ____	-
		Env.Sc. Grade 3: p. 2 (2 times), p. 11, p. 12 (3 times), p. 21 (2 times), p. 23 (2 times), p. 24 (2 times), p. 25, p. 26, p.28, p. 30, p. 34	17
		Env.Sc. Grade 4: p. 16	1
		Amh.Grade 2: p. 13 (3 times), p. 55, p. 57 (3 times), p. 59, p. 61 (3 times), p. 66, p. 67, p. 68 (4 times), p. 69 (2 times)	19
		Amh.Grade 3: p. 4 (2 times), p. 7, p.10, p. 11, p. 69 (4 times)	9
		Amh. Grade 4: p. 85 (2 times)	2
		Aesthetics Grade 2:p. 49, p. 50, p. 64, p. 65; grade 3: p. 67, p. 68 (2 times), grade 4: p. 31 (6 times), p. 33, p. 37 (3 times), p. 40, p. 56 (2 times)	20
	ንጽህና <i>nis'ihinna</i>	Env.Sc. Grade 2: p. 26	1
		Env.Sc. Grade 3: p. 2, p. 17, p. 19 (5 times), p. 20 (4 times), p. 22, p. 24, p.25, p.28	15
		Env.Sc. Grade 4: ---	-
		Amh. Grade 2: p. 54, p. 56, p. 57, p. 58	4
		Amh. Grade 3: p. 7, p. 75, p. 104	3
		Amh. Grade 4: -	-
		Aesthetics Grade 2: p. 49 (7 times), p. 50 (6 times), p. 51, p. 52 (3 times), p. 53 (2 times), p. 54 (3 times), p. 55, p. 56 (3 times), p. 57 (4 times), p. 58 (2 times), p. 61, p. 62 (2 times), p. 64 (2 times), p. 66; grade 3: p. 36, p. 42 (8 times), p. 43 (10 times), p. 44 (3 times), p.45 (2 times), p. 46 (2 times); grade 4: p. 30 (2 times), p. 31 (3 times).	69
	ንፅሕና <i>niz'ihinna</i>	Aesthetics Grade 2: p. 62	1
		Total	235

## B. Spelling variation of Amharic compounds

	Spelling variation of compounds	Source	Frequency	%
a)	መጠነ ቁስ <mət'ən-ə qus> (amount +material) 'mass'	Env.Sc. Grade 2: p. 88 (4 times), p. 89 (4 times), p. 92, p. 121; grade 3: p. 68, p. 69, p. 76 (3 times), p. 77 (3 times), p. 81 (2 times); grade 4: p. 60, p. 71, p. 173	23	65.7%
	መጠነቁስ <mət'ən-əqus> 'mass'	Env.Sc. Grade 2: p. 88 (2 times), p. 89 (2 times), p. 121, p. 122,--- grade 3: p. 69 (2 times); grade 4: p. 60 (2 times), p.108, p.109	12	34.3%
		Total	35	100%
b)	ሥር ነቀል /śir nəqqəl/ <śir nəqqəl>	Env.Sc. Grade 4: p. 74	1	50%
	ሥርነቀል <śirnəqqəl> (root+uprooted) 'radical'	Env.Sc. Grade 4: p. 72	1	50%
		Total	2	100%
c)	ሥነ ሕይወታዊ <śin-ə hiywət-awwi> (study+life) 'biological'	Env.Sc. Grade 4: p. 37 (4 times), p. 38 (4 times), p. 39 (4 times), p. 40 (3 times), p. 43 (2 times), p. 161	18	85.7%
	ሥነ-ሕይወታዊ <śinə-hiywət-awwi> (study+life) 'biological'	Env.Sc. Grade 4: p. 38	1	4.8%
	ሥነ-ህይወታዊ <śinə-hiywət-awwi> (study+life) 'biological'	Env.Sc. Grade 4: p. 39, p. 40	2	9.5%
		Total	21	100%
d)	ንነ ሦስት <gonnə śost> (side+three) 'triangle'	Math Grade 2: p.78; grade 3: p. 40; grade 4: p. 76	3	50%
	ንነ-ሦስት <gonnə-śost> (side+three) 'triangle'	Math Grade 2: p. 82; Math Grade 3: p. 40 grade 4: p. 75	3	50%
		Total	6	100%
5)	ሰንደቅ ዓላማ <səndəq šalama> (flag stand +purpose) 'flag'	Amh. Grade 2: p. 4, p. 120 (2 times), p. 121; Aesthetics Grade 3: p. 20	5	83.3%
	ሰንደቅዓላማ <səndəqšalama>	Amh. Grade 3: p. 70	1	16.7%
		Total	6	100%
e)	ሥነ ልቦና <śinə libbona> (study+ conscience) 'psychology'	Env.Sc. Grade 4: p. 42, p. 49, p. 53, p. 54	4	36.4%
	ሥነልቦና <śinəlibbona> (study+ conscience) 'psychology'	Aesthetics Grade 3: p. 63	1	9%

	ስነ ልቦና <sinə libbona>	Env.Sc. Grade 4: p. 33	1	9%
	ስነ-ልቦና <sinə-libbona>	Env.Sc. Grade 3: p. 30; grade 4: p. 42, p. 49, p. 50, p. 56	5	45.5
		Total	11	100%
f)	ሥነ ምግባር <sinə mixidar> (study+ ) 'ecology'	Env.Sc. Grade 4: p. 108	1	
	ሥነ-ምህዳር <sinə-mihidar>	Env.Sc. Grade 4: p. 88	1	
	ሥነምግባር <sinəmixidar>	Env.Sc. Grade 4: p. 88	1	
g)	ሥነ ምግባር <sinə migbar>	Env.Sc. Grade 2: p. 15, p. 19,-----; grade 4: p. 42, p. 173 (2 times), p. 174; Aesthetics grade 2: p. 62	7	20%
	ሥነ-ምግባር <sinə-migbar>	Env.Sc. Grade 2: p. 41, p. 43	2	5.7%
	ሥነምግባር <sinəmigbar>	Amh. Grade 2: p. 93, p. 95, p. 96, p. 98; Amh. grade 3: p. 29, p. 30, p. 33, p. 56, p. 64, p. 65 (3 times); Amh. grade 4: p. 37 (2 times), p. 40, p. 104; Aesthetics grade 2: p. 2	17	48.5%
	ስነምግባር <sinəmigbar>	Amh. Grade 2: p. 93, p. 94 (2 time), p. 96 Amh. grade 4: p. 38 (2 times), p. 39, p. 40; Aesthetics grade 2: p. 5	9	25.7%
		Total	35	100%
h)	ሥነ ሥርዓት <sinə śir?at>	Env.Sc. Grade 2: p.10, p.29, p. 54 (2 times), p. 59; grade 3: p. 34; grade 4: p. 168, p.173	8	38.1%
	ሥነ-ሥርዓት <sinə-śir?at>	Env.Sc. Grade 2: p. 79	1	4.7%
	ሥነሥርዓት <sinəśir?at>	Amh. Grade 2, p. 96; Aesthetics grade 2: p. 32, grade 4: p. 8, p. 9 (4 times), p. 14, p.15	9	42.6%
	ስነ-ሥርዓት <sinə-śir?at>	Env.Sc. Grade 4: p. 79	1	4.7%
	ሥነስርዓት <sinə śir?at>	Env.Sc. Grade 4: p. 94	1	4.7%
	ስነስርዓት <sinəśir?at>	Amh. grade 3, p. 107	1	4.7%
		Total	21	100%
i)	ሥነ ጥበብ <sinə t'ibeb>	Env.Sc. Grade 2: p. 130, p. 131 (3 times), p. 133; grade 3: p. 130; grade 4: p. 170 (3 times); Aesthetics grade 3: p. 88, grade 4: p. 5, p. 81	12	57.1%

	ሥነ-ጥበብ <sinə-t'ibeb>	Env.Sc. Grade 4: p. 170	1	4.8%
	ሥነጥበብ <sinət'ibeb>	Env.Sc. Grade 3: p. 134; grade 4: p. 182; Aesthetics grade 3: p. 34, p. 48, p. 54; grade 4: p. 5	6	28.6%
	ስነ ጥበብ <sinə t'ibeb>	Aesthetics grade 4: p. 5	1	4.8%
		Total	21	100%
j)	ሥነ ቃል <sinə qal>	Env.Sc. Grade 3: p. 122	1	50%
	ሥነቃል <sinəqal>	Env.Sc. Grade 4: p. 159	1	50%
		Total	2	100%
k)	ቀስተ ደመና <qəstə dəmməna>	Env.Sc. Grade 2: p. 83, p.84, p.86 (4 times), p. 92	7	77.7%
	ቀስተደመና <qəstədaḥmməna>	Env.Sc. Grade 2: p. 121, p. 122	2	22.2%
		Total	9	100%
l)	ዓለም አቀፍ <ʿaləm ʔaqqəf>	Env.Sc. Grade 2: p. 13, p. 116; grade 4: p. 146, p. 157 (2 times), p. 162, p. 163 (2 times), p. 169	9	69.2%
	አለም አቀፍ <ʔaləm ʔaqqəf>	Env.Sc. Grade 3: p. 76	1	7.7%
	ዓለምአቀፍ <ʿaləmʔaqqəf>	Amh. grade 4: p. 91; Aesthetics grade 4: p.1 (2 times)	3	23.1%
		Total	13	100%
m)	አርሶ አደር <ʔarso ʔaddər>	Env.Sc. Grade 2: p. 141, p. 153; Amh. Grade 3: p. 78	3	30%
	አርሶአደር <ʔarsoʔaddər>	Amh. Grade 3: p. 76 (2 times), p. 82 (2 times), p. 121, p. 130 Amh. grade 4: p. 110	7	70%
		Total	10	100%
n)	እደ ጥበብ <ʔidə t'ibəb> (hand[Ge'ez]+wisdom) 'handcraft'	Env.Sc. Grade 2: p. 41, p. 146 (3 times), p. 150, p. 151 (3 times), p. 153	9	52.9%
	ዕደ ጥበብ <ʕidə t'ibəb>	Env.Sc. Grade 4: p. 112, p. 115	2	11.7%
	ዕደጥበብ <ʕidət'ibəb>	Aesthetics grade 3: p. 31	1	5.9%
	እደጥበብ <ʔidət'ibəb>	Env.Sc. Grade 2: p. 145 (4 times), p. 151	5	29.4
		Total		100%

o)	ደም ቅዳ <dəm qida> (blood+fetch) 'artery'	Env.Sc. Grade 4: p. 24	1	50%
	ደምቅዳ <dəmqida>	Env.Sc. Grade 4: p. 36	1	50%
		Total	2	100%
p)	ወዝ አደር <wəz ʔaddər> (sweat+ spent the night) 'proletariat'	Env.Sc. Grade 2: p. 153	1	50%
	ወዛደር <wəzaddər>	Amh. grade 4: p. 106	1	50%
		Total	2	100%
q)	ሀኪም ቤት <hakim bet> (physician+house) 'hospital'	Amh. Grade 3: p. 124	1	11.1%
	ሀኪምቤት <hakimbet>	Amh. Grade 3: p. 1 (2 times), p. 7, p. 62, 124 (3 times)	7	77.8%
	ሐኪምቤት <ḥakimbet>	Amh. Grade 3: p. 9	1	11.1%
		Total	9	100%
r)	ብረት ድስት <birət dist> (metal+pan) 'saucepan'	Math. Grade 2: p. 96	1	25%
	ብረትድስት < birətdist >	Amh. Grade 2: p. 71, p. 87 (2 times)	3	75%
		Total	4	100%



## C. Spelling variation of loanwords

### i. Variation due to consonant cluster

Spelling variation of loanwords	Transcription	Gloss	Source
ስቱኮ or እስቱኮ	<stukko> or <istukko>	‘stucco’	ELRC 1993 E.C, p.138
ስቲዲዮም or እስቲዲዮም	<stedyom> or <istediyom>	‘stadium’	ELRC 1993 E.C, p.138
ስቴፕለር or እስቴፕለር	<steppilär> or <isteppilär>	‘stapler’	ELRC 1993 E.C, p.138
ስኮላርሺፕ or እስኮላርሺፕ	<skolaršipp> or <iskolaršipp>	‘scholarship’	ELRC 1993 E.C, p.139
ስኮችቴፕ or እስኮች ቴፕ	<skočtepp> or <iskoč tepp>	‘scotch tape’	ELRC 1993 E.C, p.139
ስፒል or እስፒል	<spil> or <ispil>	‘spill’	ELRC 1993 E.C, p. 140; Env. Sc. Grade 4: p. 62, p.102
ስፓጌቲ or እስፓጌቲ	<spageti> or <ispageti>	‘spaghetti’	ELRC 1993 E.C, p. 140
ስፖንጅ	<spongǵ>	‘sponge’	Env.sc. Grade 2: p. 74; ELRC 1993 E.C, p. 140
እስፖንጅ	<ispongǵ>	‘sponge’	Env.sc. Grade 2: p. 74, p. 77
ስቴንሰል	<stencil>	‘stencil’	ELRC 1993 E.C, p.138
ስቴቶስኮፕ	<stetoskop>	‘stethoscop’	Env.sc. Grade 4: p. 28
ስኩዌር	<skuwer>	‘square’	Env.sc. Grade 3: p. 24

ii) Variation due to homophones or extra graphemes, vowel usage and word spacing

Type of variation	Loanwords	Transcription	Gloss	Source
Homophones	ሰዓት	<səʔat>	‘o’clock’	Math Grade 2: p. 104
	ሠዓት	<śəʔat>		Math Grade 2: p.104
Homophones	ሳሙና	<samuna>	‘soup’	Env.sc. Grade 2: p. 16 (3 times), p18 (2 times)
	ሣሙና	<śamuna>		Env.sc. Grade 2: p. 15
Vowel difference and homophones	ሴኮንድ	<sekond>	‘second’	ELRC 1993 E.C, p.134; Env. Sc. Grade 4: p.28; Math Grade 2: p. 91, Gr. 4: p. 86
	ሰኮንድ	<səkond>		ELRC 1993 E.C, p.134; Env.sc. Grade 2: p. 88
	ሠኮንድ	<śəkond>		Env.sc. Grade 3: p. 81
Vowel difference	ኢንዱስትሪ	<ʔindustiri>	‘industry’	Env.sc. Grade 3: p.54, p. 80 (3time), p. 82, p. 85, p.105, (2 times), p. 109, p. 116 (2 times)
	ኢንደስትሪ	<ʔindəstiri>		Env.sc. Grade 3: p. 46
	እንዱስትሪ	<ʔindustiri>		Env.sc. Grade 3: p. 47 (2 times), p. 86
Word spacing	ካርቦሃይድሬት	<karbohaydiret>	‘carbohydrate’	Env.sc. Grade 4: p. 4
	ካርቦ ሃይድሬት	<karbo haydiret>		Env.sc. Grade 4: p. 5
Word spacing and vowel difference	ሴንቲሜትር	<sentimetir>	‘centimeter’	ELRC 1993 E.C, p.134,
	ሰንቲሜትር	<səntimetir>		Env,sc, Grade 3: p. 76
	ሳንቲ ሜትር	<santi metir>		ELRC 1993 E.C, p.134
Word spacing	ኪሎግራም	<kilogiram>	‘kilogram’	Env.sc. Grade 3: p. 69
	ኪሎ ግራም	<kilo giram>		Env.sc. Grade 2: p. 88; Grade 3: p. 69
Word spacing	ባርግራፍ	<bargiraf>	‘bar graph’	Math Grade 4: p. 93, p. 100 (2 times)
	ባር ግራፍ	<bar giraf>		Math Grade 4: p. 99 (4 times), p. 100

## Appendix IV: Summary of loanwords in Amharic

### A. English loanwords in Amharic

	Word	Gloss	Source
1.	ሃይድሮጅን /haydiroğin/	‘hydrogen’	Env.sc. G4, p.5
2.	ሆስፒታል /hospital/	‘hospital’	Env.sc. G3, p. 120; GTP, p. 117
3.	ሆቴል /hotel/	‘hotel’	Amh. G2, p.83
4.	ሊትር /litir/	‘liter’	Ma. G4, p. 69
5.	ላቦራቶሪ /laboratori/	‘laboratory’	GTP, p. 147
6.	ሎጂስቲክስ /logistik/	‘logistics’	GTP, p. 100
7.	ሙዚቃ /muziqa/	‘music’	Aest. G2, p. 35; Env.sc. G3, p.31
8.	ሙዚየም /muziyəm/	‘museum’	Aest. G3, p. 27
9.	ሚሊ ሊትር /mililitir/	‘milliliter’	Ma. G4, p. 69
10.	ሚሊ ግራም /miligiram/	‘milligram’	Ma. G4, p. 66
11.	ሚኒሚዲያ /minimidiya/	‘mini media’	Amh. G4, p. 99
12.	ሚዲያ /midiya/	‘media’	GTP, p. 111
13.	ማስተር ፕላን /mastər pīlan/	‘master plan’	GTP, p. 15
14.	ማሽን /mašin/ (Eng./Fr.)	‘machine’	Ma. G4, p. 29
15.	ማኔጅመንት /maneğment/	‘management’	GTP, p. 148
16.	ማግኒዝየም /maginiziyem/	‘magnesium’	Env.sc. G4, p. 12
17.	ሜትር /metir/	‘meter’	Env.sc. G3, p.24
18.	ሞባይል /mobayil/	‘mobile’ (telephone)	Env.sc. G4, p. 99
19.	ሞተር /motər/ (Eng./Fr.)	‘motor’	Ma. G4, p. 37
20.	ሞዛይክ /mozayik/	‘mosaic’	Aest. G3, p. 84
21.	ሞዴል /model/	‘model’	Ma. G4, p. 83; Env.sc. G3, p. 72
22.	ሰልፈር /salfər/	‘sulfur’	Env.sc. G4, p. 79
23.	ሰከንድ /səkond/	‘second’	Env.sc. G3, p. 81
24.	ሲሊንደር /silindər/	‘cylinder’	Ma. G2, p. 81
25.	ሲስተም /sistəm/	‘system’	GTP, p. 91
26.	ሲሪንጅ /siring/ (Eng./Fr.)	‘syringe’	Ma. G4, p. 70

27.	ሲቪል ሰርቪስ /sivil sərvis/	‘civil service’	GTP, p. 119
28.	ሳንቲሼን /sanitešin/	‘sanitation’	GTP, p. 30
29.	ሳይንስ /sayins/	‘science’	Env.sc. G3, p. 76
30.	ሴንቲ ግራም /sentigiram/	‘centigram’	Ma. G4, p. 66
31.	ሴክራቲ /sekkuriti/	‘security’	GTP, p. 103
32.	ሴክተር /sektər/	‘sector’	GTP, p. 76
33.	ሴኮንድ /sekond/	‘second’	Env.sc. G4, p. 28
34.	ስታንዳርድ /(i)standard/	‘standard’	GTP, p. 31
35.	ስታይል /(i)stayil/	‘style’	Aest. G4, p. 5
36.	ስቴቶስኮፕ /(i)stetoskopp/	‘stethoscope’	Env.sc. G4, p. 28
37.	ስትራቴጂክ /(i)stirategik/	‘strategic’	GTP, p. 15
38.	ስኩየር /(i)skuyər/	‘square’	Env.sc. G3, p.24
39.	ስፖርት /(i)sport/	‘sport’	Env.sc. G3, p.32,130
40.	ሶላር /solar/	‘solar’	Env.sc. G4, p.100
41.	ሶኬት /soket/ (Eng./Fr.)	socket	Aest. G3, p. 50
42.	ሶዲየም /sodiyəm/	‘sodium’	Env.sc. G4, p. 12
43.	ሶፍትዌር /softiwer/	‘software’	GTP, p. 124
44.	ሪትም /ritim/ (Eng./Fr.)	‘rhyme’	Aest. G2, p. 27
45.	ሪኬትስ /rikets/	‘rickets’	Env.sc. G4, p. 10
46.	ሪፎርም /riform/	‘reform’	GTP, p. 133
47.	ሪፖርት /ripport/	‘report’	Aest. G3, p. 4
48.	ሪሾ /rešo/	‘ratio’	GTP, p. 101
49.	ሪንጂ /rengeğ/	‘rain gauge’	Env.sc. G4, p. 83
50.	ሪክታንግል /rektangil/	‘rectangle’	Ma. G3, p. 88
51.	ራዲየስ /rediyəs/	‘radius’	Ma. G3, p. 96
52.	ራዲዮ /rediyoy/	‘radio’	Aest. G3, p. 50
53.	ባር ግራፍ /bar giraf/	‘bar graph’	Ma. G4, p. 100
54.	ባትሪ /batri/	‘battery’	Env.sc. G4, p. 99; Ma. G4, p. 33
55.	ባንክ /bank/	‘bank’	Env.sc. G4, p 181

56.	ባክቴሪያ /bakteriya/	‘bacteria’	Env.sc. G4, p. 30
57.	ባጀት /baǧət/	‘budget’	GTP, p. 45
58.	ብሎክት /bloket/	‘brick’	Ma. G3, p. 57
59.	ብሩሽ /biruš/	‘brush’	Aest. G3, p. 47
60.	ብሮድካስት /birodkast/	‘broadcast’	GTP, p. 112
61.	ብሮድካስትንግ /birodkasting/	‘broadcasting’	Amh. G4, p. 99
62.	ቦክስ /boks/	‘boxing’	Amh. G4, p. 73
63.	ቱሪዝም /turizim/	‘tourism’	Env.sc. G4, p. 143
64.	ቱሪስት /turist/	‘tourist’	Env.sc. G3, p. 53
65.	ቱቦ /tubbo/	‘tube’	Env.sc. G4, p. 1
66.	ታክሲ /taksi/	‘taxi’	Amh. G4, p. 14
67.	ታክስ /taks/	‘tax’	GTP, p. 13
68.	ቴሌኮሙኒኬሽን /telekomunikešin/	‘telecommunication’	GTP, p. 95
69.	ቴሌቪዥን /televižn/	‘television’	Aest. G3, p. 50; Env.sc. G4, p. 80
70.	ቴርሞ ሜትር /termometir/	thermometer	Env.sc. G3, p. 78; G4, p. 83
71.	ቴኒስ /tenis/ (Eng./Fr.)	‘tennis’	Ma. G3, p. 116
72.	ቴክኖሎጂ /teknologji/	‘technology’	Env.sc. G3, p. 65
73.	ቴክኒካል /teknikal/	‘technical’	GTP, p. 94
74.	ቴፕ /tepp/	‘tape’	Aest. G2, p. 27
75.	ቴፕ ሪከርደር /teprikordər/	‘tape-recorder’	Aest. G2, p. 50
76.	ትራንስሚሽን /tiransimišin/	‘transmission’	GTP, p. 95
77.	ትራንስፎርሜሽን /tiransiformešin/	‘transformation’	GTP, p. 40
78.	ትራንስፖርት /tiranispport/	‘transport’	Env.sc. G4, p. 47
79.	ትራክተር /tiraktər/	‘tractor’	Env.sc. G4, p. 139
80.	ትራፒዚየም /tirapiziyəm/	‘trapezium’	Ma. G3, p. 88
81.	ቶን /ton/	‘ton’	Ma. G4, p. 66; Env.sc. G3, p. 77
82.	ነርስ /nərs/	‘nurse’	Env.sc. G3, p. 11
83.	ነርቭ /nərv/	‘nerve’	Env.sc. G4, p. 10
84.	ኔትወርክ /netwərk/	‘network’	GTP, p. 17

85.	አስፋልት /ʔasfalt/	‘asphalt’	Aest. G3, p. 51
86.	አርቴሪ /ʔarteri/	‘artery’	Env.sc. G4, p. 27
87.	አርቲስት /ʔartist/	‘artist’	Env.sc. G3, p. 131
88.	አርኪዎሎጂ /ʔarkiwoloği/	‘archeology’	Aest. G3, p. 31
89.	አትሌትክስ /ʔatiletiks/	‘athletics’	Aest. G3, p. 106
90.	አኒሚያ /ʔanimiya/	‘anemia’	Env.sc. G4, p. 10
91.	አኒሞ ሜትር /ʔanimometir/	‘anemometer’	Env.sc. G4, p. 83
92.	አናሎግ /ʔanalog/	‘analog’	Ma. G2, p. 91
93.	አንግል /ʔangil/	‘angle’	Ma. G3, p. 92
94.	አውሮፕላን /ʔawuoppilan/	‘airplane’	Env.sc. G3, p. 63
95.	አየር /ʔayyər/	‘air’	Env.sc. G3, p. 49
96.	አዮዲን /ʔayodin/	‘iodine’	Env.sc. G4, p. 12
97.	ኢነርጂ /ʔinerği/	‘energy’	GTP, p. 17
98.	ኢንተርኔት /ʔintərnet/	‘internet’	Env.sc. G4, p. 149
99.	ኢንተርፕራይዝ /ʔintərpirayiz/	‘enterprise’	GTP, p. 18
100.	ኢንቨስትመንት /ʔinvəstimənt/	‘investment’	GTP, p. 79
101.	ኢኖቬሽን /ʔinovešin/	‘innovation’	GTP, p. 146
102.	ኤሌክትሪክ /ʔelektirik/	‘electricity’	Env.sc. G3, p. 56
103.	ኤስቴቲክስ /ʔestetiks/	‘aesthetics’	Aest. G2, p. 1
104.	ኤርፖርት /ʔerport/	‘airport’	GTP, p. 103
105.	ኤች.አይ.ቪ /ečč.ay.vi/ ኤድስ /eds/	‘H.I.V/ AIDS’	Env.sc. G3, p1
106.	ኤክስቴንሽን /ʔekistenšin/	‘extension’	Env.sc. G3, p.120
107.	ኤጀንሲ /ʔeğənsi/	‘agency’	Env.sc. G4, p. 82
108.	ኤግዚቢሽን /ʔegzibišn/	‘exhibition’	Aest. G3, p. 23
109.	አኩል /ikkul/	‘equal’	Ma. G4, p. 42
110.	አሪክል /ʔorikl/	‘auricle’	Env.sc. G4, p. 29
111.	አርታ /ʔorta/	‘aorta’	Env.sc. G4, p. 24
112.	አክሲጂን /ʔoksiğin/	‘oxygen’	Env.sc. G4, p. 5

113.	ክለር /kələr/	‘color’	Aest. G2, p. 56
114.	ኩብ /kub/	‘cube’	Ma. G4, p. 81
115.	ኪሎ ሜትር /kalori metir/	‘calorie meter’	Env.sc. G3, p. 78
116.	ኪሎ ሜትር /kilometir/	‘kilometer’	Ma. G4, p. 63
117.	ኪሎ ግራም /kilogram/	‘kilogram’	Ma. G4, p. 66
118.	ካልሲየም /kalsiyəm/	‘calcium’	Env.sc. G4, p. 12
119.	ካርቦሃይድሬት /karbohaydiret/	‘carbohydrate’	Env.sc. G4, p. 4
120.	ካርቦን /karbon/	‘carbon’	Env.sc. G4, p. 5
121.	ካርቦን ዳይኦክሳይድ /karbon dayoksayid/	‘carbon dioxide’	Env.sc. G4, p.24
122.	ካርድ /kard/	‘card’	Env.sc. G3, p.10
123.	ካውንስል /kawinsil/	‘counsel’	GTP, p. 159
124.	ካፒላሪ /kappilari/	‘capillary’	Env.sc. G4, p. 27
125.	ኬሚካሎች /kemikaločč/	‘chemicals’	Env.sc. G3, p. 47
126.	ኬሚካዊ /kemikawwi/	‘chemical’	Env.sc. G4, p 58
127.	ኮሌጅ /koleğ/	‘college’	Env.sc. G3, p. 119
128.	ኮምፒውተር /kompiwiter/ or ኮምፒውተር/kompiyuter/	‘computer’	Env.sc. G4, p. 149 Amh. G4, p. 95
129.	ኮርፖሬሽን /korporešin/	‘corporation’	Amh. G4, p. 99, Env.sc. G2, p.138
130.	ኮት /kot/	‘coat’	Amh. G2, p. 3
131.	ኮን /kon/	‘cone’	Ma. G4, p. 81
132.	ኮንስትራክሽን /konistirakšin/	‘construction’	GTP, p. 18
133.	ኮንዶም /kondom/	‘condom’	Aest. G2, p. 76
134.	ኮፒ /koppi/	‘copy’	Aest. G4, p. 37
135.	ኮፒራይት /koppirayit/	‘copyright’	GTP, p. 148
136.	ዊንድ ቪን /wind ven/	‘wind vein ’	Env.sc. G4, p. 83
137.	ዌብ ሳይት /web sayit/	‘website’	GTP, p. 159
138.	ዜሮ /zero/	‘zero’	Ma. G2, p. 44
139.	ዞን /zon/	‘zone’	Env.sc. G4, p. 130

140.	ዩኒየን /yuniyən/	‘union’	GTP, p. 12
141.	ዩኒፎርም /yuniform/	‘uniform’	Ma. G4, p. 65
142.	ዩኒቨርሲቲ /yunivərsiti/	‘university’	Env.sc. G3, p. 120
143.	ዲሞክራሲያዊ /dimokrasiyawwi/	‘democratic’	Env.sc. G4, p. 116
144.	ዲዛይን /dizayin/	‘design’	Env.sc. G3, p. 72; Aest. G2, p. 88
145.	ዲያሜትር /diyametir/	‘diameter’	Ma. G3, p. 96
146.	ዲጂታል /diğtal/	‘digital’	Ma. G2, p. 90
147.	ዲግሪ /digri/	‘degree’	Amh. G4, p. 46
148.	ዲፕሎማሲ /dipilomasi/	‘diplomacy’	Env.sc. G4, p. 117
149.	ዳስተር /dastər/	‘duster’	Aest. G3, p. 19
150.	ዳታ /data/	‘data’	GTP, p. 17
151.	ዴስክ /desk/	‘desk’	Ma. G2, p. 28
152.	ድራማ /dirama/	‘drama’	Env.sc. G3, p.24
153.	ዶላር /dolar/	‘dollar’	Amh. G4, p. 113
154.	ዶክተር /doktər/	‘doctor’	Env.sc. G3, p. 130
155.	ጀርሞች /ğərmocč/	‘germs’	Env.sc. G3, p11; G4, p.30
156.	ጁል /ğul/	‘joule’	Env.sc. G3, p. 78
157.	ጀምናስቲክ /ğimnastik/	‘gymnastic’	Aest. G3, p. 106
158.	ጀኦሜትሪ /ğiʔometiri/	‘geometry’	Ma. G2, p. 82
159.	ጅት /ğet/	‘jet’	Amh. G4, p. 14
160.	ጀነሬተር /ğenəretər/	‘generator’	Env.sc. G4, p. 99
161.	ጅግ /ğog/	‘jug’	Ma. G3, p. 49
162.	ጋላሪ /galəri/	‘gallery’	Aest. G3, p. 23
163.	ጋዝ /gaz/	‘gas’	Env.sc. G3, p. 49, 57
164.	ግራም /giram/	‘gram’	Env.sc. G3, p. 77
165.	ግራፍ /giraf/	‘graph’	Ma. G3, p. 112
166.	ፈዚካዊ /fizikawwi/	‘physical’	Env.sc. G4, p. 63
167.	ፊልም /film/	‘film’	Aest. G3, p. 3
168.	ፋኩልቲ /fakulti/	‘faculty’	Env.sc. G3, p. 125



169.	ፋይናንስ /fayinans/	‘finance’	GTP, p. 45
170.	ፌዴራላዊ /federalawwi/	‘federal’	Env.sc. G4, p.116
171.	ፎስፈረስ /fosfērəs/	‘phosphorus’	Env.sc. G4, p. 12
172.	ፎቶግራፍ /fotogiraf/	‘photograph’	Env.sc. G3, p.133
173.	ፒራሚድ /piramid/	‘pyramid’	Ma. G4, p. 81
174.	ፓራሌሎግራም /paralelogiram/	‘parallelogram’	Ma. G3, p. 88
175.	ፓርክ /park/	‘park’	Env.sc. G4, p. 126; Aest. G4, p. 1
176.	ፓተርን /patərn/	‘pattern’	Ma. G2, p. 100
177.	ፓኬጅ /pakeḡ/	‘package’	Env.sc. G3, p. 120
178.	ፔትሮሊየም /petiroliyəm/	‘petroleum’	GTP, p. 81
179.	ፕላስቲክ /plastik/ < Gr.	‘plastic’	Aest. G2, p. 94
180.	ፕላትሌት /platilets/	‘platelet’	Env.sc. G4, p. 36
181.	ፕላን /plan/	‘plan’	GTP, p. 57
182.	ፕላዝማ/plazima/	‘plasma’	Env.sc. G4, p. 25
183.	ፕሪዝም /prizm/	‘prism’	Ma. G4, p. 81
184.	ፕሬስ /pres/	‘press’	GTP, p. 129
185.	ፕሮቲን /protin/	‘protein’	Env.sc. G4, p. 4
186.	ፕሮግራም /progiram/	‘program’	GTP, p. 116
187.	ፖሊሲ /polisi/	‘policy’	GTP, p. 38
188.	ፖስተር /postər/	‘poster’	Aest. G2, p. 2
189.	ቪዲዮ /vidiyo/	‘video’	Aest. G4, p. 31
190.	ቫይረስ /vayirəs/	‘virus’	Env.sc. G3, p.1, G4, p. 30
191.	ቫይታሚን /vaytamin/	‘vitamin’	Env.sc. G4, p. 4
192.	ቬንትሪክል /ventiriki/	‘ventricle’	Env.sc. G4, p. 29
193.	ቬይን /veyin/	‘vein’	Env.sc. G4, p. 27

## B. French loanwords in Amharic

	Word	Gloss	Source
194	መካኒክ /məkanik/ (Fr./Eng.)	‘mechanic’	Amh. G3, p. 95
195	ሚሊዮን /miliyon/	‘million’	Env.sc. G4, p. 79; Aest. G4, p. 2
196	ሜዳሊያ /medaliya/	‘medal’	Amh. G4, p. 77
197	ሲጋራ /sigara/	‘cigarette’	Aest. G4, p. 48
198	ሳንቲም /santim/	‘cent’	Ma. G3, p. 99
199	ሬፑብሊክ /republik/	‘republic’	Env.sc. G4, p. 111
200	ሸሚዝ /šəmis/ šn	‘shirt’	Amh. G2, p. 1
201	ሹፌር /šofer/	‘driver’	Amh. G3, p. 62, G4, p. 26
202	ሻምፒዮን /šampiwon/	‘champion’	Amh. G4, p. 77
203	ቢሮ /biro/	‘office’	Env.sc. G3, p. 119
204	ባቡር /babur/	‘train’	Env.sc. G2, p. 151
205	ብስክሊት /biskilet/	‘cycle, bicycle’	Amh. G4, p. 14, Ma. G4, p. 29
206	ቴምብር /tembir/	‘stamp’	Env.sc. G4, p. 127
207	ቴክኒክ /teknik/	‘technique’	Amh. G4, p. copyriht page
208	ቴያትር /teyatir/	‘theater’	Aest. G4, p. 1
209	ትራክ /tirak/	‘track’	Amh. G4, p. 77
210	ትራፊክ /tirafik/	‘traffic policeman’	Amh. G3, p. 50
211	ኢንዱስትሪ /?industiri/ (Fr./Eng.)	‘industry’	Env.sc. G3, p.47
212	ኢኮኖሚ /ikkonomi/ (Fr./Eng.)	‘economy ‘	Env.sc. G4, p. 45
213	ኩፖን /kuppon/	‘coupon’	Amh. G4, p. 118
214	ካሴት /kasset/ (Fr./Eng.)	‘cassette’	Aest. G2, p. 27
215	ክላሰር /kilasər/	‘folder’	Env.sc. G4, p. 21
216	ኮላጅ /kollağ/	‘collage’	Aest. G2, p. 22
217	ኮሌኔል /kolenel/	‘colonel’	Env.sc. G3, p. 130
218	ኮሚቴ /komite/	‘committee’	Amh. G3, p. 115
219	ዶሴ /dose/	‘file’	Env.sc. G4, p. 21
220	ፖሊስ /polis/ (Fr./Eng.)	‘police’	Env.sc. G3, p. 119

### C. Italian loanwords in Amharic

	Word	Gloss	Source
221	ሀዲድ /hadid/ ??	‘railway’	Amh. G4, p. 14
222	መርካቶ /mərkatō/	‘marketplace’	Env.sc. G3, p. 128
223	መኪና /məkina/	‘car, automobile’	Env.sc. G2, p. 48; G4, p63
224	መካሮኒ /məkaroni/	‘macaroni’	Env.sc. G4, p. 3; Amh.G2,p. 90
225	ሰላጣ /səlat’a/	‘salad’	Amh. G2, p. 47
226	ሲሞንቶ /siminto/	‘cement’	Env.sc. G4, p. 142
227	ሲባ /sibago/	‘string’	Env.sc. G4, p. 151
228	ባኮ /bakko/	‘packet’	Ma. G4, p. 82
229	ቦርሳ /borsa/	‘bag’	Env.sc. G4, p. 150
230	ቧንቧ /b <sup>w</sup> amb <sup>w</sup> a/	‘pipe’	Env.sc. G3, p. 26
231	አውቶብስ /ʔawtobis/	‘(auto)bus’	Env.sc. G3, p. 135
232	ካርታ /karta/	‘map, card’	Env.sc. G3, p. 113
233	ካርቶን /karton/	‘cartoon’	Ma. G3, p. 87
234	ገጽጣ /gazet’a/	‘newspaper’	Amh. G4, p. 94
235	ጎማ /gomma/	‘tire, rubber’	Amh. G4, p. 29
236	ጣሳ /t’asa/	‘can, tin’	Ma. G3, p. 79
237	ፋብሪካ /fabrika/	‘factory’	Env.sc. G3, p. 49
238	ፒዛ /piza/	‘pizza’	Env.sc. G4, p.3
239	ፒያሳ /piyassa/	‘piazza’ (place name)	Aest. G4, p. 26
240	ፓስታ /pasta/	‘pasta’	Amh. G2, p. 90; Ma. G2,p. 100
241	ፖለቲካ /polətika/	‘politics’	Env.sc. G3, p.112
242	ፖስታ /posta/	‘letter, mail, envelop’	Env.sc. G2, p. 67

### D. Greek loanwords in Amharic

No.	Word	Gloss	Source
243.	ላጲስ /lapp’is/	‘eraser’	Ma. G2, p. 86
244.	ማራቶን /maraton/	‘Marathon’	Amh. G4, p.79
245.	ቄስ /qess/	‘priest’	Amh.G2, p. 118
246.	ብርሌ /birille/	‘flask (for drinking)’	Amh.G2, p. 124
247.	ታቦት /tabot/	‘arc of covenant’	Amh.G2, p. 118
248.	ኢትዮጵያ /ʔitiyopp’iya/	‘Ethiopia’	Amh. G2. P. 27

249.	ክርስቲያን /kristiyan/	‘Christian’	Amh. G2, p. 73
250.	ውቅያኖስ / wiqyanos/	‘ocean’	Amh. G4, p. 81
251.	ዲያቆን /diyaqon/	‘deacon’	Amh. G3, p. 63
252.	ጠረጴዛ /t’ərp’əza/	‘table’	Amh. G2. p. 46
253.	ጣርመስ /t’armus/	‘bottle’	Ma.G2, p. 48
254.	ጳጉሜ /p’agume/	‘13 <sup>th</sup> month of Ethiopia’	Amh. G2, p. 27

#### E. Arabic loanwords in Amharic

	Word	Gloss	Source
255.	ሀቅ /haqq/	‘truth’	Amh.G2, p. 94
256.	ሐኪም/ሃኪም /hakim/	‘physician’	Amh.G2, p. 55, p.81
257.	ሐዋላ /hawala/	‘money transfer’	Env.sc. G3, p. 121
258.	መርከብ /mərəkəb/	‘boat’	Amh.G4, p. 14
259.	መቀስ /məqəs/	‘scissors’	Env.sc.G3, p. 83; Amh. G2, p.58
260.	መውሊድ /məwliḍ/	‘birth of prophet Mohammed’	Amh.G2, p. 33
261.	መዲና /mədina/	‘city’	Aest. G2, p. 110
262.	ሙዝ /muz/	‘banana’	Env.sc. G3, p. 9
263.	ሚዛን /mizan/	‘weight, pair of scales’	Env.sc. G3, p. 83
264.	ሰንደቅ /səndəq/ < Turkish	‘flag stand’	Amh. G2, p. 4
265.	ሰዓት /səʔat/	‘clock’	Env.sc. G3, p.15; G4, p. 47
266.	ሱቅ /suq/	‘market, shop’	Env.sc. G3, p. 75; Amh. G2,p.2
267.	ሲኒ /sini/	‘cup’	Amh.G2, p. 89
268.	ሳህን /sahin/	‘dish’	Env.sc. G4, p. 18
269.	ሳሙና /samuna/	‘soap’	Env.sc. G4, p. 12
270.	ስልክ /silk/	‘telephone’	Env.sc. G4, p. 63
271.	ስኳር /sikk <sup>w</sup> ar/	‘sugar’	Env.sc. G3, p. 75
272.	ሶላት /solat/	‘prayer’	Amh.G2, p. 118
273.	ርሳስ /risas, ırsas/	‘lead’	Ma. G3,p. 28
274.	ሸቀጥ /šəqəṭ’/	‘goods’	Env.sc. G4, p. 146
275.	ሻማ /šama/	‘candle’	Amh. G2, p. 46

276.	ሻይ /šay/	‘tea’	Env.sc. G3, p. 7
277.	ሼህ /šeh/	‘sheik’	Amh.G2, p. 118
278.	ቀጣሪ /qəmis/	‘shirt’	Amh. G2, p. 118
279.	አልኮል /ʔalkool/	‘alcohol’	Amh.G4, p. 24
280.	አረቄ /ʔarəqe/	‘liquor, alcohol’	Amh. G3, p. 48
281.	አረፋ /ʔarəfa/	‘Id Al Adha’	Amh.G2, p. 116
282.	አውታር /awtar/	‘cord of the tent’	Ma. G3, p. 96
283.	ኢድ አልፈጥር /ʔid alfətʔir/	‘Id Al Fitr’	Amh.G2, p. 116
284.	ከሰረ /kəssərə/	‘lose’	Amh.G4, p. 110
285.	ከስ /kis/	‘pocket’	Env.sc. G4, p. 150
286.	ክራይ /kiray/	‘rent’	GTP, p. 119
287.	ክብሪት /kibrit/	‘match’	Env.sc. G3, p. 63
288.	ወረቀት /wərəqət/	‘paper’	Env.sc. G4, p. 141
289.	ወባ /wəba/	‘malaria’	Env.sc. G3, p. 27
290.	ዘይት /zəyit/	‘oil’	Env.sc. G4, p. 64
291.	ዝንጅብል /zingībīl/	‘ginger’	Env.sc. G4, p. 86
292.	ጀብና /ǧəbəna/	‘jug or kettle of coffee pot’	Aest. G2, p. 79,
293.	ፈረሱላ /fərəsulla/	‘farsula’	Env.sc. G2, p.90
294.	ፍራሽ /firaš/	‘mattress’	Aest. G3, p. 98

#### F. Ge’ez loanwords in Amharic

	Word	Gloss	Source
295.	ኃይል /hayl/	‘power’	Env.sc. G4, p. 48
296.	ክልውና /hilliwinna/	‘existence’	Env.sc. G4, p. 75
297.	ኅብረተሰብ /hibrətəsəb/	‘society’	Env.sc. G4, p. 92
298.	ሕዋስ /hiwas/	‘cell’	Env.sc. G4, p.10
299.	ህዳሴ /hiddase/	‘transformation’	GTP, p. 135
300.	ላዕል /laʔil/	‘numerator’	Ma. G3, p. 40
301.	መልክዓ ምድር /məlkīʔa midir/	‘geography’	Env.sc. G4, p. 166
302.	መርሐ-ግብር /mərihagibir/ (guiding+task)	‘program’	GTP, p. 14, 15

303.	መርህ /mərih/	‘principle’	Aest. G4, p. 106
304.	መርሆ /məriho/	‘principle’	Amh. G2, p. v
305.	መንፈቅ /mənfaq/	‘period of six months’	Amh. G3, p. 37
306.	መድኅን /mədihin/	‘insurance’	Env.sc. G3, p. 121
307.	ሙስና /mussinna/	‘corruption’	Amh. G3, p. 64
308.	ማህሌት /mahilet/	‘song of praise’	Ma. G4, p. 100
309.	ማኅደር /mahidər/	‘archive’	Env.sc. G3, p.133
310.	ማዕቀፍ /maʔiqəf/	‘framework’	GTP, p. 78
311.	ማዕከላዊ /maʔikəlawwi/	‘central’	Env.sc. G3, p. 112
312.	ማዋዕለ ነዋይ /məwaʔlə nəway/ (to spend +money)	‘capital’	GTP, P. 1
313.	ምግባር /migbar/	‘virtue/character’	Amh. Grade 2: p. 95
314.	ሰሌዳ /səleda/	‘chart, board’	Amh. G3, p. 51
315.	ሠራዊት /sərawit/	‘army’	Env.sc. G3, p. 123
316.	ሰብአዊ /səbiʔawwi/	‘human’	Env.sc. G4, p. 173
317.	ስልት /silt/	‘system, mode’	Amh. G3, p. 33
318.	ስብዕና /sibiʔinna/	‘personality’	Env.sc. G4, p. 173
319.	ሥነምግባር /sinəmiḥiddar/	‘ecology’	Env.sc. G4, p. 88
320.	ሥነምግባር /sinəmigbar/	‘ethics’	Amh. G.2, p. 93, Aest. G2, p. 2
321.	ሥነፅሁፍ /sinəsʔihuf/	‘literature’	Amh. G4, p. 99
322.	ሥዕል /siʔil/	‘picture, drawing’	Env.sc. G4, p. 127
323.	ራእይ /raʔiyy/	‘vision’	Env.sc. G4, p. 41
324.	ርቱዕ /rituʔ/	‘direct’	Amh. G3, p. 64
325.	ርዕስ /riʔs/	‘title’	Env.sc. G4, p. 44
326.	ቀዳማይ /qədamay/	‘first’	Ma. G3, p. 5
327.	ብዙሃን /bizuhan/	‘mass’	GTP, p. 120
328.	ብዝሃ ሕይወት /bizīha hiwot/	‘biodiversity’	Env.sc. G4, p. 161
329.	ተህዋስያን /təhiwasiyan/	‘small crawling insects’	Env.sc. G3, p11
330.	ተልዕኮ /təliʔko/	‘mission’	GTP, p. 28
331.	ተሞክሮ /təmokkiro/	‘experience’	Env.sc. G4, p. 169
332.	ተባዕታይ /təbaʔitay/	‘masculine’	Amh. G2, p.122
333.	ተዋናይ /təwanay/	‘actor’	GTP, p. 12

334.	ተዋፅኦ /təwas'io/	‘output’	Env.sc. G4, p. 6
335.	ተግባራዊ /təgbarawwi/	‘functional’	Amh. G3, p. 54
336.	ታህት /tahit/	‘denomenator’	Ma. G3, p. 40
337.	ትዕይንት /tiṯiyyint/	‘scene’	Aest. G2, p. 119
338.	ነዋይ /nəway/	‘money or property’	GTP, P. 1
339.	ንዑስ /niṯus/	‘sub or small’	Env.sc. G4, p. 44
340.	አሃድ /ʔahad/	‘unit’	Env.sc. G3, p. 68, 69
341.	አርአያ /ʔarʔayya/	‘model, exemplary’	Amh. G3, p. 74
342.	አንስታይ /ʔansitay/	‘feminine’	Amh. G2, p.122
343.	ዐውድ /ʔawid/	‘context’	Amh. G3, p. 86
344.	አዝርዕት /ʔaziriṯit/	‘seeds’	Amh. G3, p. 85
345.	ዑደት /ʔudət/	‘cycle’	Env.sc. G3, p. 85; G4, p. 106
346.	ዓርማ/አርማ /ʔarma/	‘logo’	Env.sc. G3, p. 115, p.135
347.	ዓውዳሙት /ʔawidamət/	‘holyday (religious)’	Amh. G2, p. 11
348.	እሴት /isset/	‘value’	Env.sc. G3, p. 111; G4, p. 94
349.	ዕድ /ʔid/	‘hand’	Amh. G3, p. 93
350.	እጽዋት /is'wat/	‘plants’	Amh. G4, p. 11
351.	ኩነት /kunət/	‘event’	GTP, p. 132
352.	ክሂል /kihil/	‘skill’	Env.sc.G4, p. 1; Amh. G2, p.vii
353.	ክዋኔ /kiwwane/	‘action’	Env.sc. G4, p.161
354.	ዘዌ /zəwe/	‘angle’	Academy of Eth.Lang. p.11
355.	ዘገባ /zəgəba/	‘report’	Env.sc. G3, p.43
356.	ግብረ ኃይል /gibrə hayil/	‘task force’	GTP, p. 21
357.	ግብረሠናይ /gibrəsennay/	‘charity’	Amh. G2, p. 99
358.	ግብዓት /gibʔat/	‘input’	Env.sc. G3, p. 86; GTP, p. 87
359.	ፀረ-ሙስና/s'ərəmuṣsinna/ (anti+corruption)	‘anti-corruption’	GTP, p. 23

### G. Oromo loanwords in Amharic

	Word	Gloss	Source
360.	መላ /məla/	‘idea of solving problem’	Amh. G4, p. 65
361.	ፊቻ /(i)rečča/	‘thanks giving day’	Env.sc. G4, p 159
362.	ባቱ /batu/	‘mountain’	Env.sc. G4, p 119
363.	አንጋፋ /ʔangaffa/	‘first, foremost’	Amh., G4, p. 79
364.	ካራ /karra/	‘gate’	Env.sc. G4, p 119
365.	ደቦ /dəbo/	‘communal labour’	Env.sc. G4, p 177
366.	ዳለቻ /daləčča/	‘gray’ /daalačča/	Aest. G3, p. 5
367.	ዳመከሲ /daməkəse/	‘plant used as a medicine’	Env.sc. G4, p.90
368.	ጀጌ /ḡige/	‘communal labour’	Env.sc. G4, p 177
369.	ጉድፈቻ /guddifəčča/	‘adoption’	Env.sc. G4, p. 44
370.	ጋማ /gamma/	‘lion’s mane’	Amh., G4, p. 19
371.	ጮማ / č’oma/	‘fat (meat)’	Env.sc. G4, p. 8



## Appendix V: Transcript of expert interviews

### Expert A

1. ጠ (ጠያቂ):- ከ1-4ኛ ክፍል በተዘጋጁት የአማርኛ የመማሪያ መጻህፍት በዝግጅም ሆነ በማሻሻል ስራ የተሳተፉባቸው አጋጣሚዎች ከነበሩ ቢነግሩኝ?

I (Interviewer): Would you tell me if you have participations on the development or revision of Amharic textbooks?

2. ተ (ተሳታፊ):- ከዚህ በፊት በስርአተ ትምህርት ክለሳ ላይ ነበርኩ። ከዚያ በሁዋላ አዲሱ ስርአተ ትምህርት ሲዘጋጅም ተሳትፌአለሁ። እንደ አዲስ አበባ ተጨባጭ ሁኔታ መጻህፍትን አዛምዶ ማዘጋጀትም ላይ ሰርቻለሁ።

P (Participant): I participated in curriculum revision and then I also participated in the new language curriculum. I also worked in the adaptation and preparation of Amharic textbooks in the Addis Ababa context.

3. ጠ:- የመጽሀፉ ዝግጅት ሳይጀመር በፊት የወሰዱት (የተሰጠው) ስልጠና ነበር? ስልጠናው ከነበረ ለመጻህፍት ዝግጅቱ ያገኙት ጥቅም (ያበረከተ አስተዋጽኦ) ከነበረ ቢጠቁሙኝ

I: Was there a training that you had received before you embarked on the textbook preparation? If there was training, have you benefited from it?

4. ተ:- ከዚህ በፊት ከነበረኝ እውቀት በተሻለ በአዲሱ ስርአተ ትምህርት መሰረት እንዴት ማዘጋጀት እንደሚቻል ስልጠና ተሰጥቶናል፤ በዚህም ትምህርት ሚኒስቴር ከተለያዩ ድርጅቶች ማለትም ከፍሎሪዳ ስቴት ዩኒቨርሲቲ እና ከኤስ.አይ.ኤል ጋር በመሆን የተዘጋጁ ስልጠናዎችን ወስጃለሁ። እነዚህም ስልጠናዎች ለመጻህፍት ዝግጅት እጅግ ጠቃሚ ሆነው አገኝቻቸዋለሁ።

P: We received training which was organized by Ministry of Education and different organizations including Florida State University and SIL. The training was invaluable as it indicates how to prepare new curriculum that focuses on improving reading in Mother tongue. I found those trainings very important for material development.

5. ጠ:- የአማርኛ ቋንቋ መማሪያ መጻህፍት በአዲስ መልክ ተዘጋጅተዋል ብለዋል። በዚያ ላይ አዳዲስ ጽንሰ-ሀሳቦች ሲያጋጥም ከሌሎች የቋንቋ ባለሙያዎች ጋር ውይይት አድርጋችሁ ታውቃላችሁ?

I: You said that Amharic textbooks are prepared in a new way. In this regard, when new concepts are encountered, did you have discussion sessions with language experts?

6. ተ:- አዎን፤ እንግዲህ በርካታ ባለሙያዎች ናቸው የተሳተፉት። በቋንቋ ዙሪያ ላይ ኮንሰልታንቶች ነበሩ። የተለያዩ የቋንቋ ባለሙያዎችና አማካሪዎች ስለነበሩ በእያንዳንዱ ስራ ውይይቶች ነበሩ። እንዴት ለተማሪዎች ግልጽ በሆነ መንገድ መቅረብ አለበት? ለአተገባበርም በሚያመች ሁኔታ እንዴት ይቅረብ? በሚል ዙሪያ በርካታ ውይይቶች በየመሃሉ ይደረግ ነበር።

P: Yes. Many experts have participated in the textbook development. There were language consultants. Since there were consultants and language experts, there were various discussions in the middle of

preparation. The discussions focused on how the lesson should be presented clearly and how it should be designed in the way that is convenient to implement.

7. ጠ:- በመማሪያ መጽሀፍ ዝግጅት ወቅት አዲስ ጽንሰ ሀሳብ ሲመጣ ስያሜ ለመስጠት ያስቸገራችሁ ነገር ከነበረ ቢነግሩኝ?

I: would you tell me if there was a challenge when new concept encounter during textbook development?

8. ተ:- አንዳንድ ነበር ለምሳሌ በተማሪው መጽሀፍ ላይ ምርድ ስተዲ (word study) የሚል አለ። ወርድ ስቴዲ ቀጥተኛ ትርጉሙ የቃላት ጥናት ነው። ስለዚህ ይሄንን ደግሞ ስንል በኛ ኮንቴክስት (በኛ አገር ተጨባጭ ሁኔታ) የቃላት ጥናት በጣም ሰፊ አሳቤ ነው። ግን ይንን ከማለት ይልቅ እኛ ለማለት ያሰብነው ቃላቱ ምንባብ ውስጥ ሲገቡ የማንበብ ፍጥነት እንዲኖራቸውና ትክክለኛነትን እንዲያዛንፉ መጀመሪያ ላይ ከምንባቡ ወጥቶ ረዘም ረዘም ያሉ ቃላት እንዲለማመዱት ይደረጋል። ስለዚህ ለዚህ ተመጣጣኝ የሆነ ትርጉም ለመስጠት በጣም ነው የተቸገርነው። ስለዚህ ይሄንን በቀጥታ በስምምነት የቃላት ጥናት የሚለው ሰፊ ቢሆንም ለዚህ ተጨባጭ የመጽሀፍ ዝግጅት የአንግሊዝኛውን ትርጉም እንዳለ ወስደናል።

P: There were some challenges. For instance, there was the term ‘word study’. The direct meaning of word study (i.e. *yəqalat t’inat*) is very wider concept in our context. In this material our intention was very specific which indicates practicing longer words which were taken from reading texts so as to practice fluency and accuracy in reading. So we have been challenged to provide equivalent meanings. Therefore, even though the direct meaning of ‘word study’ has wider meaning in our context, we adopted the direct meaning of English during the textbook development.

9. ጠ:- ስለዚህ እንዲህ አይነት ነገር ሲኖር ከባለሙያዎች ጋር ትወያዩ ነበር ማለት ነው?

I: therefore, in such occasion were you discussing with experts and consultants?

10. ተ:- አዎን።

P: yes.

11. ጠ:- ውይይቱ ጠቅሟችሁዋል ማለት ነው?

I: Have you benefited from the discussions?

12. ተ:- አዎን በጣም ጠቅሞናል። ምንክያቱም ዛሬ የምንወስናቸው ነገሮች ነገ ከነገ ወዲያ በልጆች ላይ ተጽእኖ እንዳያመጣ፣ የቋንቋን ህልውና እንዳይስት ከሚል አሳቤ አንጻር የቋንቋ ባለሙያዎች ስለነበሩ ከነሱ ጋር ይሄ ቢሆን የተሸለ ይሆናል የሚለውን እንወስዳለን። አሁን ለምሳሌ ሳይት ወርድ የሚለው ወደ እኛ ሲመጣ ተዘውታሪ ቃላት ተብሏል። ምክንያቱም የሚዘወተሩ ናቸው። ቀጥታ ትርጉሙ በአይን ተቃኝቶ የሚታወቅ ማለት ነው። በኛ አገር ተጨባጭ ሁኔታ ግን አዛምደን ነው የሰየምነው። ስለዚህ አዳዲስ አሳቤዎች ሲመጡ በእኛ አገር ተጨባጭ ሁኔታ አዛምደን እንወስዳለን፤ ካልተቻለ ደግሞ እንዳለ (በቀጥታ ትርጉም) እንወስዳለን። ቃል በቃል ተርጉመን እንወስዳለን።

P: We have benefited very much from the discussions. Since the decisions that we make today will have an impact on our children’s learning tomorrow. Moreover, we had discussions with language experts so as not to negatively affect language. For example the term sight word when designated in our language (Amharic) named as *təzəwtari qalat* ‘frequent words’. Because they are recurrent. The direct meaning refers to words identified at simple glance. Therefore, when new concept appears we adapt it according to our context. If this is not possible we take in direct translation, i.e. by word-for-word translation.

13. ጠ:- ስያሜዎችን ለመሰየም የተጠቀማችሁት/ያገለገላችሁ መጽሀፍ ወይም መዝገበ ቃላት ካሉ?

I: Did you have books or dictionaries that you referred to designate new concepts?

14. ተ:- በአብዛኛው ጊዜ በአገራችን የተዘጋጁ የአማርኛ መዝገበ ቃላትን ከጥንት ጀምሮ የተዘጋጁትን፣ አሁንም እየተሰራባቸው ያሉትንና በትልልቅ ተቋማት የተዘጋጁትን ከተጨባጭ ሁኔታ ጋር እያመዛዘንን እንጠቀማለን።

P: We used Amharic dictionaries which were prepared in our country. We uses those dictionaries prepared by big institutions with the consideration of the present situation.

15. ጠ:- በአዲሱ የመማሪያ መጻህፍት ዝግጅት ወቅት ቋንቋ ነክ የሆኑ ያጋጠሙ ችግሮች ከነበሩ ቢነግሩኝ?

I: Would you tell me if you encountered language related problems in the development of new textbooks?

16. ተ:- እስከ አሁን ያጋጠመን ብዙ ችግር የለም። ምናልባት እንዳልኩህ ይሄ ስርአተ ትምህርት በአዲስ መልክ ሲዘጋጅ የተለያዩ አገር ተሞክሮዎችን አካቶ ነው። በመጽሀፉ ውስጥ 5 የንባብ ዘርፎች (ኮምፖዝዮች) አሉ። በተቻለ መጠን ከአገራችን ተጨባጭ ሁኔታ አጣጥመን ለማዘጋጀት ሞክረናል። ወደ ተግባር ሲገባ ለማስተዋወቅ በዚህ ጉዳይ የግድ ስልጠና ስለሚያስፈልግ መምህራን እንደ ወረደ እንዳያስተምሯቸው እናስለጥናለን።

P: We did not face a significant problem still now. As I said when the new curriculum was prepared, experiences form various counties were considered. There are five major components in the books. As much as possible we have tried to prepare considering real situation of our country. Before implementing the new curriculum we gave trainings to teachers to familiarize them with the new curriculum.

17. ጠ:- መማሪያ መጻህፍት ውስጥ ጽንሰ-ሀሳቦችን ለመሰየም የሚያግዝ መስፈት ነበራችሁ? በእንግሊዝኛ ያሉ ቃላት ወደ አማርኛ ሲመጡ ስያሜ ለመስጠት እንደ መስፈርት የምትወስዷቸው ከነበሩ (የተጻፈ ወይም ያልተጻፈ ስምምነት ከነበረ)?

I: Did you have criteria help to designate new concepts? For instance, if you had written or unwritten conventions to designate terms in Amharic that come from English?

18. ተ:- መሰረታዊ ነገር ያደረግነው፣ ቅድም በዝግጅ ወቅት የቋንቋ አማካሪዎች አሉ ብየሃለሁ። ትልቁ ነገር በአገሪቱ ተጨባጭ ሁኔታ ይሄ ነገር ስያሜ ካለው ያ ስያሜና ተግባሩ የሚመሳሰል (የሚገልጽልን) ከሆነ አይተን ትርጓሜን ሰጥተን እንጠቀማለን። ትርጓሜውን ሰጥተን ተግባሩን የማይመልስልን ከሆነ ግን ለምሳሌ ቅድም ወርድ ስቴዲ ያልነው አይነት የቃላት ጥናት ይልና የቃላት ጥናት ግን አይደለም የሚያሳየው። ስለዚህ ስያሜውና ተግባሩ የተለያየ ሲሆን እንዳለ የምንወስድበት ጊዜ አለ። ይሄንን በመጀመሪያ ሰብሰብ እያልን እየተወያየን ኔገቲቭ የሆነ ነገር እንዳያጣ (ጥንቃቄ) በማድረግ በመወያየት ነው።

P: As I informed you earlier there were language consultants during the development process. The main thing is that if there is equivalent meaning in our real context we use it for designation. If the equivalent meaning does not reflect the source concept, we use direct translation as we did for the term *yəqalat t'inat* ‘word study’. We take care to avoid negative impact when we discuss to designate concepts.

19. ጠ:- የቃላት እጥረት (ክፍተት) ሲያጋጥም ጽንሰ ሀሳብን ለመወከል የምትጠቀሙበት ዘዴ ነበር? ቃላትን ለማበልጸግ የምትጠቀሙበት ስልቶች ካሉ?

I: What are the methods you use to fill lexical gap or mechanisms for lexical enrichment?

20. ተ:- መጀመሪያ ወደ ውስት ከመሄዳችን በፊት በቋንቋ ውስጥ ካሉት ቃላትን የማበልጸጊያ ስልቶች እንጠቀማለን። ውስትን እንደ ሁለተኛ አማራጭ ነው የምንወስደው (የወሰድነው)።

P: First of all we use language internal means of lexical enrichment mechanisms. We use borrowing as a second option.

21. ጠ:- ውስት የግድ ሲሆን ከየትኛው ቋንቋ ለመዋስ ነው ቅድሚያ የምትሰጡት?

I: When borrowing is mandatory, which language is preferred for the team?

22. P: First of all we prefer to borrow from Ethiopian languages.

ተ:- በመጀመሪያ በአገር ውስጥ ካሉት ቋንቋዎች እንወስዳለን።

23. ጠ:- ውስን አድርገን ስንገል አማርኛ ከየትኛው/ኞቹ ቋንቋዎች ቃላትን ይዋሳል?

I: Could you tell me specifically from which Ethiopian languages Amharic borrow lexical items?

24. ተ:- ከግእዝ፣ ከኦሮምኛ፣ ከትግርኛ ከሌሎች የደቡብ ቋንቋ ይወስዳል። ከዚያ ካለፈ ነው ወደ ውጭ ቋንቋዎች የሚሄደው።

P: Amharic borrows from Ge'ez, Oromo, Tigrinya and from other Southern languages. As a second option borrows from foreign languages.

25. ጠ:- ከእነዚህ ቋንቋ ቅደም ተከተል ብናስዝ እንዴት ይሆናል?

I: Would you please tell me the languages in the priority order?

26. ተ:- ለአማርኛ ግእዝን እናስቀድማለን። ትግርኛ፣ ጉራጊኛ አሉ። ከዚያም ወደ ኩሽ ቋንቋዎች እንሄዳለን። ከኩሽ ኦሮምኛን እናስቀድማለን። ከዚያም ደቡብ ህዝቦች ላይ ካሉትም ልንወስድ እንችላለን።

P: For Amharic we prefer Ge'ez and then Tigrinya and Gurage. And then we borrow from Cushitic languages. From Cushitic languages, we use mainly Oromo. And then we may use from languages spoken in Southern people (region).

27. ጠ:- በጣም ጥሩ። ከ1-4 የተዘጋጁ የአማርኛ መማሪያ መጻህፍት ላይ አዳዲስ የተሰየሙ ቃላት አሉ። እነዚያ ቃላት ተቀባይነት ማግኘት አለማግኘታቸው የሚረጋገጥበት መንገድ አለ ወይ?

I: Well. There are newly coined words in grade 1-4 Amharic textbooks. Is there any way to assure acceptance?

28. ተ:- አዎን። እንደ አዲስ አበባ ተጨባጭ ሁኔታ መጻህፍት ተዘጋጅቶ ወደ ተማሪው ሲወርድ መምህራን እንዲሰለጥኑ አድርገናል። መምህራን ሲሰለጥኑ የተለያዩ ያነሱዋቸው ነገሮች አሉ። በቃላትም ደረጃ፣ በዝግጅቱም ዙሪያ አዲስ እንደ መሆኑ ያነሱዋቸው ነገሮች አሉ። ሀሳባቸውን ተቀብለን የገባበትን መንገድ ለማስረዳት ሞክረናል። ብዙዎቹ በጣም ደስተኞች ናቸው። ምክንያቱም ይሄንን ቋንቋ ለማዳበር በዚህ መንገድ አማርኛ ከሌሎች የኢትዮጵያ ቋንቋዎች ለማዋዋስ የተደረገውን ጥረት አድንቀዋል። ያም ሆነ ይህ የመምህራንን ሀሳብ እንቀበላለን። ይህ ገና ጅምር ነው። ቀጣይ ከትግበራው በኋላ የምናያቸውም ይኖራሉ።

P: Yes. In Addis Ababa we offered training to teachers after the preparation of the textbooks was done. During the training sessions there were issues raised by teachers. In lexical level and in preparation in general there were questions since it is newly developed material. We tried to explain how we developed the books. Most of the teachers were happy in relation to the efforts that has been made to enrich the language through borrowing from Ethiopian languages. We are open to receive teachers' comments. This is beginning. There are issues we consider in future the after implementation.

29. ጠ:- ስለዚህ የማያረካ ቃል ሲገኝ ለማሻሻል ከፍት ነው ማለት ነው?

I: Therefore, is it open to improve when in appropriate word occur?

30. ተ:- አዎን በሚገባ

P: Exactly.

31. ጠ:- በአማርኛ ከ1-4 ለአንድ ጽንሰ ሀሳብ የሚሰጥ ስያሜዎች ወይም ቃላት በፊደላት አጻጻፍ አንድ ወጥ እንዲሆኑ የተደረገ ጥረት (ከትትል) አለ ወይ:: በሌላ አነጋገር፣ አንድን ቃል በተመሳሳይ ፊደል በመጻፍ ሁኔታ የሚደረግ ከትትል ከነገረ ቢገልጽልኝ?

I: Are there any efforts or follow up to maintain spelling uniformity for terms or words that appeared in grade 1-4 Amharic textbooks? Would you explain me if there were some efforts?

32. ተ:- በተለይ ከ1ኛ-4ኛ ክፍል ይሄ ትኩረት አልተደረገም:: በተለይ 1ኛ እና 2ኛ ክፍል ያሉ ተማሪዎች የፊደላትን ትርጉም አይተው ሊቃላት ፍች እንዲሰጡ (እንዲተረጉሙ) አይደለም:: ፊደላቱን ለይተው በፊደላቱ ቃላት እንዲመሰርቱ ነው:: ስለዚህ ተደጋጋሚ ፊደላት አሉ:: ለምሳሌ የ /ha/ ዘሮች ሆኑ:: ሶስቱን አሁን የትርጉም/ የአገባብ ልዩነት እንዳላቸው ሳንገነዝብ ሁሉንም እናስተምራቸዋለን:: መጀመሪያ የ<ሀ>ፊደል ድምጹ /y/ መሆኑን ነው እንዲያውቁ ምናደርገው:: በ <ሀ> ፊደል የተሰየመውን በ <ሐ> ም መሰየም እንደሚችሉና ፊደሉን ተጠቅመው ቃል መመስረት እንዲችሉ ነው:: ቀስ በቀስ ደረጃቸውን በጠበቀ ሁኔታ ወደ ፊት እንዲለዩ ማድረግ ይቻላል::

P: This was not emphasized especially in grade 1-4. There was no intention to identify the meaning of symbols particularly for grade 1 and 2. Rather to identify the symbols and build words using those symbols. There are redundant symbols. For example, there are ሀ, ሐ, ሃ as <ha> variants. We teach all the three symbols without telling the particular usage of those symbols. First we introduce them the symbol ሀ <ha> has the sound [ha]. Similarly the students can replace the symbol ሀ with ሐ <ha> and form words. Gradually it is possible to make them identify their usage in the future.

33. ጠ:- ከፍ እያሉ ሲሄዱ ተደጋጋሚ ፊደላት 3 እና 4 ክፍል ላይ ወጥ እንዲሆን ለማድረግ የተደረገ ጥረት አለ?

I: Have you made an attempt to standardize the spelling for those redundant symbols in grade 3 and 4?

34. ተ:- እስከ 4ኛ ክፍል የተለያዩ ተደጋጋሚ ፊደላትን አጠቃቀም በተመለከተ የተደረገ ጥረት የለም:: በዚህ ደረጃ ፊደላትን እንዲለዩ ብቻ ነው የተደረገው:: ለምሳሌ:- <አ> እና <ዐ> ተጠቅመው አይን/ዐይን ማለት ይችላሉ:: በዚህ ደረጃ እንጂ የሁለቱ (አ እና ዐ ልዩነት አልገለጽንም):: የተሻሻለው የአማርኛ ስርአተ ትምህርቱም ሲዘጋጅ አላማው ተማሪዎች በአፍ መፍቻቸው ቢማሩም ውጤታቸው ዝቅተኛ በመሆኑና የዝቅተኛነቱም ምክንያት ተማሪዎች አንብቦ መረዳት አለመቻላቸው ነበር:: ስለዚህ ትኩረት ያደረግነው እንዴት ማንበብ ወይም አንብበው መረዳት ይችላሉ የሚለው ላይ ነበር::

P: There is no effort with regard to regularizing the usage of redundant symbols up to grade 4. The only thing we did in this level is that making them to identify symbols or graphemes. For instance, using አ <?> and ዐ <?> they can write አይን/ዐይን *ገላይን/ገላይን* ‘eye’. In this level, we did not explain the difference between አ <?> and ዐ <?>. The objective of the revised Amharic curriculum was to fill gap of students’ reading comprehension. Even though students have been taught in their mother tongue, they scored poor. Therefore, we focused on enhancing reading skills and comprehension.

35. ጠ:- ሞክሼ ፊደላትን በተመለከተ እናንተ ከመጻህፍት ዝግጅት አንጻር ያላችሁ አስተሳሰብ (አቀዳም) ምንድነው? ይቅሩ ትላላችሁ ወይስ ይጠበቁ ትላላችሁ?

I: What is your position in relation to redundant symbols during preparation of Amharic textbooks? Do you suggest to drop or to maintain those symbols?

36. ተ:- እኛ እንደ ቋንቋ ክፍል ይቅር አንልም። መማር አለባቸው። ሲማሩ ግን ሁሉንም አንድ ላይ እናምጣ አንልም። መጀመሪያ በተናጠል እናስተምራለን። ሞክሼ የሆኑበትን ደረጃ ደግሞ በቀጣይ እዲለዩዋቸው እናደርጋለን። አንደኛ ክፍል ፊደሎችን በተናጠል እንዲማሩ አድርገናል። ሁለተኛ ክፍል ሲደርሱ ደግሞ /አ፣ እና ዐ ን ጸ እና ፀ ን ሀ እና ሐ ን ሰ፣ ሠ ን በንጽጽር እንዲማሩ እናደርጋለን። ሞክሼ ፊደላቱን በቅርጽ ቢለያዩም በድምጽ አንድ እንደሆኑ እንዲማሩ በራሱ አንድ ይዘት ሆኖ ቀርቧል፤ እንጂ ይቀነሱ የሚል የለም፤ ሁሉም በመማሪያ መጻህፍቱ ተካተዋል።

P: We as language department do not propose to drop the redundant symbols. However, we do not bring them at once to students’ learning. First we introduce in isolation. And then we make them identify the homophones. In grade one we presented the graphemes in isolation. In grade two we made them learn the redundant symbols in comparison. Even though the extra symbols have different shapes, children would be taught that the redundant symbols have similar sounds and they are presented as independent contents. Hence, we do not want them dropped; rather we included all in the textbooks.

37. ጠ:- ሌሎች አካባቢ ሳይንስና ሂሳብ መጻህፍት ሲዘጋጁ፣ ከቋንቋ፣ ከአጻጻፍ ስርአት አንጻር ወይም ከእርማት አንጻር አዘጋጆች እናንተን የሚያስገመግሙበት አጋጣሚ ከነበረ ቢያስረዱኝ?

I: Would you explain if there was any incidence in relation to assessing and editing the language aspect when the Environmental science and Mathematics textbooks were prepared?

38. ተ:- ከዚህ በፊት (እስከ አሁንም) አልነበረም። እንደ ባለሙያ መጻህፍቱ ከታተሙ በኋላ ይሄ መጽሀፍ ተግባር ላይ ሊውል ነው ሲባል የማየት ነው እንጂ በዝግጅት ወቅት ተሳትፈን አናውቅም። እዚያ ላይ ጋፕ አለ ማለት ይቻላል በቋንቋ ደረጃ። (በዝግጅት ጊዜ ከቋንቋ ባለሙያ ጋር አብሮ የመስራት ልምድ የለም። የትምህርት አይነቱ (የአካባቢ ሳይንስና ሂሳብ) በላሙያዎች ብቻ ናቸው ተመርጠው የሚያዘጋጁት)።

P: There is no efforts until now. Apart from observing the published books, we did not participate during textbooks development. There is a gap here. It is not common to see working with language experts in the development stage. Only the subject (i.e., Environmental science and Mathematics) experts develop textbooks.

39. ጥ:- በቅርብ ጊዜ በአዲስ መንገድ በተዘጋጀው የአማርኛ መማሪያ መጻህፍት የተደረጉ ለውጦች ካሉ ይጠቁሙኝ?

I: Would you please mention if there are changes in the newly prepared Amharic textbooks?

40. ተ:- በአሁኑ የአማርኛ ቋንቋ አዲስ ዝግጅት ቀደም ሲል በከፍተኛ አንዳንዴም በጭረት ምልክት ይጻፍ የነበረውን በወጥነት እንደ አንድ ቃል ያለ ከፍተኛ እንዲጻፍ ተደርጓል። ለምሳሌ ቀደም ሲል ትምህርት ቤት የሚለው ጥምር ቃል እንደ ሁለት የተለያዩ ቃላት ይጻፍ ነበር። አሁን ግን ያለ ከፍተኛ ነው የሚጻፈው። ለዚህም ለውጥ ምክንያቱ ሁለቱ ተጣማሪ ቃላት ላንድ አዲስ ፍች የሚውሉ መሆኑን ወይም ጥምርነቱን ለማሳየት ታስቦ ነው።

P: We made some changes in writing compound words. Previously compounds were written either with space or using hyphen. In the materials [grade 1-4 Amharic textbooks], however, we have decided to consistently write without space. For instance, previously ትምህርት ቤት *timihirt bet* ‘school’ were written two different words. Now it is written without leaving word space. The reason for this change is to clearly indicate that the two constituents stand for a single concept or to show constituents are compound.

41. ጠ:- መምህራንና ሌሎች የቋንቋ ተጠቃሚዎች ለውጡን የተቀበሉበት መንገድ ምን ይመስላል?

I: How do you explain teachers’ and other language users’ reactions regarding the change?

42. ተ:- መምህራን መጻህፍቱን ለማስተዋወቅ ባደረግነው ስልጠና ይህ ዝግጅት የአጻጻፍ ስርአት እስከመቀየር ለምን ሄደ። ከተለመደው የጥምር ቃል አጻጻፍ መወጣት ተገቢ አይደለም ብለው ቅሬታ አሰምተዋል። በመሆኑም እኛም በዚህ ደረጃ ተማሪዎች ንባብን መማር ላይ ስለሚያተኩሩ ስለ ህጉ ሳይጨናነቁ እንዲማሩ ነው የታሰበው የሚል ምላሽ ተሰጥቷል። ከመምህራኑ የሰማናቸውን ቅሬታ የማሻሻያ ሀሳቦችን ወደ ፊት ለማስተናገድ እንደሚቻልም ተቀብለናል። ወደ ፊት መቀየር ያለባቸው የአጻጻፍ ስርአት-ቶች (ለምሳሌ፣ የጥምር ቃል አጻጻፍም ቢሆን) ተነጋግረን ማረም ይቻላል፤ መቀየር ካለብን።

P: During training which was organized about newly developed textbooks, some teachers expressed their dissatisfaction with regard to the new way of writing compounds. They asked why traditional way of writing compounds should be changed. You should not have changed the way of writing. Thus, for such dissatisfactions we tried to give explanation. We assumed that since students focus, in this level, is on learning to read without getting stressed about the rules. We accepted the teachers’ comments to consider future revisions of the textbooks. Having made discussions, we may change what should be changed regarding spelling conventions (for example, including the way of writing compounds) in the future.

43. ጠ:- በመጨረሻ የአማርኛ ቋንቋ እድገትንና መደበኛነትን ለማሳደግና ለማስጠበቅ መደረግ አለበት የምሉት ካለ?

I: Finally, what do you suggest for the development and maintainance of standardization of Amharic?

44. ተ:- አማርኛ ብዙ ሪሶርስ ያለ ቋንቋ ነው። ይሄንን ለማድረግ ደግሞ ለምሳሌ 10ኛ ክፍል ከደረሱ በሁዋላ 11ኛ ና 12ኛ ላይ ለአማርኛ የተሰጠው ትኩረት በጣም ዝቅተኛ ነው። አንደኛ ከፊዲቱ ትንሽ ነው፤ ሁለተኛ እዚያ ያለው የተማሪዎች አቀባበል ብሔራዊ ፈተና ላይ ስለማይመጣ ጊዜን እንደ ማጥፋት ይቆጥራሉ። ይሄ በፖሊሲ ደረጃ ያለ ስለሆነ ፖሊሲው እንደገና ቢታይ ደስ ይለኛል። በከፍተኛ ደረጃ ላይ ያሉ የቋንቋ ባለሙያዎች ቋንቋውን ከማስተማሪያ ባሻገር ለዚህ ለቋንቋ የራሳቸውን አስተዋጽኦ ቢያደርጉ አላለሁ። መጻህፍት በማዘጋጀት የውይይት መድረኮችን በማዘጋጀት ቢሳተፉ። አማርኛ ለኢትዮጵያውያን እስካገለገለ ድረስ ሁሉም የበኩሉን ድርሻ ቢያበረክት አላለሁ።

P: Though Amharic is the language with rich resources, it is limited up to grade 10. The attention given in grade 11 and 12 is very less and the credit hour given is very small. Students consider learning Amharic as time wastage since it is not given in the university entrance exam. Since this is the policy issue and I

would be happy if the decision is revisited. Apart from teaching the language, language experts in higher institutions should contribute to the language. They should participate in writing books and organizing discussion forums. Since Amharic is serving Ethiopians, all concerned bodies should contribute to the language.

## Expert B

1. ጠ (ጠያቂ):- ከ1-4ኛ ክፍል በአማርኛ በተዘጋጁት አካባቢ ሳይንስ የመማሪያ መጽሀፍት በዝግጅት ሆነ በማሻሻል ስራ የተሳተፉባቸው አጋጣሚዎች ከነበሩ ቢነግሩኝ? ከተሳተፉ የስራ ድርሻዎ ምን ነበር?

I (Interviewer): Would you tell me about your participation on the development or revision of grade 1-4 Environmental science textbooks? What was your role if you have had a participation?

2 ተ:- (ተሳታፊ):- ከ1-12 ክፍል ድረስ በስርአተ ትምህርት ዝግጅት፣ ከ1ኛ-4ኛ ክፍል አካባቢ ሳይንስ ከ5ኛ - 8ኛ ሶሻል ስታዲስ፣ ከ9-12 የጂኦግራፊ ስርአተ ትምህርት ሲዘጋጁ መረጃ ከማሰባሰብ ጀምሮ ተሳታፊም አስተባባሪም ሆኜ ነው እሳተፍ የነበረው፡፡

P (Participant): I have participated in curriculum development for grade 1-12 both as a participant and as a coordinator starting from data collection when curriculum was developed for grade 1-4 Environmental science, 5-8 social studies and grade 9-12 Geography.

3. ጠ:- የመጽሀፉ ዝግጅት ሳይጀመር በፊት የወሰዱት (የተሰጠው) ስልጠና ነበር? ስልጠናው ከነበረ ለመጽሀፍት ዝግጅቱ ምን ያህል ጠቀመዎ?

I: Had you received a training before you embarked on the textbook preparation? If there was training have you benefited from the training?

4. ተ:- በዚያ ወቅት ላይ ስለ ስርአተ ምንነትና ዝግጅት የሚጠቅሙ ርፍሬሽመንት ግንዛቤ ማስጨበጫ ስልጠናዎችን አግኝተናል፡፡ ከዚያ ውጭም በራሴ የመጀመሪያ ድግሪዬን የሰራሁት የመመረቂያ ጽሁፍ ማሟያ በመጽሀፍት ይዘት ትንተና ላይ ነው የነበረው፡፡ በመጽሀፍት ዝግጅትና በአርትኦት ስራ ላይ ሰፊ ልምድ አለኝ፡፡

P: During that time we got important refreshment training about the concept syllabus. It also widened our awareness. Apart from this, I did my first degree paper in the content analysis of a textbook. Moreover, I have rich experience as textbook writer and editor.

5. ጠ:- እርስዎ ባዘጋጁት ወይም ባሻሻሉት የመማሪያ መጽሀፍት አዲስ ጽንሰ-ሀሳብ ሲያጋጥም ከቋንቋ ባለሙያዎች ጋር የመወያየት ጊዜ ነበረዎ? የውይይት ጊዜ ከነበረ፣ የውይይት ጊዜን እንዴት ይገመግሙታል?

I: When new concepts are encountered during textbook development or revision, did you have discussion sessions with language experts? If there was discussion session, how do you evaluate?

6. ተ:- ከቋንቋ ባለሙያዎች ጋር ግንኙነት አልነበረንም፡፡ በግሌ ማለት ነው፡፡ በግሌ በነበረኝ ተሞክሮ መጽሀፍ ሳዘጋጅ (ስናዘጋጅ) እጠቀምበት የነበረው የሳይንስና ቴክኖሎጂ መዝገበ ቃላት አሉ፡፡ በሳይንስና ቴክኖሎጂ በየሳብጀክቱ የተዘጋጁ መዝገበ ቃላት አሉ፡፡ አማርኛ ወደ እንግሊዝኛ እንግሊዝኛ ወደ አማርኛ አቻ ቃል ይተረጎማል፡፡ በተጨማሪም በአማርኛ የሚዘጋጁ ጥናታዊ ስራዎችን ስራዬ ብዬ መከታተል እወዳለሁ፡፡ በተለይም መድበለ ጉባኤ (ፕሮፌሰር) እከታተላለሁ፡፡ የቋንቋ ሰዎች ቋንቋ ነክ ጉዳዮችን የሚገልጹበት አገባብ (መንገድ) ምንድነው የሚለውን አያለሁ፡፡ በተቻለ መጠን አሁንም ቃላትን የዛን አቻ ቃላት ምንድነው በአማርኛ የሚለውን ነገር በማገላትና የሳይንስ መዝገበ ቃላትን ተጠቅሜ ለማስተዋወቅ ጥረት አደርጋለሁ፡፡



P: Personally I did not have relationship with language experts. From my personal experience when we prepare books, I used to use Science and Technology Dictionary since there are such dictionaries in the language. It renders Amharic to English and English to Amharic equivalent term. Moreover, I am interested in following research works which are conducted in Amharic. Especially, I like to read proceedings. I learn from the way language experts express language related issues. As much as possible, I try introduce new terms using Science and Technology Dictionary.

7. ጠ:- እናንተ (ትምህርት ቢሮ) ወደ አዲስ አበባ ዩኒቨርሲቲ የቋንቋዎች አካዳሚ አብራችሁ ለመስራት የሄዳችሁበት ወይም የሞከራችሁበት አጋጣሚ አልነበረም?

I: Was there any efforts that you made to work with the Ethiopian Language Academy?

8. ተ:- የኢትዮጵያ ቋንቋዎች አካዳሚ የሚሰራውም ስራ በራሱ ከህዝቡ ጋር ይግባባል ወይ? እሱ ቋንቋ እንዲያጠና እንጂ ቋንቋ እንዲቀንስ ማለትም ፊደል እንዲቀንስ ስልጣን የሰጠው አካል የለም። ጊዜና ሁኔታ ተመቻቻ ለተቀመጡ ሰዎች ዝም ብለው እንደፈለጉ እንዲያደርጉ። ማድመጥ ሲችል ነው...ጥሩ ነገር ሲሰማ ነው ወደ እነሱ መሄድ የሚችለው። ጥሩ ነገር ከሌለው ምን ብዬ እሄዳለሁ?

P: Does the Ethiopian Language Academy itself communicate its activity in a smooth or acceptable way? Who provided authority to the Academy to reduce *fidäl* (graphemes)? Its mandate is to study or describe languages. Those who has got an opportunity to work in the academy are doing just as they wish. I go there if I hear promising things. When there is no encouraging things why should I go there?

9. ጠ:- አካዳሚውስ የአማርኛ ቋንቋ መደበኛነትን በትምህርት አውዶች ከማሳደግ አንጻር ከቢሮአችሁ ጋር አብረን እንስራ ብለው የሚመጡበት አጋጣሚ ካለ?

I: Was there any occasion the Academy showed interest to work with your office to develop the standard of Amharic language in the education domains?

10. ተ:- የለም። እነሱን ለማሳተፍ የምንሰጠው ባጀት የለንም። ምክንያቱም የመንግስት ባጀት ዝም ብሎ አንስቶ መስጠት አይቻልም። የራሱ ህግና ስርአት አለው። ስለዚህ ለዚያ ...አዲስ አበባ ዩኒቨርሲቲና ትምህርት ሚኒስቴር ስምምነት ተፈራርሟል-ለጥናትና ምርምር። ሆኖም ከወረቀት ያለፈ አይደለም ፋይዳው።

P: No. We have no budget to invite them to participate since we cannot share the government's budget. There is rule and order to use the flow of budget. Though Addis Ababa University and Ministry of Education have signed memorandum of understanding for research, there is no practical significance beyond paper exercise.

11. ጠ: በአካባቢ ሳይንስ መጻህፍት ላይ በብዙዎቹ ቦታዎች ሊቃላት ስያሜ በቅንፍ ቃላት ተቀምጠው ይታያሉ። እንግሊዝኛና አማርኛን ጎን ለጎን ያስቀመጣችሁበት አላማ ምንድነው?

I: In Environmental science, there are English words written in bracket. So, what is your intention to put such words in bracket?

12. ተ:- ለአንዳንድ የአማርኛ ቃላት የእንግሊዝኛውን ቃል በቅንፍ አስቀምጠናል። ለምሳሌ መልሶ መጠቀም ለሚል ቃል (ርሳይክል) የሚል ቃል ጎን ለጎን አስቀምጠናል። ይህን ምናደርገው ቃሉን ለመጀመሪያ ጊዜ ስናስተዋውቅ ነው። በየቦታ ማስቀምጥለት ከሆነ ቃሉን አያጠነውም፤ በየቦታ ያገኘዋል። ባንዴ ከተዋወቀ ወደ ሁዋላ ሄዶ ከፈለገ የእንግሊዝኛውን አቻ ያያል። አለበለዚያ ሁሉ ጎን ለጎን ከተቀመጠ የአማርኛውን አቻ ትርጉም አያጠናውም። ስለዚህ በዚህ መልክ ነው እዚህ ውስጥ የምናገኛቸው በርካታ እንግሊዝኛ ቃላት

አሉ። በአማርኛ መልሰናቸዋል። ለምሳሌ፣ ጥንተ ተፈጥሮ (ኦሪጅን)፣ ተፈጥሮ ጥንቅር (ኮምፖዝሽን)፣ የህይወት ክልል (ባዮ እስፌር) እያልን አስቀምጠናል።

P: Yes. We put some English words side by side with the Amharic equivalent. For example, for the term *mälliso matt'äqam* (lit. using again) we used (*risayikl*) side by side. We do this when we introduce the term for the first time. If we put every where, students do not study the new word. When once introduced to students, the students could refer to the English version going back to the first instance. In this way there are many English words in the books. We have translated the words into Amharic. For example, *t'intä täfat'ro* (lit. ancient nature) (for Eng. *origin*), *täfat'ro t'iniqqir* (lit. nature organized) (for eng. *kompozishn*), *ye-hiwot killil* (lit. of-life region) (for Eng. *bayo isfer*).

13. ጠ:- መጽሀፍ ሲያዘጋጁ የሚያጋጥሙትን አዳዲስ ጽንሰ-ሀሳቦች ለመሰየም የሚያገለግል መዝገበ ቃላት ወይም መመሪያ (guideline) ነበር?

I: Would you tell me if you had a guideline or dictionary that you referred to designate new concepts?

14. ተ:- የተጻፈ መመሪያ የለም። ያልተጻፈ ግን አለ። ምንድነው አንድ ነገር ላይ ...መጽሀፎቹ ላይ ጽንሰ ሀሳቡ የሚናገረው ምንድነው? ሁላችንም ያነበብናቸውን ነገሮች አንስተን እንወያይባቸዋለን። መዝገበ ቃላትም ላይ ያገኘናቸውን ነገሮች እንዳለ አንወስዳቸውም። ተከታዮቹን ጥያቄዎች እንጠይቃለን። የተሸለ ትርጉም ምን ሊሆን ይችላል? የትኛው ይቀርባል? በቀላሉ ሊያዝ የሚችል ማይረሳና በትክክል ያንን ነገር መግለጽ የሚችል/ ለመግለጽ አቅም ያለው ነገር ብለን ነው መለኪያ የምናስቀምጠው። በዚያ መለኪያ ነው የምናስቀምጠው። ኤች.አይ.ቪ በሽታ ተብሎ ቴክስትቡክ ላይ ተጽፎ ነበር። ኤችአይቪ ቫይረስ እንጂ በሽታ አይደለም፤ የእሳቤ ስህተት አለበት፤ ወረርሽኝ ተብሎ ተጽፎ ያውቃል። ያ አገላለጽ በተማሪዎች ብሎም በህብረተሰቡ ላይ ሊያስከትል የሚችለው አሉታዊ ተጽዕኖ አለ።

P: There is no written guideline, but there is unwritten one. What we focus on is that we comprehend the concept in the original language. We discuss based on what we read. We do not use a dictionary meaning as it is. We ask the following questions. Which one is a better meaning? Which one is closer to the concept? Hence, we check terms against criteria such as easy comprehension and precise expression of a concept. For instance, formerly HIV was written in a textbook as a disease. This expression has a conceptual error since HIV is not a disease but it is a virus. It was also written as if HIV was an epidemic. This kind of expressions could have negative impact on the students or society at large.

15. ጠ:- መጽሀፉን ሲያዘጋጁ ያጋጠሙ ቋንቋ ነክ ችግሮች ከነበሩ ይግለጹ/ይጥቁሱ።

I: Would you tell me if you encountered language related problems in the textbook development?

16. ተ:- አሁን ክልሎች ላይ ስንመጣ በአፍ መፍቻ ቋንቋቸው የሚማሩና የሚያስተምሩ ትግራይና ኦሮሚያ ክልል ስንመጣ ቋንቋችንን እናሳድግ ሲሉ ታያለህ። ግን እዚህ አማርኛን መናገር የቻለ ሁሉ አማርኛን አዋቂ ነው (አውቃለሁ ይላል)። ትልቁ ችግር እሱ ነው። እንደ ትግራይና ኦሮሚያ ባሉት ሌሎች ክልሎች ላይ ያለው አይነት ቋንቋን (አማርኛን) የማሳደግ ኮንሰርን አይታይም። እዚህ የሚነገረው አማርኛ የማነው? አንተ ለምሳሌ ሀዲያ ላይ ብትሰራ ያበረከትከውን አስተዋጽኦ ሰው ያውቃል። እዚህ ግን የኔ የሚለው ስለሌለ ለእድገቱ አስተዋጽኦ ለማድረግ ሰው አይነሳሳም።

P: When we see regions that are teaching using mother tongue, for instance, Tigray and Oromiya they are making efforts to develop their languages. Here those who speak Amharic consider themselves as expert. This is the major problem. There is no concern of language (Amharic) development here in Addis Ababa

that you see in other regions like Tigray and Oromiya. Whose is the Amharic which is spoken here? If you contribute for Hadiyya language, for instance, your contribution is recognized by the people. Since there is no one who considers as his/her own, people are not motivated to contribute to its development.

17. ጠ:- የሳይንስ ጽንሰ ሀሳቦችን ለመሰየም በአብዛኛው ይከተሉበት የነበረው ስልት ከአማርኛ መፈለግ ነው ወይስ ወደ ውስት መሄድ ነው ሚዛወተረው? የትኛው ቅድሚያ ይሰጥ ነበር።

I: When you designate Environmental science concepts, have you preferred to look for the words from Amharic to borrowing? Which one of the two was your first option?

18. ተ:- በመጻህፍት ዝግጅት ብዙ ጊዜ በክለሳ፣ በዝግጅት ቃላት ላይ በተቻለ መጠን ጥንቃቄ እናደርጋለን። የአማርኛ አቻ ቃል እያለ የእንግሊዝኛውን አንመርጥም። ሰዎች ያን ነገር (አዳዲስ) የተሰየሙትን ቃላት በትክክል ይቀበሉትም አይቀበሉትም ማስረዳትን ይጠይቃል። ብዙ ጊዜ መጽሀፍ እና የፊደሉ ትምህርትም ሲዘጋጅ መምህራንን እናሳትፋለን። መምህራን ለቋንቋ በጣም ባይተዋር እየሆኑ ከአማርኛ ይልቅ እንግሊዝኛ እየቀለላቸው ነው። ለምሳሌ መርሀ ግብር ከማለት ፕሮግራም ማለት የሚመርጡ ነበሩ። እንዲህ አይነት ቃላትን መጠቀም መምህራንም ዘንድ አንዱ ተግዳሮት ነው። ለምሳሌ፣ 'challenge' ለሚል ቃል ተግዳሮት ከሚባል ቻለንጅ ቢባል ብለው የመረጡ መምህራን ነበሩ። እኔ የአርትኦት ስራ ሲሰራ በጣም በርካታ ስራዎች ትርጉም የለሽ ነው። ምናልባት አሁን ያለው ትውልድ የዛሬ 30 ና 40 አመት የተጻፉ ጽሁፎችን ለመረዳት ሊቸገር ይችላል። አይደለም በግዕዝ የተጻፉትን መረዳት ይቅርና በአማርኛ የተጻፉትን አብብሮ ለመረዳት በጣም አስቸጋሪ ይሆናል። ስለዚህ በተቻለ መጠን በአማርኛ መጻሕፍት ሲዘጋጁ በእኔ እምነት ሳይንስ መጻህፍት ስለሆኑ ትምህርት የህብረተሰብ ጽንሰ ሀሳብ ብቻ አይደለም ማስተላለፍ ያለበት፤ ቋንቋን አስተምርበታለሁ። የትኛውንም መጻህፍት ሳኑ በቋንቋ አጠቃቀምን፣ ሰዋሰውን በደንብ አድርጌ እማራለሁ። አሁን ግን እየታሰበ ያለው ቋንቋ መጽሀፍ ማለት አማርኛ ብቻ ተደርጎ ነው እየታሰበ ያለው። እሱ ከሆነ ስህተት ነው።

P: Most of the time as much as possible we take care of word diction during textbook revision and development. We do not prefer the English word when there is Amharic equivalent. It doesn't matter if people accept or not the newly designated terms, but explanation is needed. We usually invite teachers in textbook preparation and in Radio lesson development. Teachers incline to use English than Amharic. For example, instead of using *māriha gibir* (guidance+task) 'program' there are teacher who prefer the English loanword *pirogram*. Using such words is one of the challenges for teachers. For instance, for the word 'challenge' itself some teachers prefer to the English loanword *čaleng* instead of using the word *tagdarot*. While I am doing editorial works, I found many works are meaningless. Perhaps this generation may struggle to understand the literature written before 30 and 40 years ago. Let alone understanding Ge'ez, comprehending Amharic may be challenging for them. Therefore, as much as possible when textbooks are prepared in Amharic, they should be instruments of teaching language in addition to expressing the Environmental science concepts. When I read any book, I learn language use and grammar. Now a days, however, the language use issues are left for Amharic textbooks only. This is not acceptable.

19. ጠ:- ውስት ግድ ሲሆን ወደ የትኛው ቋንቋ ነው የሚያዘነብሉት? ያ ቋንቋ ለውስት ለምን ተመራጭ ሆነ?

I: When borrowing is mandatory, which language is preferred for the team? Why it is preferred?

20. ተ:- በግሌ ወደ ግዕዝ እሄዳለሁ።

P: Personally I prefer Ge'ez for borrowing.

21. ጠ:- ግዕዝን የሚመርጡበት ምክንያትዎ ምንድነው?

I: What is your reason for your preference?

22. ተ:- ምናልባት ቋንቋውን (ግዕዝን) በግሌ የመማር እድሉ ስለነበረኝ ይሆናል።

P: Personally I prefer Ge'ez for the reason that I had a chance to learn it.

23. ጠ:- በመማሪያ መጽሀፍ ዝግጅት ወቅት የተፈጠሩ አዳዲስ ቃላት በተጠቃሚዎች ዘንድ ተቀባይነት ማግኘት አለማግኘቱ የሚረጋገጥበት መንገድ አለ? አስቀድሞ ከተሰየሙት ቃላት ውስጥ የማያረካ ሲኖር በሌላ ቃል የሚተካበት መንገድ አለ?

I: How do you check whether newly coined words or terms have been acceptance or not? Is there any way to replace when you come across with unsuitable words?

24. ተ:- ከ1ኛ- 4ኛ ባለው መምህራን መጨረሻ ላይ እኛ የተዘጋጁትን መጻህፍት ካየን (ከገመገመን) በኋላና ከተስተካከለ በኋላ ለቫልዴቭን ይጠራሉ። መምህራን የተስተካከለውን እንዲያዩት የምክክር መድረክ አዘጋጅተን ለ3 ቀን መምህራን የሚሳተፉበት ያንን ነገር መምህራን ሲያስተምሩበት ከነበረው ልምድ ተነስተው እንዲገመገሙት ለማድረግ ጥረት አድርገናል። ከ1-4 ያለውን በ3 ቀን፣ 5 እና 6 ን ደግሞ በሌላ ዙር እሱን አስተችተናል።

P: For grade 1-4, after we had evaluated and corrected the textbooks, we have invited teachers for validation workshop. We have tried to prepare consultative workshop of evaluation based on their teaching experience for three days. The workshop for grade 1-4 was organized for 3 days while for grade 5 and 6 organized in other round.

25. ጠ:- ከ1-4 ባሉት የአካባቢ ሳይንስ ትምህርት መማሪያ መጻህፍት ለአንድ ጽንሰ-ሀሳብ የተሰጠው ስያሜ (term) በቃላት ወይም በፊደል አጻጻፍ አንድ ወጥ እንዲሆኑ ለማድረግ የሚደረግ የከትትል ስልት አለ?

I: Is there any follow up mechanisms to keep consistency of spelling in grade 1-4 Environmental science textbooks?

26. ተ:- በአጠቃላይ በዚህ መንገድ ጻፉ ብሎ የመከታተል ጥረት የለም። እንደየሰው ነው። እንደየጸሀፊዎቹ ምርጫ ነው የሚወሰነው። በአማርኛ ለሁሉም ጸሀፊዎች በዚህ መንገድ ጻፉ ብሎ የሚያስገድድ ወይም የሚመራ የአጻጻፍ ስምምነት እስከአሁን የለም። ነገር ግን በአማርኛ ስንጽፍ የትርጉም ለውጥ የሚያመጡ ቃላት አሉ በተለይ ኢትዮጵያውን ከግንዛቤ ውስጥ ስናስገባ። ለምሳሌ፣ ሰረቀ (የሌላን ወሰደ)፤ ሠረቀ ታየ፤ ወጣ የሚሉ ትርጉሞች ሲኖሩት፤ ምሥራቅ የሚለው ደግሞ የሚጻፉ ከዚያው ግንድ ተስፋፍቶ ነው። ትርጓሜውም (መውጫ፣ ቦታ) እንደማለት ነው። ስለዚህ እንዲህ አይነቱን የቃሉን ትርጉም መናገር ምትችለው ከምንጩ እንዳለ ስትወስድ ነው። ትርጉማቸውን ማወቅ የምትችለውም ከምንጩ እንዳለ ስትወስድ ነው።

P: There is no effort that shows spelling rule. But it depends on the individual writers' style. Until now, there is no spelling conventions which enforce or guide writers regarding maintaining consistent use of Amharic symbols. In Amharic, however, there are some words which bring meaning differences especially when we consider their etymology. For instance, if you take the word ሰረቀ *sərraqə* it refers to the meaning 'stole' while ሠረቀ *śərraqə* stands for 'seen, risen'. The term for 'east' would also be spelled by extending the second spelling (ሠረቀ *śərraqə*) as ምሥራቅ *miśraq*. Its meaning refers to the place where something is risen. Therefore, you can only speak about such a kind of meaning when you take a word

from its source as it is. In other words, you can only understand their meaning when you go back to their etymology.

27. ጠ:- በአማርኛ በየትኛውም ፊደል ቢጻፍ አውዱ ይገልጻል የሚሉ አሉ። እዚህ ላይ ምን አስተያየት አሎት?

I: There are some people who say we can understand from the context when we write in any one of the Amharic symbols to minimize spelling inconsistencies? What do you comment?

28. ተ:- አንድ ነገር እናንሳ፤ በእንግሊዝኛ የአጻጻፍ ችግር ቢኖር በመዝገበ ቃላት ይታረማል፤ spell checker (ኮምፕውተርም) ይይዘሃል። አርታኢዎችም ያርሙታል። በእንግሊዝኛ ለምሳሌ፤ የዚህ ቃል ምንጩ (ኦርጅኑ) ላቲን ነው ይላል። ተትቀበለዋለህ፤ ትሸመድደዋለህ። በግዕዝ ኢትዮሎጂ የተጻፈውን ሌላው ስላለውቀው ወይም ስላላረመው፤ ወይም ስርወ ቃሉን ስላለውቀው ማወቀም ስለማይፈልግ የፈለገውን ይጽፋል። አውዱን ብቻ ሳይሆን ኢትዮሎጅውን ማወቅ ያስፈልጋል፤ ኢትዮሎጅውን ማወቅ ካልቻልክ የኔ ነው የምትለው ቋንቋ የለህም። ከየት መጣውን ማወቅ ያስፈልጋል።

P: Let us take a point here. If there is spelling problem for English, it is edited by dictionary, or spell checker. The editors also edit. In English, for instance, for a certain word it could be indicated that the etymology is Latin. You will accept and memorize it. For the reason that he/she is not criticized, or does not know or does not want to know the root words which has Ge'ez etymology, writes as he/she wishes. You need to know not only the context but also the words' etymology. If you do not know the etymology you do not have the language which you learn as yours. You should know the origin.

29. ጠ:- እንዲህ አይነቱ በፊደላት ምክንያት የሚመጠው የቃላት የትርጉም ልዩነት በትምህርት ሲቀርብ አይታይም፤ በአማርኛ መጻህፍትም እንደ አጻጻፍ ህግ አይቀርቡም። እዚህ ላይ ምን አስተያየት አሎት?

I: This kind of meaning difference is not taught in school subjects including Amharic as a spelling rules. So what is your comment regarding?

30. ተ:- ይሄ በየዩኒቨርሲቲዎችም ያለው የማስተማር ችግር ነው፤ የቃላትን ጥንተ አመጣጥ አለማስተማር (ከነአጻጻፋቸው)። ይሄን አልተማረም ማለት ግን ይህ (ፊደሎቹ) አያስፈልጉም ማለት ግን አይደለም። በአማርኛ እንዲህ የሚል ሰው እስኪ እንግሊዝኛ ላይ ይሄ አያስፈልግም ይበል! ማንም ሰው አይልም። አሁን ገብቶሃል? አለማወቅን ዲፌንድ ለማድረግ ይሄ ነገር አስፈላጊ አይደለም ይላል።

P: Ignoring teaching the words' spelling in their etymology is also the problem of the universities. However, they are not taught doesn't mean the symbols are not important. The people who criticize the issue in Amharic why not criticize English. Nobody does this. Am I clear? To defend his/her ignorance, says this things are not important.

31. ጠ:- በአካባቢ ሳይንስ ትምህርት ከ1-4 ባሉት መጻህፍት ለአንድ ጽንሰ-ሀሳብ የተሰጠው ስያሜ (term) በቃላት ወይም በፊደል አጻጻፍ አንድ ወጥ እንዲሆኑ ለማድረግ የሚደረግ የክትትል ስልት አለ?

I: Are there any efforts or follow up to maintain spelling uniformity for terms or words that appeared in grade 1-4 Environmental science textbooks? Would you explain if there were some efforts?

32. ተ:- እስከ አሁን ባለው ሁኔታ ይህን በሚመለከት የተለየ ክትትል እየተደረገ አይደለም።

P: There is no efforts to control the spelling inconsistency until now.

33. ጠ:- ሞክሼ ፊደላትን በተመለከተ እናንተ ከመጻህፍት ዝግጅት አንጻር ያላችሁ አስተሳሰብ (አቋም) ምንድነው? ይቅሩ ትላላችሁ ወይስ ይጠበቁ ትላላችሁ?

I: What is your position in relation to redundant symbols during textbook development? Do you suggest to drop or to maintain those symbols?

34. ተ:- የአማርኛ ፊደላት በዙ ጠለው ምናገሩ አሉ በዩኒቨርሲቲ ደረጃም፡፡ አደገ ምንለው እንግሊዝኛ እንኳን የፊደል/ምልክትና የድምጽ አለመግጣጠም ይታያል፡፡ ለምሳሌ <f> እና <ph> እንደ [f] ይነበባል፡፡ እንዲህ አይነት በጣም በርካታ ምሳሌዎች አሉ፡፡ ወደ ቻይንዝም ስንመለከት በሺ ሚቶጠሩ ከረከተሮች ናቸው ያሉት፡፡ የአማርኛ ፊደላት በዛ ኡኡ የሚለው ራሱ የአዲስ አበባ ዩኒቨርሲቲ የቋንቋ መምህራንና ተቋሙ ነው፡፡ ስለዚህ እሱ ያለከበረውን ማን ያከብራል፡፡ ዩኒቨርሲቲ ራሱ እንደ ባለቤትነት ቦታ አልሰጠውም፡፡ ስለዚህ እዚያ ያሉ መምህራን በገኙት አጋጣሚ በተለያዩ መገናኛ ብዙሃን ሲገልጡ ይሰማል፡፡ ግን ደግሞ ሊያከብር ይገባል፡፡ አሁን ይሄ ዝም ብለን እንደ አገር ስናነሳ የራስ የሆነ ፊደል አለን፡፡ ምናልባት ከአንድ ብሄር ጋር ተቆራኝቶ ስላለ ቋንቋው በዚያ ያደረባቸውን ጥላቻ ለመግለጽ እንደሆነ አላውቅም፡፡ ቋንቋውን እንዴት ለትውልድ እንዴት እናስተላልፍ የሚለው አይደለም የሚያስጨንቃቸው አዲስ አበባ ዩኒቨርሲቲ፤ ፊደላቱን እንዴት እንቀንስ ነው፡፡ ፊደላቱ ሲቀነሱ ያው አብረው የሚጠፉ በርካታ ነገሮች አሉ፡፡ አዲስ አበባ ዩኒቨርሲቲ የቋንቋዎች ጥናት አካዳሚ ያን መዝገበ ቃላት ለማዘጋጀት የደከመውን ያህል የአማርኛ ቋንቋ አጻጻፍ መጽሀፍ ዝግጅት ላይ መምህራን ተማሪውን እንዴት ማስተማር እንዳለባቸው ጥረት አላደረገም፡፡ ይሄ የህዝቡ ትልቅ ጭንቀት አይደለም፡፡ ህዝቡ ፊደል ማንበብ አቃተን አላለም፤ ጥቂት ሰዎች የራሳቸውን ስሜት ነው ሚያስተጋቡት ነገር ነው፡፡ እዚህ ጋ መጥተው ጥናትም ሰርተው ይሄ ነው ችግሩ፤ ይሄን ችግር እንፍታ ሲሉ አናይም፡፡

P: There are people who argue against the number of Amharic symbols. There is grapheme and sound discrepancy even in English which is considered as the most developed language. For instance, <f> and <ph> read as [f]. There are many such kind of examples. When we see Chinese, there are thousands of characters. Those who complain for the number of graphemes are the Addis Ababa University language instructors and the university itself. The University did not give a right place for it. Therefore, if the University does not give a respect, who gives a respect to the script. As a country, we have our own script. It is probably because the language is attached to one ethnic group, they may want to express negative attitude towards it. The worry of Addis Ababa University is not about how to transmit language to the next generation but how to minimize the number of graphemes. When the graphemes are dropped, there are many things to be lost. The Academy of Ethiopian Language in Addis Ababa University simply has prepared a dictionary but it does not make an effort to show how to teach the language using the script effectively. This is not people's worry. People do not say we cannot read the script/orthography; but few individuals are expressing their feelings. But they did not work with us and have not made effort to minimize problems based on research findings.

35. ጠ:- በግዕዝ ስርወ ቃላት ያላቸውን በአማርኛ የአጻጻፍ ስርዓት ወጥነት ባለው ሁኔታ በትምህርት አውድ እንዲተገበር ምን መደረግ አለበት ይላሉ?

I: What do you recommend to use words which have Ge'ez etymology in Amharic spelling in a standardized way?

36. ተ:- መዝገበ ቃላቱ (ኪዳነ ወልድ ክፍለ፣ ደስታ ተክለ ወልድ፣ ከሳተ ብርሃን ተሰማ) ምንድነው የሚያሳየው? መዝገበ ቃላቱ በትክክል ያስቀምጣሉ፡፡ እነዚህን የሚደረግበት በኢትዮጵያው ነው፡፡ እነዚያን መዝገበ ቃላት ልክ እንደ እንግሊዝኛው፣ ኮምፕውተር ውስጥ ብናስገባቸው ችግር ያለባቸውን እያስመረ ያስቀምጣቸዋል፡፡ አማርኛ ስለምናውቅ መዝገበ ቃላት አያስፈልጉም እንላለን፡፡ መዝገበ ቃላቱ ተቀምጠው መዝገበ ቃላቱን አናውቃቸውም፡፡

P: What do the dictionary of Kidane Weld Kifle, Desta Tekle Weld and Kesate Berhan Tesemma imply? Those dictionaries put such words properly. They arranged such words by their etymology. If we feed these words to computer as has been done in English, it underlines the misspelled words. Most of us for we speak Amharic, we consider that the use of dictionaries as if it was valueless. Though the dictionaries are available, we do not know the dictionaries.

37. ጠ:- በእነዚህ መዝገበ ቃላት ብቻ ሳይሆን በትምህርት ስርአት ወይም በመማሪያ መጻህፍት ውስጥ በዚህ መንገድ ይጻፋል የሚሉ ህግጋት አሉ?

I: Apart from the availability of the dictionaries, have the spelling rules been indicated in the educational domains or textbooks?

38. ተ:- በመማሪያ መጻህፍቱ ያሉ አይመስለኝም፡፡ ትልቁ ነገር መዝገበ ቃላት መዘጋጀታቸው ነው፡፡ ሁሉም ሰው አጻጻፉን ማየት ሲፈልግ ከዚያ ምንጭ ያገኛል፡፡ እኛ አማርኛን እናውቃለን፤ ስለዚህ መዝገበ ቃላት አያስፈልግም የሚሉ አሉ፡፡ ችግሩ ይህ ነው፡፡

P: I do not think they are mentioned in the textbooks. The main thing is the availability of a dictionary. Anyone who wants to check a spelling can get from those sources. There are people who say that we speak Amharic and therefore, we do not need to use a dictionary. This is the problem.

39. ጠ:- በአማርኛ ቋንቋ በተዘጋጀው የአካባቢ ሳይንስ መጽሀፍ ሲያዘጋጁ የአጻጻፍ ስርአትን በሚመለከት የሚያጋጥም ችግር ካለ ይጠቁሙ፡፡ የአጻጻፍ ስርአትን ለማሻሻል መወሰድ ስላለበት ርምጃ ይጠቁሙ፡፡

I: Are there problems related to Amharic spelling during the preparations Environmental science textbooks? If so, what measures should be taken to improve Amharic spelling?

40. ተ:- ትልቁ ችግር የፊደላትን አጠቃቀም ስርአትን አለማወቅ ነው፤ ወይም በወጥነት አለመጠቀም ነው፡፡ ለዚህም እንደ መፍትሄ የምጠቁመው፤ በኢትዮጵያ የተዘጋጁ መዝገበ ቃላት እየተጠቀሙ መደበኛነትን ማስጠበቅ ነው፡፡ በዩኒቨርሲቲዎች ደረጃም የአማርኛ ቋንቋን በዚህ መንገድ ማስተማር ቢችሉና መምህራንም የአጻጻፍ ስርአትን በመጠበቅ ምሳሌ መሆን ቢችሉ እላለሁ፡፡

P: The major problem is the failure to know how to use the spelling consistently. The solution is using etymological dictionaries to maintain standardization of Amharic. Moreover, Amharic should be taught at the university level in this way and the teachers should also be models in their keeping of standard Amharic.

## Expert C

1. ጠ (ጠያቂ):- ከ1-4 በተዘጋጀው የሂሳብ መማሪያ መጻህፍ ውስጥ በዝግጅትም በማሻሻል ስራ የተሳተፉባቸው አጋጣሚዎ ከነበሩ?

I (Interviewer): Have you participated in textbook revision and/or preparation?

2. ተ (ተሳታፊ):- ምናልባት እዚህ ላይ በዚያ(መጻህፍት በሚዘጋጁበት) ወቅት እኔ አልነበርኩም፡፡ ነገር ግን በተለያዩ ስብሰባዎች ከመምህራን ጋር የመገምገም እድል አገኝተን ነበር፤ ተሳትፎአለሁ፡፡

P (Participant): I was not in the present position when the textbooks were prepared. However, I had a chance to evaluate the books with teachers.

3. ጠ:- ምናልባት በግምገማ ወቅት መጽሃፍቶችን ያዩበት ወቅት ነበርና፤ ከዚህ አንጻር ለሂሳብ የተወከሉ አንዳንድ ጽንሰ ሀሳቦች ሲለየሙ (ሲወከሉ) ችግሮች ከነበሩ ቢነግሩኝ?

I: You had a chance to evaluation Mathematics textbooks. Have you come across with the problem of concept designation (terminology problems)?

4. ተ:- ቅድም እንዳልኩህ በዋናነት በሚዘጋጅበት ወቅት ተሳታፊ አልነበርኩም፡፡ ነገር ግን በአጠቃላይ ሂሳብ እንደሚታወቀውም በእንግሊዝኛ የተገለጹት አንዳንድ ሀሳቦች በቀጥታ ወደ አማርኛ በሚወሰድበት ጊዜ ፣ በቀጥታ ቃላቱን ለማግኘት ይከብዳል፡፡ አንዳንድ ጊዜ የሚያሻሙም ነገሮች ይኖራሉ፡፡ ይሁንና ግን በሌላ ቋንቋ ከምንጠቀም በአፍ መፍች ቋንቋ መጠቀሙ በተለይ ከ1ኛ-4ኛ ያሉ ተማሪዎች ከእንግሊዝኛ ይልቅ በራሳቸው በአፍ መፍቻቸው ቢማሩ በደንብ እንዲረዱ ያስችላል፡፡ ያም ሆነ ይህ ግን እንዳልኩህ አንዳንድ ቃላት ላይ ግልጽ ያልሆኑ ስያሜዎች አሉ ወይም ነበሩ፡፡ ከዚህ በፊት ይጠቀሙ የነበሩ አገላለጾት በዘመናዊ አማርኛ የተሻሻሉ አሉ፡፡ ለምሳሌ ጠሪና ቆጣሪ የሚሉት ታህታይና ላክላይ በሚሉ የተቀየሩ አሉ፡፡ መጽሀፉ እንዳየሁት ሲዘጋጅ በተቻለ መጠን ለተማሪ በሚገባ መልኩ ቀለል ባለ ቋንቋ ተገልጾዋል፡፡ በፊት ከነበረው ዝግጅት ጋር ሳነጻጽር፡፡

P: As I said earlier I was not participant during textbooks development. Generally, when the Mathematics concepts expressed in English are taken by Amharic, sometimes difficult to get the Amharic equivalent. Sometimes we come across with confusing terms. Even though there are such limitations, using mother tongue education facilitates students understanding compared to using English medium for grade 1-4. Anyway, there were confusing terms. Some of the confusing terms are recently replaced by other terms. For example, the terms ጠሪ *t'ari* (literally, caller) ‘numerator’ and ቆጣሪ *qot'ari* (literally, counter) ‘denominator’ are recently replaced by *la'ilay* ‘upper’ and *tahitay* ‘lower’ to represent the concepts ‘numerator’ and ‘denominator’. Therefore, as to my assessment, the current books are presented in a clear language compared to the previous ones.

5. ጠ:- ከ1-4 ያሉትን መማሪያ መጻህፍቱን ሲገመግሙ ቋንቋ ነክ ሌሎች ችግሮች ካሉ ቢገልጹልኝ?

I: Would you please mention if there were other language related problems in grade 1-4 Mathematics textbooks?

6. ተ:- እንዳልኩህ የእንግሊዝኛ ቃላት አቻ የአማርኛ ቃላት ሲፈለግላቸው ፍትሃዊ ይሆናል፡፡ ስለዚህ እዚያ ጋ ለመረዳት ሊያስቸግር ይችላል ይሆናል፡፡ እንግሊዝኛ ላይ ቴክኖሎጂውም ያደገ በመሆኑ ለመግለጽ ሳይቸገር ሲጠመቀሙበት ነበር፡፡ ያ ወደ እኛ ሲመጣ አቻ በሆነ መልኩ ላይገልጽ ይችላል፡፡ ለምሳሌ እንዲህ ባለ ሁኔታ በቅንፍ የተጠቀምንበት ሁኔታ አለ፡፡ ያ ማለት ሙሉ በሙሉ ላይፈታ ስለሚችል፤ ሙሉ በሙሉ አቻ የሆነ ፍትህ ሲሰጥ ስለማይችል በቅንፍ ተገልጾዋል፡፡

P: As I mentioned before, English terms may not directly fit to Amharic when we look for the Amharic equivalent. Hence, in this case it might be difficult to understand the concepts. Since English is more developed language in technology the English users are using without problem of expression. Such concepts might not be easily expressed in Amharic. In such condition, we used the English term in bracket. This implies that there is gap in providing the equivalent substitution of foreign concepts.

7. ጥ:- እነዚህ የሂሳብ ጽንሰ ሀሳቦችን ለመሰየም በአብዛኛው ይከተሉበት የነበረው ስልት ከአማርኛ መፈለግ ነው ወይስ ወደ ውስት መሄድ ነው ሚዘወተረው፤ የትኛው ቅድሚያ ይሰጥ ነበር?



I: When you designate Mathematics concepts, have you preferred to look for the terms from Amharic or preferred borrowing. Which one was your first option?

8. ተ:- በርግጥ እኔ በዝግጅቱ ላይ አልነበርኩም። ግን በተለያዩ ስልጠናዎችና ግምገማዎች በተሳተፍኩበት ምንድነው የሚደረገው መማሪያ መጻህፍቱ በአማርኛ ሲዘጋጅ የሳይንስና ቴክኖሎጂ መዝገበ ቃላት አሉ። በተቻለ መልኩ እነዚያን በመጠቀም ነበር ያዘጋጁት (ለምሳሌ የተቀናጀ የአካባቢ ሳይንስ ሲያዘጋጁ) እነዚያን መዝገበ ቃላትን ተጠቅመዋል። እዚያ ውስጥ የሂሳብ ቃላትም ይኖራሉ። መጻህፉ ሲዘጋጅ እኛ አናዘጋጅም፤ ምንድነው ሚደረገው ጨረታ ወጥቶ አዘጋጅ ክፍል አለ፤ መምህራን ሊሆኑ ይችላሉ፤ ኮንሶልታንት ሊሆኑ ይችላሉ። ስለበስ ስንሰጣቸው በዚያ መሰረት ተወዳድረው ያሻነፉት ያዘጋጁሉ። ሲያዘጋጁ እኛ ምናደርገው በተሰጠው ስለበስ መሰረት መዘጋጀቱንና የተዘጋጀው ረቂቅ ትክክል ስለመሆኑ እናረጋግጣለን። ስህተቶቹን እያረምን እየመለስን እየገመገምን አጽድቀን እናሳልፋለን። በአጠቃላይ መጽሀፉ ስርአት ይዞ በሲላብሱ መሰረት መሰራቱን እንፈትሻለን። በዋናነት ግን ያ ክፍል ነው የሚያዘጋጀው፤ የቃላት አጠቃቀምም የሚመርጠው። አሁን ለምሳሌ፤ በዝግጅት ወቅት ቃላቱ በትክክል የማይፈቱ ከሆኑ በተገቢ ቃላት እንዲቀየር እናደርጋለን ወይም እንጠቁማለን።

P: In fact, I was not in developers' team. But I was participant during training and evaluation of the books. As I observed the team prepared the books referring to the Dictionary of Science and Technology. There are Mathematical terms in this dictionary. When the books are prepared we (experts) do not participate as a developer. There is independent development team; they may be teachers, consultants. Those who won the bid prepare the books. Our role is checking and evaluating the draft whether it is aligned with the given syllabus or not. After giving comments, we validate and assure the quality or the book. Generally our role is to evaluate the book against the syllabus. The development team has the major responsibility for preparation and word diction. During the preparation process, if there are words or terms which are not clearly representing concepts, we suggest to be replaced by relevant terms.

9. ጠ:- እዚያ ላይ ምናልባት አማርኛ ቃላትንና የውስት ቃላትን ስታነጻጽሩ፤ በግምገማ ወቅት የምትመርጡት ቅድሚያ የምትሰጡት ለየትኛው ነው?

I: When you compare Amharic and loanwords, which resources do you prefer during evaluation?

10. ተ:- በተቻለ መጠን አማርኛ መግለጽ የሚችለው እስካለ ድረስ ውሳኔን አንመርጥም። ብዙ ጊዜ በእንዲህ አይነት ነገሮች ላይ ክርክር ይነሳል። አፋ የሆነ ቃል ተፈልጎ ሲታጣ እንጂ በራሳችን የሚገልጽ ቃል ካለ ማንም አይከራከርም። ግን እንዳልኩህ ሙሉ በሙሉ የእንግሊዝኛ ቃላት ወደ አማርኛ ሲመጡ መግለጽ የማይችሉ ሲሆኑ አማራጭ ቃል እናስቀምጣለን። ወደ ሌላ ትርጉም ካልሄደብህ በስተቀር በአማርኛ እንዲገለጽ ነው ሚደረገው።

P: As much as possible, if there are Amharic terms which express the concepts we do not prefer borrowing. When there is no equivalent terms from Amharic we argue in such cases. When there is lexical items that express the concept, no one argue. When Amharic unable to express the English terms, we put an alternative words in bracket.

11. ጠ:- ወደ ውስት መሄድ የግድ ከሆነ ወደ የትኛው(ኞቹ) ቋንቋ (ዎች) ነው ሚታመዝኑት

I: When borrowing is mandatory, which language(s) is (are) your preference?

12. ተ:- በአማርኛ መግለጽ የማይቻል ከሆነ እንግሊዝኛን እንጠቀማለን፤ ምክንያቱም አብዛኞቹ መጻህፍት የተጻፉት በእንግሊዝኛ ነው። ከዚህ በፊት እንደ ኢትዮጵያ ነባራዊ ሁኔታ ተማሪውም ሌላ ቋንቋ አይጠቀምም። እንግሊዝኛ ነው ሞር ሚቀርበው። እንግሊዝኛ መሆኑ ደግሞ ተገቢነት አለው። አንደኛ የብሔር ብሔረሰቦች ብዙ ቋንቋዎች ስላሉ ከፌዴራል ቋንቋ ውጭ ሌላ ብትጠቀም አያማከልም። እሳቤዎችም በዚያ ቋንቋ የበለጸጉ ስለሆነ እንግሊዝኛውን መጠቀሙ ይቀላል።

P: If it is not possible to express in Amharic, we use English since most of the resources/books are in English. In the real Ethiopian context students are not using languages other than English. English is more relevant. This is because of we are multilingual nation, it is not fair to use other than Federal language. Moreover, for the concepts are more developed in English, it is easier to use English.

13. ጠ:- መጻህፍት ተዘጋጅተው ወደ ትምህርት ቤት ሲበተኑ ከመምህራን አስተያየት (ፊደባክ) ወይም ጥያቄ የሚሰበሰብበት መንገድ አለ? አስተያየቶች ወይም ጥያቄዎች ካሉ እንዴት ይስተናገዳሉ?

I: After the implementation of the prepared textbooks in schools, is there any way to get feedback or questions from teachers? How do you entertain their questions or feedbacks?

ተሳ:- በመምህራን ፍዲ ባኮች ይሰጣሉ። በአጠቃላይ መምህራን ሲያስተምሩ የኮንሰፕት (እሳቤ) ችግሮች ሊኖሩ ይችላሉ። በአጠቃላይ በዝግጅት ወቅት ስህተቶች ይኖራሉ፤ ስህተቶቹን ከመምህራን ባገኘነው አስተያየት መሰረት በየጊዜው እንዲስተካከል ይደረጋል። በየአመቱ ለመምህራን የምንሰጣቸው ቼክሊስት ስላሌ በስ ሰርተው ይልኩልናል። መምህሩ ያመጣው ሀሳብ የእሳቤ ችግር መኖሩን ገምግመን ካመንንበት ለውጥ እናደርጋለን። የቃላት ግድፈት ይኖራል፤ የእሳቤም ይኖራል። በየጊዜው ይታረማል።

P: Feedbacks are usually given by teachers. When teachers are teaching they may come across with conceptual problems. There may have errors during preparation of textbooks. We make corrections based on the teachers' feedback. We provide checklist for teachers yearly and they send us their comments. If conceptual problems are identified by teachers we make corrections. Usually lexical errors happen and we make corrections.

14. ጠ:- አንዳንድ ስያሜዎች ሲሰየሙ በፊደላት በሚጻፉበት ጊዜ በተለያዩ አይነት መንገድ ይጻፋል። ከ1ኛ-4ኛ ያሉት የሂሳብ መጻህፍት ስያሜዎች ሲጻፉ ወጥነት እንዲኖራቸው የተደረገ ክትትል ነበር?

I: Was there any follow up to write words consistently using Amharic redundant symbols in grade 1-4 Mathematics textbooks?

15. ተ:- እኔ መጽሀፉ ሲዘጋጅ አልነበርኩም ብዬሃለሁ። ምናልባት ሲዘጋጁ የተለያዩ ተደራራቢ ፊደላት በምን ይጻፍ በሚለው ላይ ብዙም ኖሃው (ሀሳብ) የለኝም- ስላላዘጋጀሁት። በግምገማውም ወቅት ቢሆን ስፔሊንጉን አስተውቄ አላዩሁም፤ በየትኛው የትኛው ቃል መጻፍ አለበት በሚለው ላይ።

P: as I said earlier, I was not part of development team. I have no idea regarding the spelling rule of redundant symbols. Even during evaluation of the books, I did not intentionally check the spelling regarding redundant symbols. I did not recognize which words should be written by which symbols.

16. ጠ:- የአማርኛ ሞክሼ ፊደላትን የያዙ ቃላት የሚጻፍበት መመሪያ የለም ማለት ነው?

I: Is there any writing convention regarding the use of Amharic redundant symbols?

17. ተ:- እኔ እስከማውቀው የለም። በዚህ ላይ የቋንቋ ባለሙያዎች የተሸለ እውቀት ይኖራቸዋል ብዬ አምናለሁ። እኔ እውቀቱ የለኝም።

P: As far as my knowledge is concerned there is no spelling convention. I think regarding this point language experts may have better knowledge. I have no knowledge in this regard.

## Expert D

1. ጠ (ጠያቂ):- ሀዲይሳ የጽሁፍ ቋንቋ የሆነው ለመጀመሪያ ጊዜ መቼ ወይም በምን አይነት ሁኔታ ነበር?

I (Interviewer): When or in what kind of situation Hadiyya has become a written language?

2. ተ (ተሳታፊ):- ዶ.ር ላጵሶ ጌ. ዲሌቦ በጻፉት መጽሀፍ ለመጀመሪያ ጊዜ በሀዲይሳ ማቴዎስ ወንጌል የተተረጎመው በ1920 ነው ብለው ጽፈዋል። እኔ በማውቀው መንግስት በመሰረተ ትምህርት ቋንቋነት እንዲማሩ ከተመረጡት 15 ቋንቋዎች ሀዲያ አንዱ ስለነበር ከ1973 አ.ም ጀምሮ ነው። በዚያን ጊዜ ቋንቋው በህዝብ ብዛት 7ኛ ሆኖ ተጀምሯል። በመጀመሪያ 5 ቋንቋዎች ጀመሩ። ቀጥሎም 5 ቋንቋዎች ሲጀምሩ ሀዲይሳም በ73 ጀምሯል። የመጽሀፍ ህትመቱ በትርጉምና በዝግጅት ኮሚቴ አማካይነት በኢድገት በህብረትም ተጀመረ። በኢድገት በህብረት የተጀመረው እየጠነከረ እየጠነከረ በ71 ሌሎች ቀድመው ገቡ።

P (Participant): As far as I know, Hadiyya begun to be used in the education when it was selected as one of the 15 literacy campaign languages in 1973 E.C. During that time the language (Hadiyya) was the 7<sup>th</sup> based on the population size. In the first round there were five languages. When five another languages were begun in the second round, Hadiyya also begun in 1973 E.C. The publication of books had also started by the Translation and Development committee during the ‘National Work Campaign for Development through Cooperation’. Hadiyya was introduced into the campaign in 1973 E.C after the first round languages had been started in 1971 E.C.

3. ጠ:- ሀዲይሳ ቀደም ሲል በግእዝ/አማርኛ በሚጠቀመው ፊደል ሀዲይሳ ይጠቀም ነበር። በተለይ በደርግ ዘመንም በመሰረተ ትምህርት ይጠቀም ነበር። ከዚያ በኋላ በላቲን ስክርፕት መጠቀም የተጀመረበትን ሁኔታ/ሂደት ቢያስረዱኝ።

I: Hadiyya previously was written in Ethiopic or Ge’ez script until Derg regime. Would you explain the situation or process that the Latin alphabet has been introduced?

4. ተ:- የላቲን ስክርፕት ምርጫችንን ልናደርግ የቻልነው፣ ሌሎች እንደሚሉት አማራን ወይም አማርኛን ስለጠላን አይደለም። እንዲያውም የእኔ ተወዳጅ ምርጫዬ ነበር አማርኛ። ዲፕሎማቲካም በዚያ ተምራለሁ። ችግሩ የአማርኛ ፊደላት አናባቢና ተነባቢ ተለይቶ መታወቅ ያለመቻል ችግር የሚጠብቁትና የሚላሉትን፣ የሚረዝሙትንና የሚያጥሩትን ከኮንቴክስቱ ማወቅ እንጂ ራሱን ችሎ ቃሉ አይናገርም። በዚያ እንቸገር ነበር። ለምሳሌ በሀድይሳ qota፣ qoota በሚሉት አጻጻፉ በአማርኛ ፊደል ከሆነ ‘ቆ’ እና ‘ታ’ ብቻ ነው። በላቲን ሲጻፍ የሚረዝመው በግልጽ ይታያል። ሌላው፣ ጉዱኮ የሚለው ቃል በላቲን ሲጻፍ በሶስት መንገድ ሊጻፍ ይችላል፤ <gudukko> “ተዘጋጀ”, <guudukko> “አነደደ” <guddukko> “ቋጠረ” ። ጉዴ gude, guude፣ gудde, የሚለውን በሀዲይሳ ‘ጉ’ እና ‘ዴ’ ብቻ ነው በአማርኛ ፊደላት። በላቲን የሚጠብቀውና የሚላለው ተለይቶ ስለሚጻፍ አያሻማም። የሚጠብቀውንና የሚላለውን ለይቶ ስለማያስቀምጥ ቀደም ሲል በግእዝ ፊደል ይህንን ችግር ለመቅረፍ መፍትሄ ሳናገኝ ቆየን። ከዚያም ኢህዴግ ገባ። የሽግግር መንግስት ተቋቋመ። የሽግግር መንግስት በ1983 አ.ም ከተቋቋመም በሁዋላ በዶክመንቱና በትምህርት ፖሊሲም እያንዳንዱ ቋንቋውን ማሳደግና መጠቀም እንደሚችል ተረጋገጠ። በሽግግር ወቅት ቻርተሩ ላይ ሁሉም ነገር ዋና ዋና ነገር ነው የተጠቀሰው። በዝርዝር መመሪያ ላይ የትኛውን ፊደል ትመርጣችሁ የሚባል ነገር መጣ። ያን ጊዜ በሽግግር መንግስት የነበሩ የኛም ብሄር ሰዎች ስለነበሩ፣ ያንን ነገር ስምተው ወዲያው እኔ ጋ እንዲሄዱ ተባለና ሲመጡ እኔ ቀደም ብዬም ተቸግሬ አጥንቼ አስቀምጬ ነበር። ላቲን ይሻላል ወይስ የአማርኛ ፊደል በሚል ኮምፔር ኤንድ ኮንትራስት አርጌ ነበር።

P: The reason we opted for the Latin/Roman-based script was not for the reason that we developed hatred for Amharic or Amhara, as others claim. Even my personal preference was Amharic and I got my diploma in it. The problem of the script Amharic uses is that it does not indicate consonant and vowel discretely. Due to this, it is difficult to identify consonant gemination and vowel length from a word except using context. This was our problem. In Hadiyya words such as *qota* ‘partly broken’ and *qoota* ‘dowry’ when they are written in Amharic, the symbols will be ቆ <qo> and ታ <ta>. The word <ጉዱኮ> can

be represented by three different ways in Hadiyya; <gudukko> ‘he got ready’, <guudukko> ‘he got it burn’ or <guddukko> ‘he made it tied’. When they are written in Roman alphabet the long sound is clearly seen. In Latin script, since the geminated and non-geminated are written differently it is not ambiguous. Since Ethiopic could not identify geminated and non-geminated, we did not get solution for this problem previously. Then, after EPRDF had controlled the power, Transitional Government was established. After the establishment of the Transitional Government in 1983 E.C, it has been affirmed in the document and Education and Training Policy that every language group would be able to develop and use its own language. In the charter of the Transitional Government, general issues were mentioned. In the detailed guideline, we were explicitly asked which of the scripts we choose for our language. During this time, for there were people from our ethnic group in the Transitional Government, they came and discussed with me about the script choice. When they came to me, I had already identified the problem of Ethiopic script and I made a comparison between Latin and Ethiopic script for the choice.

5. ጠ:- ከዚያ በኋላ የሆነው ምን ሆነ?

I: And what happened after that?

6. ተ:- ያኔ በአፍ መፍቻ ትምህርት ሲጀመር፣ ልክ እንደ መሰረተ ትምህርትም አማርኛ፣ ትግርኛ፣ ኦሮምኛ፣ ስዳምኛና ወለይትኛ በህዝብ ብዛት ነው ያዩዋቸው፣ ሱማሌ ከኛ ጋር በኋላ በነበረው ምርጫ ነው የተጨመረው። በመጀመሪያ እነዚህ አምስቱ ተመርጠው ስለነበር የእነዚህን አጻጻፍ አየን። አየሁኝና ለእኛም የሚሻለው ላቲን ነው አልኩና ራሴ መመሪያዋን ጀች ዳውን አደረኩኝ። ሲጠብቅ ሲላላ፣ ሲረዝም ሲያጥር የሚሉትን በደንብ አድርጌ ለየሁኝና ለኛ ፍቱን ሆኖ አገኘሁኝና። እኔ ጋ የተላኩ እውቀቱም የነበራቸው አልነበሩም፣ ሌላ ትምህርት የተማሩ ካድሬ ሆነው መጡ። ይሄን ነገር በትክክል አስረዳኋቸው፣ ከዚያ በኋላ ተቀበሉ። ከዚያ በሁዋላ አዲስ አበባ የነበሩትን የሀዲያ ምሁራን ሰበሰብን። ዳግማዊ ሚኒልክ ትምህርት ቤት አዳራሽ። ሁላችን ተሰበሰብንና ኦሮምፋን በደንብ አጥርተው ከሚናገሩት በአዲስ አበባ ዩኒቨርሲቲ ውስጥ ዶ.ር ጥላሁን ገምታ የሚባሉ ሰው ነበሩ። እሳቸውን ጋበዝናቸው። እሳቸውም በላቲን ፊደል ዲክሽነሪ በኦሮምፋ በመጀመሪያ የሰሩ ናቸው ስለተባሉ ልምድ እንዲያካፍሉ እሳቸውን ጠራን። እኔ ያዘጋጀሁትን ዝግጅት አቀረብኩ። እሳቸውም ደግሞ ጠቃሚ አስተያየት ተናገሩና፣ እሳቸውም ኦሮምፋ ሲናገሩ እኔ እጽፋለሁ፤ እኔ በሀዲያኛ ስናገር እሳቸው ይጽፋሉ። ስለዚህ ከውይይት በኋላ ይሄ ፊደል ለኛ ተስማሚ ነው ብለው የአዲስ አበባዎቹ የሀዲያ ምሁራን አጸደቁ። ይሄ ነገር በሀዲያ ዞን ደረጃም ምሁራንና ህዝቡ ይወቅ ተባለ።

ይሄን ይገባ ሄድኩና በንግስት ኢሌኒ ሆስፒታል አዳራሽ ላይ በሆላኦና ከተማና ዙሪያ የሚያስተምሩ መምህራን፣ ሌሎችም በየመስሪያ ቤቱ ያሉ ምሁራን፣ አስተዳደሮችም ጭምር ሁሉም በተገኙበት አሁንም አስረዳሁ። የአዲስ አበባ ምሁራን ያጸደቁትን አስረዳሁ። ከዚህ በፊት የነበረውን ትግር በዝርዝር አስረድቼ አሁን ያለን አማራጭ ይሄን (ላቲን) መጠቀም ነው ብዬ የጠየቁኝን ጥያቄ ሁሉ ከመለስኩ በኋላ ያለአንዳች ድምጽ ተአቅቦና ያለ አንዳች ተቃውሞ በሙሉ ድምጽ ላቲን ስክሪፕት ፊደላችን ይሁን ብለው አጽደቁ፤ በ1985 ታህሳስ ወር ላይ።

Just as it was done during literacy campaign, Amharic, Tigrinya, Oromo, Sidama, Wolayita, were selected based on population size to embark on mother tongue education. Somali was included in second round together with our language. We shared experiences from the five languages that was selected in the first round. After that I jot down spelling manual based on Latin alphabet. I thoughtfully identified gemination and vowel length problem, and I suggested Latin script is a solution to this problem. The individuals who were sent to me had no idea about language or script were educated in another field and they were simply politicians (cadre). I explained to them and they accept my idea. After that we called for meeting the Hadiyya scholars who reside in Addis Ababa in the Menilik II school hall. We also invited Dr. Tilahun Gamta who compiled Oromo dictionary in Latin alphabet to share experience. I delivered my presentation and Dr. Tilahun provided me with important comments. I write as Dr. Tilahu speak Oromo; and he also

write as I speak Hadiyya. Hence, after making thorough discussions, this script (Roman-based script) has got acceptance as a suitable script for the language by the Hadiyya scholars residing in Addis Ababa. Finally, it has been suggested to make discussion regarding the proposed script with scholars and people in Hadiyya zone.

After the Addis Ababa discussion, I went to Hosaena and then I made presentation to teachers who came from Hosa'ina and around, scholars from different offices and administrators in *Nigist* Elleni Hospital hall. I explained them the script got acceptance by the Hadiyya scholars in Addis Ababa. I have provided them with explanations on the problems we faced when we were using Ethiopic script and have shown option to use Latin alphabet. I tried to respond to their questions and then finally unanimously they decided Latin script to be the alphabet for Hadiyya in November 1985 E.C.

7. ጠ:- ከዚያ በኋላ በተመረጠው ፊደል ምን ተደረገ? ቀጣዩ ሂደት ምን ይመስል ነበር?

I: What was the next step after the script choice had been made?

8. ተ:- የአዲስ አበባው ወይይት በህዳር ወር ከተደረገ በኋላ ቀጥታ ከሀዲያ ዞን መስተዳድር በመሸኛ ደብዳቤ ቀጥታ ለትምህርት ሚ/ር ተጻፈ። ይሄን ፊደል እንደ መረጥን ተገልጾ ሲጻፍ በየካቲት ወር አካባቢ ቶሎ ብላችሁ መጽሀፍ አዘጋጁ ተብሎ፤ የቋንቋ መጻህፍት አዘጋጆችና የሌሎች ትምህርቶችን ተርጓሚዎችን (ሂሳብ፣ አካባቢ ሳይንስ፣ ታሪክ) የሚተረጉሙትን ሰዎች መርጠችሁ አዘጋጅታችሁ በትምህርት ሚኒስቴር ስርአተ ትምህርት ስልጠና አለ ኑ ተባልን። 53 ሰዎችን ከአጸደ ህጻናት ጀምሮ መለመልን። ከአጸደ ህጻናት እስከ 6 ክፍል ድረስ ያሉትን መጻህፍት የሚተረጉሙትን ባንዴ ነው ያዘጋጀነው። በአኛያንዳንዱ አምስት አምስት ወይም ሶስት ሶስት ሰው እያደረግን መረጥንና መጣን። እዚህ ስርአተ ትምህርት ላይ ስልጠና ለሁለት ቀን ተሰጠን። ከዚያ በሁዋላ፤ እኔ ያን ጊዜ ያልታተመችውን መመሪያ ፎቶ ኮፒ አድርጌ (60 ጥራዝ ያህል ካባዘሁ በኋላ ያንን አያይገፎ ለእነዚህ አዘጋጆች አንድ ቀን ስልጠና ሰጠሁ። ከዚያ በሁዋላ እያንዳንዳችን ያን ጋይድ እያየን ስራ ላይ ገባን። አጣዳፊ ነበር መጋቢት ነበር የጀመርነው። ያን ጊዜ ከኛ ጋር የጀመሩት ሀዲያ፣ ከምባታ፣ ጌዲኦ፣ ሶማሌና አረብኛ የሚማሩ ተብሎ ሀረሪዎችና ወደ ቤንሻንጉል ያሉት አምስት ቋንቋ ተጨመረ በመጀመሪያው 5 ላይ። ሌሎች ከዚያ በሁዋላ ነው እየተጨመሩ የመጡት። በዚህ አይነት ሰኔ 17፣ 1985 አ.ም ትርጉምና ዝግጅት ጨረሰን። ከስለስስ፣ የመምህሩ መምሪያ መጽሀፍ ሁሉንም ጨረሰን፤ ከዚያም ወደ ህትመት ተገባ።

After the discussions have been made in November, in Addis Ababa, the script choice was reported to Ministry of Education with cover letter. And then, language textbooks developers and other subjects such as Mathematics, Social Studies, and history translators were called for the task. We recruited 53 people starting from Kindergarten to grade 6. We selected/assigned five or three people in each subject and sections. We received training for two days on curriculum issues. After that I photocopied 60 copies the manuscript of the proposed orthography and I offered one-day training to the textbook developers. After that every one of us started to work using that guideline. We started the task in March since it was urgent. In first round Hadiyya, Kambaata, Gedeo, Somali and Arabic were included in the material preparation. In this way we finished translation and development on 17 June 1985 E.C. and textbooks including syllabus and teacher's guide were published.

9. ጠ:- የፊደል ምርጫ ላይ ኮሚቴ ሲቋቋም ለፊደል ምርጫ ስልጣን ወይም ሀላፊነት የሰጠው አካል ማን ነበር?

I: When committee was assigned for the script choice, who gave/offered the authority or responsibility for the committee?

10. ተ:- ቅድም ብያለሁ፡፡ እያንዳንዱ ህዝብና ብሄር ብሄረሰብ ለቋንቋው ተስማሚ ፊደል ይምረጥ የሚል ከመንግስት መመሪያ ሆኖ ወረደ፡፡ ሲወርድ ከየብሄር ብሄረሰቡ ያን ጊዜ በሽግግር መንግስት ከነበሩት ከእኛ ፕ/ር በየነ ጴጥሮስ ነበሩ፡፡ እሳቸው የትምህርት ሚኒስቴርም ምክትል ሚኒስትር ነበሩ፡፡ እሳቸው ለሁሉም ቋንቋዎች ሀላፊነት ስለነበረባቸው ለሌላው እንዳደረጉ ሁሉ ወደ እኔም እንደ ቋንቋ ኤክስፐርትነቴ ላኩ፡፡ ለእኛም ቋንቋ መልእክት አስተላለፉ፡፡ እሳቸውን ቀርበው ያሉትን ካድሬዎች ከእሱ ጋር ሆናችሁ አጥኑ ብለው ላኩ፡፡ እነሱም መጥተው ነገሩኝ፤ እኔም ቀደም ሲል ያዘጋጀሁትን ረቂቅ አሳየኋቸው፡፡ ይሄን ነገር ወደዱትና ይህ ነገር በህዝቡም በአዲስ አበባ ባሉት ምሁራንም ጋር በመወያየት ሊጸድቅ እንደሚገባ ተነገረኝ፡፡ ስነገረን ምሁራንን ሰበሰብን፡፡ ያን ጊዜም ቀደም ብለው በመሰረተ ትምህርት በኤዲትንግና ትርጉም ኮሚቴ ይሰሩ የነበሩት ሰዎች በአብዛኛው አብረው ነበሩ፡፡ ይሄ ፊደል ተስማሚ መሆኑን አይተው ላቲንን ተቀበለ፡፡ የአሮሞ ምሁርም ስለፊደል ታሪካዊ ሁኔታ አብራሩ፡፡ (እሳቸው በአዲስ አበባ ዩኒቨርሲቲ ረዳት ፕሮፌሰር ነበሩ)፡፡ የላቲንን ፊደል ተስማሚነት አስረዱ፡፡ እኛ ግን እሳቸው በማንሳታቸው ብቻ ሳይሆን አስቀድሞም (አልፎ) ፊደሉ ተስማሚ እንደሆነና አናባቢና ተነባቢ ለይቶ የሚያሳየን በመሆኑ እንደሚመች አይተን ነበር፡፡

P: As I mentioned earlier, a guideline was given from government for every nation, nationality and people to choose a suitable script for their languages. When this guideline was shared to us, Professor Beyene Petros was in the Transitional Government. He was also Deputy Minister of the Ministry of Education. As he had responsibility for all languages, he sent a directive to me as an expert of the language. He sent cadre (politicians) by telling them to study the issue of script choice with me. They told me this and I shared that I have already developed a draft. They accepted my draft proposal of a script and then we agreed to conduct a workshop (discussion forum) in Addis Ababa with Hadiyya scholars and Hadiyya people before making the final decision. During this time, there were most of the people with me who were previously working as Translation and editorial committee during literacy campaign. They also preferred the Latin script as a suitable alphabet. The Oromo scholar (who was Assistant professor in Addis Ababa University) also explained about historical background of script. He explained the suitability of the Latin script. It is not only for the reason that the Oromo scholar mentioned about script, we had previously identified that the script enables us to write consonants and vowels separately.

11. ጠ:- ከርስዎ ጋር የነበሩትን ኮሚቴ ማለት እንችላለን ወይስ ለቫልጄሽን የመጡ ሰዎች ናቸው?

Q: Can we say the people who were with you are the script selection committee or they are participants for validation meeting?

12. ተ:- አሁን እገሌ ሊቀ መንበር፣ ጸሀፊ፣ አባል ብለን ኮሚቴ ያዋቀርነውና የትኛውን ፊደል እንምረጥ እያልን የተፋለጥንበት ኮሚቴ አልነበረም፡፡ ቀደም ሲል የተዘጋጀውን ነገር በትምህርት ሚኒስቴር ምክትል ምንስትር አማካይነት ለተላኩ ሰዎች (ፖለቲከኞች) አስረዳሁ፡፡ ከዚያ በኋላ የአዲስ አበባ ምሁራንን ሰብስበን እንደ ኮሚቴ ቆጠርን፡፡ የአዲስ አበባ ኮሚቴ (ጉባኤ) ይሄን ነገር ካጸደቀ (ከተቀበለ) በኋላ ባለቤቱም እንዲያጸድቅ ወደ ሀዲያ ዞን ምክር ቤት ሄድን፡፡ እኔ ይዘጋጃለሁ በሄድኩት ዶክሜንት ከእኔ ጋር አቶ አሰፋ ቡንጤ፣ አቶ አባትኩን ላምቦርን፣ አቶ አበራ አጭሶን ጨመሩና ምክር ቤቱ እስቲ አብራችሁ አንድ ቀን ተወያዩ አሉን፡፡ በአዲስ አበባ በተወያየነው ረቂቅ ላይ እንደገና ተነጋገርን፡፡ በአዲስ አበባ ኮሚቴ ይሄ ተገምግሞ የጸደቀ መሆኑን አስረዳሁ፡፡ እነሱም ምሁራን ስለነበሩ ካዩ በኋላ ቢቃ ይሄ ነገር ይቅረብ ጥሩ ለህዝብ ቀርቦ ሊጸድቅ ይችላል ብለው ለምክር ቤት አስተዳደር (ያኔ አቶ ሀብታሙ ጅካሞ የዞኑ ፔሬዝደንት ነበሩ) አቀረቡ፡፡ ከዚያም አስረዳ ተባልኩኝ፡፡ አሁን ከጠቀስኳቸው ሰዎች ጋር አብረን በረቂቁ ላይ ከተወያየን በኋላ እንዲቀርብ ተደረገ፡፡

P: There was no more formal committee by assigning a chairperson, secretary, members to make a debate in the script selection. I explained previously drafted document to the individuals (politicians) who was sent by the Deputy Minister of the Ministry of Education. We assumed the participants of Hadiyya scholars who were assembled in Addis Ababa as a committee. Having made the script choice by the Addis Ababa committee or assembly, we went to Hadiyya zone counsel. The zonal counsel, added Ato

Assefa Bunte, Ato Abatkun Lamboro, Ato Abera Achiso to discuss and consolidate on the document I have had. We discussed again on the draft document that we had made discussion in Addis Ababa. I also explained them this is a document that we made discussion on and got acceptance. These individuals for they are scholars, after making discussions they proposed to the Zone counsel (to Ato Habtamu Jikkamo, president of the zone at that time) to be presented to the people for discussion and final decision. He told me to explain to the people. After making discussions on the draft with the individuals that I mentioned before, it was decided to be presented to the people.

13. ጠ:- እነዚህ አብራሃም ጽሁፉን ያጣራችሁ ሰዎች የትምህት መስካቸው (ዳራ) ምን ምን ነበር?

I: What was the educational background of individuals who made discussion on the draft in the Hadiyya zone?

14. ተ:- እርግጥ ቅድም ምሁራን ባልኳቸው ውስጥ ገብረኪዳን አንክሶም አለ። ገብረኪዳን እንግሊዝ ዲፕሎማ ነው። አባትኩም ያን ጊዜ ጎልማሶች ትምህርት ከፍል ሀላፊ ነው የወረዳ። ትምህርቱ በእንግሊዝኛ ቢ.ኤ ድግሪ (ያኔ እንግሊዝኛ ድፕሎማ ነበር)። አሰፋ ቡንጤ የቋንቋውን ባህላዊ ሁኔታን አጥርቶ ያውቅ ነበር፤ ፖለቲካል ሳይንስ ዲፕሎማ ነበረው። አበራ አጭሶ ያኔ የትምህት ደረጃ ቲቲአይ ነበር፤ ግን ቋንቋ ነበር የሚያስተምረው። እኔም ቋንቋ ነበር የማስተምረው። ዲፕሎማ ሆልደር ነበርኩኝ (በአማርኛ)።

P: In fact, there was also Ato Gebrekidan Onkiso during discussion with scholars. Gebrekidan was diploma holder in English. Abatkun Lamboro, he was Adult Education department chair of the woreda. He has got BA degree in English. Assefa Bunte was diploma holder in political science and he had a rich knowledge about language and culture. Abera Achiso was TTI during that time. He was teaching language. I myself had diploma in Amharic during that time.

15. ጠ:- በውይይቱ ላይ ከምን ከምን ዘርፎች ነበሩ ምሁራን (ሰዎች) የተሳተፉት?

I: What were the field of study of the participants during the script choice meeting?

16. ተ:- በሆሳኒና ዙሪያ ካሉ ትምህርት ቤቶች ከሚያስተምሩ መምህራን በተጨማሪ በከተማው ውስጥ ከሚያስተምሩ 1ኛ ደረጃ እና ሀይለስኩል መምህራን ተጋብዘው ነበር። እንግዲህ ከየዘርፉ ሰዎች ተገኝተዋል ማለት ይቻላል። በውይይቱ ወቅት ትችት ያቀረቡት የብሄረሰቡ ቋንቋ ተናጋሪዎች የሁሉም ሳብጃክት ባለቤቶች ተሳታፊዎች ነበሩ። ህዝብ በአዳራሹ (ንግስት አሌኒ ሆስፒታል) ተወያይቶ ሲያጸድቅ፤ የወረዳና የዞን ምክር ቤት አባላትም በውይይቱ ነበሩ። ህዝቡ ባንድ ድምጽ ካጸደቀ በኋላ በቀጥታ መገጣጠሚያውን ነገሩም አጣጥረው ስለነበር ወደ አዲስ አበባ የሀዲያ ዞን ደብዳቤ በ3 ቀን ጽፎ ላኩ። የላቲንን ፊደል መርጠናል ብሎ ጽፎ፤ ለስርዓተ ትምህርት ዝግጅትም የተመረጡ ሰዎችንም ጭምር በደብዳቤ ላኩ።

P: In addition to the teacher who teach around (near) Hosa'ina, primary school and high school teachers were also invited. Therefore, it is possible to say that there were people from different fields. The participants who provided comments and critics were members of Hadiyya ethno-linguistic groups and from different subjects. When decision was made regarding the selected script, members' of *woreda* and *zonal* counsel were participants of the discussion. After the people made unanimous decision, the Hadiyya zone counsel wrote a letter about the Latin script selection together with the list of selected team for curriculum development in three days and sent to Addis Ababa.

17. ጠ:- በዚህ ክርክር (ውይይት) ሲደረግ የግዕዝን ፊደል እንጠቀም ብለው በአዲስ አበባም በሆሳኒናም የተከራከሩ አልነበሩም?

I: Wasn't there counter argument supporting the use of Ethiopic script during the discussion held in Addis Ababa and Hosa'ina?

18. ተ:- ይገርማል ይሄን እኔ ያላነሳሁትን አንተ ስታነሳ አሁን ትዝ አለኝ። በምኒልክ ትምህርት ቤት አዳራሽ ይሄንን ነገር ለማድረግ ስንመጣ እንግዳ የሆነን የሌላን ብሄረሰብ አባላትን ጋብዘን በነበረበት ሁለት ሰዎች ይሄን ነገር ተቃወሙ። አንዱ የቋንቋ መሰረት ያለው ሰው ነው። አዲስ አበባ ዩኒቨርሲቲ ቢ.ኤ የያዘ ነው። አንዱ የፖለቲካል ሳይንስ ቢ.ኤ ያለው ነው። ሁለቱም ተቃውመው፤ እንዲያውም እንግዳውን (ዶ.ር ጥላሁን ገምታን) ለማስቀየም ሲሞክሩ ቤት ውስጥ ያለው ህዝብ ሁሉም ሆኖ ሁለቱም ከአዳራሽ ትተው ወጡ። 'እኛ የእከሌ እገሌ ጥላቻ አይደለም። የብሄረሰብ እኩልነት ዛሬ ታውጇል። የትኛው ፊደል ይስማማል ነው እንጂ ያልነው፤ አንተ የቋንቋ መሰረት ሳይኖርህ ፖለቲካል ሳይንስ ነው ያጠናህው እንዲሁ ሄትሬድ አድርገን እንዳደረግን የምትቆጥረው በምን ቤዝ ነው?' ብለን ተከራከርን። ሆሳኦና ላይ ነው አንድም ተቃውሞ፤ አንድም ድምጸ ተአቅቦ ያልነበረው፤ ሁሉም የደገፈው። በአዲስ አበባም የነበረው ህዝብ ወደ 200 የሚደርስ ሰው ነበር። ከእነዚህ 2 ሰዎች የፊደል ምርጫውን ተቃውመዋል።

P: For your surprise I remember as you raised this question. People from another ethnic group were invited for the workshop when we organized in Menilik II high school. Two people objected our preference (of Latin script). Of the two individuals, the first one had language background and he was BA degree holder. The second individual was BA holder in Political science. The two individuals criticized the decision and even they tried to disappoint the gust (Dr. Tilahun Gemta). In this situation, the participants became very hot and the two individuals left the hall. We argued and replied to both individuals saying, 'We do not have hatred of people or groups. These days, the equality of nations proclaimed. We simply said which of the scripts is suitable for us. So, in what basis you are saying that our preference is based on hatred. How can you say this without have knowledge in language; you are political scientist'. It was in Hosa'ina that there was no opposition and abstain; all supported the decision. In Addis Ababa also the participants were about 200. Of these, two individuals were opposed the script choice.

19. ጠ:- የክርክር ነጥብ ላይ የግዕዝን ፊደል ብትጠቀሙ ይሄ ይሄ ጥቅም አለ ብለው ያቀረቧቸው ነጥቦች አልነበሩም?

I: Wasn't there groups who mentioned the advantage of Ge'ez script during discussion?

20. ተ:- እኛን የሚያሳምን ምንም የቀረበ ነጥብ አላገኘንም። ቅድም ያልኩት ስሙን መጥቀስ አያስፈልግም፤ የቋንቋ መሰረት ያለውና ቀደም ብዬ ያጠናሁትን አይቶ እት ኢዝ ጉድ (ጥሩነው) ያለው ሰው ነበር። ያኔ እኔ ዲፕሎማ ሲሆን ዲግሪ የነበረው ሰው ነው። ግን በኋላ ትንሽ ዌቭ ነበረ፤ አሁን አገኘን ብላችሁ፤ የነበረው ገሽርሜንት ላይ ተቃውሞ ለማንጸባረቅ ብላችሁ ነው... የሚሉ ትችቶችን ብለው ነበር። ይሄን ከጥቅም አንጻር ሳይሆን ከዚች ከወቅታዊ ነገር ጋር አብሮ ለመኖር እንጂ ምንም ምክንያታዊ መሰረት አላቀረበም። የቋንቋ ሰውም ልቡ እየታዘበው ነው የተናገረው። ያኛው እርግጥ በአላዋቂነትም ሊሆን ይችላል።

P: We could not get any point that convince us. There was an individual who I should not mention his name that he commented on the manuscript (of the orthography) as a good effort. During that time this individual had a degree while I had a diploma. Later there were critics by mentioning that as if we were motivated by the desire of opposing the previous government. The person from Political science criticized without logical reasoning. The individual who had language background also commented simply to provide a comment. The other individual probably may not have knowledge about language issues.



21. ጠ:- ላቲንን መጠቀም ከጀመራችሁ በኋላስ ያጋጠሙ የአጻጻፍ ችግሮች ነበሩ? ያሻሻላችሁስ ነገር ነበር?

I: Was there any challenges after you started using the Latin/Roman-based script? Was there any reform that you made?

22. ተ:- ይገርማል ሀንድ ማንስከሪፕትም በኋላ ታትሟል። ማሻሻያ የቀረበው በቅርብ ጊዜ ነው። እግድ ድምጽ ምልክት እንደ ኮንሶናንት ሊቆጠር ይችላል ተብሎ የቀረበ ሁኔታ ነበር። በአጻጻፍ ከዚህ በፊት ቢቃል መካካል ከእግድ ድምጽ በኋላ የሚመጣው ተነባቢ ደብል ይሆናል የሚለው ነገር አሁን ቀርቶ እግድ ድምጽ ራሱ ተነባቢ ስለሆነ አይደጋገምም ተብሎ ተሻሽሏል።

P: Surprisingly the hand manuscript [of Hadiyya orthography] was published; but the reform has been made recently. The glottal stop was considered as a consonant recently. The consonant that appears after a glottal stop was previously considered as geminated (double) in writing. This is modified to be written as a single consonant now.

23. ጠ:- ሌሎች ቀድሞ ሲል ያልነበሩ እና ኘ፣ፕ፣ጽ፣ ኘ፣ ...መቼ ነበር የተጨመሩት?

I: Other symbols such as <ny>, <p>, <ts>, <v>, and <zh> were added in the alphabet list. When and by whom this change has been made?

24. ተ:- እነሱ የተጨመሩት ምንድነው፤ በሀዲይሳ ውስጥ በተፈጥሮ የሌሉ ድምጾች ተብለው በዳር ተቀምጠው ነበር፤ 5 ፊደላት። እነዚህን አሁን ለምሳሌ ድሮ ጸሎት ማለት አይችሉም ነበር፤ ጣሎት ነበር የሚሉት። አሁን ግን በትምህርት ምክንያት ማለት (መጥራት ተችሏል)። ስለተለመደ የእኛ እናድርጋቸው፤ የተውሶ ደምጾችን መጥራት ተችሏል ተብሎ በፊደል ገበታ ተመድበዋል። ይሄን ያደረግነው በተለይም ዲክሽነሪ ስንሰራ ነበር። አሁን በዲክሽነሪም ለይተን ካቆየን ነገ እንቸገራለን ብለን አካተትን። 5ቱ ፊደሎች ዳር ከሚቀመጡ ይካተቱ፤ ፊደል ገበታውም በዚህ ይሻሻል ብለን ስምምነት ላይ ደረስን። ቀደም ሲል ch, sh, ph የሚለውንም በመጨረሻ አድርገን ነበር። አሁን ግን የፊደሉ ቅርጽ በሚገኝበት አጠገብ እናምጣ ብለን አሻሻልን። a,b,c, ch,... እየተባለ እንዲቀመጥ ተደረገ። ts t ባለበት, zh ደግሞ z ባለበት ቀጥሎ ይምጣ እያልን ፊደሎቹ ውስጥ እንዲካተቱ ተስማማን።

P: These sounds were not part of Hadiyya alphabet and it was mentioned that they are not naturally part of the Hadiyya language. These sounds are introduced via loanwords and nowadays people can pronounce [s'alot] instead of [t'alot] 'prayer'. Hence, because these borrowed sounds are uttered by people we used them as part of alphabet. We did this particularly when we were compiling a dictionary. Previously, we put *ch*, *sh*, *ph* at the end of alphabet list. Now we modified to appear in the position after similar symbol occur in the previous order. We included the newly added symbols after the similar symbol appears (e.g., <ts> after <t>, <zh> after <z>).

25. ጥ:- በሀዲያ ዞን ከትምህርት አውድ ውጭ ቋንቋን ለማሳደግ ጥረት የሚያደርግ፤ ቢቃላት ፈጠራና መደበኛነትን (እስታንዳርድን) በማስጠበቅ የሚሰራ አለ?

I: Is there any effort other than educational domains that would facilitate the language development regarding lexical elaboration or standardization in Hadiyya Zone?

26. ተ:- በአቅድ ደረጃ እስከ ወረደ እስከ ትምህርት ቤት ድረስ የቋንቋ እድገት ኮሚቴ ተብሎ ተይዞ ነበር። ከዞን እስከ ታች ትም/ት ቤት ድረስ እንዲደራጅ ተደርጎ ነበር። ያን ደብዳቤ ተጽፎ እንዲደራጅ ከተደረገ በሁዋላ በየመስሪያ ቤቱም ስልጠና በቋንቋ እንዲሰሩ ተሰጥቶ ነበር። የሚገርመው ፈንክሽናል አይደለም። ባለቤትነቱን፣ ሀላፊነቱን፣ ቋንቋውን ለማን ጣሉት? ለትምህርት መምሪያ ጣሉት። የትምህርት መምሪያ/ጽህፈት ቤት ጉዳይ አይነት ሁኔታ በሚፈራረቁ የምክር ቤት አባላት ሁል ጊዜ ይማማላሉ፤ በስራ እንጀምር ይባላል። ሌላው ቀርቶ ደረሰኞች ሳይቀሩ በሀዲይሳ ታትመው ነበር። ካላንደር፣ ለተማሪ ካርድ ታትሞ ነበር የትምህርትም የስራ ቋንቋም እንዲሆን። በትምህርት ቤቶችም ቻርቶች በሀዲይሳ ተዘጋጅቶ እያለ በጣም ትግል ነው። ያም ሆኖ ቋንቋው የነበረበትን ተግዳሮት አልፎ ዛሬ በዲግሪ ደረጃ ሊከፈት ችሏል። ግን ትልቁ ችግር የአመራር ቁርጠኝነት ማጣት በ1987 የስራ ቋንቋ እንዲሆን ቢታወጅም ተግባራዊ ሆኖ አልቀጠለም። ውሳኔዎች፣ ቃላትጥቅም በሀዲይሳ መጻፍ ተጀምሮ ነበር፤ ተቋረጠ። ከዚያ በኋላ እንጀምራን ተብሎ በተደጋጋሚ ቢነገርም አልሆነም። አሁን የትምህርት ቋንቋ ብቻ ሆኖ እየዘለቀ ይገኛል።

P: There was a plan to coordinate language development committee even in *woreda* and school levels. The structure was designed from zonal to *woreda* level. Having disseminated the structure, training was given for different offices to make Hadiyya the working language of the zone. Surprisingly it is not functional. The ownership and responsibility of the language is left for the Education Desk. The zonal counsel frequently promises to make Hadiyya the working language. Even receipts, calendar, students' report card were published in Hadiyya. In schools charts were prepared in Hadiyya, but it is still challenging. Despite the challenges, the language is being given in the degree level at present time. The major problem is the leadership commitment though decision was made to make Hadiyya a working language in 1987 E.C. Decisions and minutes were being written in Hadiyya but it was not continued. After that even though promise had been made to begin as a working language, it was not practical. Rather it is continued to function as a language of education.

27. ጥ:- በመጻህፍትና በመዝገብ ቃላት ዝግጅትም ወቅት እርስዎ ነበሩ፤ እዚያ ላይ ብዙ የውጭ ጽንሰ ሀሳቦች ወደ ሀዲይሳ ሲመጣ ለመሰየም የምትከተሉት ስልት የትኛው ነው (ለምሳሌ፡.....ማስፋፋት፣ ማጣመር፣ ሀረግ፣ ውሰት፣...) አለ...

I: You were one of the participants during textbooks development and dictionary compilation. So, which of the lexical elaboration techniques do you use to designate foreign concepts that are introduced to Hadiyya?

28. ተ:- ይሄ ነገር የተጀመረው በ1985 ትርጉምና ዝግጅት በተጀመረ ጊዜ ነው። ይገርመሃል! በጣም ቀውጦ ነበር። በወቅቱ የጀመርነው ከአጸደ ህጻናት ጀምሮ ቋንቋን ብቻ ሳይሆን ሁሉንም ሳብጀክት ነበር። በዚህ ጊዜ ምን ሆነ? ሶሻል ሳይንስ በሶሻል ሳይንስ፣ ሂሳብ በሂሳብ፣ ሀዲይሳ በሀዲይሳ እንደዚያ እያንዳንዱ ተዋቅሮ ነበር። አብዛኛው ቋንቋን በአዳብቴሽን ነው ወደእኛ ባህል እያመጣን። በቋንቋ ውስጥ ራሴን (የሀዲይሳ ኤክስፐርት) ጨምሮ ሰባት የምንሆን ሰዎች አብረን ሆነንና የሚያስቸግራችሁን እየሰራችሁ ቆዩና ቃላትን ምሳ ሳኦት ላይ አምጡ አልን። በምሳ ሰኦት እነዚያን ቃላት እየተነጋገርን ከባዳዎች ዲያሌክት፣ ከሶሮ ዲያሌክት፣ ከሊሙ ዲያሌክት፣ ከምሻ ወረዳ ወደ ባዶጎ ካለው ዲያሌክት፣ ከሻሾጎ ዲያሌክት ሰዎችን በጋራ አሳይን አድርገን፣ እናንተ ጋ ምን ተብሎ ይጠራል? እናንተ ጋስ ምን ተብሎ ይጠራል? እያልን እንፈልጋለን።

አንደኛ በቀጥተኛ አቻ ባለው ትርጉም ሁለተኛ መዋሰን ያለብንን አማርኛም እየተዋሰነ ያለውን እንግሊዝኛ የሆነውን በተውሶ እየተጠቀምን፣ ሶስተኛ የቃሉን አገባብ አይተን በፈጠራ፤ ለምሳሌ፡ xuunsammii woca ያልነው አረፍተ ነገር ነው። ሀሳቡን ወተት ሲናጥ ቅቤው ከሚሰበሰበው ሁኔታ ወስደን (አስፋፍተን) ነው። የተሟላ ስሜት የሚያስተላልፍ ሀሳብን ይወክላል። xumsagara ሀረግ ለሚለው (ቃላት ተሰብስበው የተሟላ ሀሳብ ባይሰጡም) በተመሳሳይ መልኩ ሰይመናል። ሀረግ በአማርኛ ቤት መስሪያም ይሆናል። እኛ በፈጠራ ብናመጣስ ብለን ሰይመናል።... በመሰረተ ትምህርት የነበረውን ጠቃሚ ልምዶች አልረሳንም፤ ያኔ የተፈጠሩትን ቃላትም እንደ አስፈላጊነቱ እንጠቀማለን። በሰው ውስጥ ጉብቶ ስለነበር፤ እነዚያን ሳንረሳ፤ የሌሎችን በፈጠራና በቀጥተኛ ትርጉም፣ በተውሶም እያደረግን እንጠቀማለን። ይህንንም በጋራ ተነጋግረን እንጂ ማንም እንደፈለገው እዚህ ሌላ እዚያ ሌላ (ዲስኦንትግሬትድ) የሆነ ስራ አንሰራም።

እስከ መዝገበ ቃላት ዝግጅት፣ መማሪያ መጻህፍትም ሲዘጋጁም ቢሆን የነበረውን መጨመር (መጠቀም) አዲስ ነገር ሲኖር ወደ ጋራ ኮሚቴ ለውይይት ማምጣት ስራ ነው ምንሰራው፡፡

P: This task was started in 1985 E.C when translation and development had begun. Surpizing! It was a dramatic scene. During this time we begun with all subjects including language starting from Kindergarthen. What we did is that we assigned Social science, Mathematics, language groups. For language concepts we mainly used adaptation to our culture. Since there were seven people (including me, language expert) in the language area, we organized discussion session on the problem of terminology designation at lunch time daily. We assigned people from each dialect, i.e. from Badawwacho, Sooro, Limu, Misha, Shashogo area. And then we search for lexical items that they use in the respective dialects.

The first way is that we use equivalent translation for terms and another way is that we borrow words that Amharic has already borrowed from English. Thirdly, examining the context of word we use coinage. For instance, we named *xuunsammi woca* ‘sentence’ (meaningful idea) in this way. We extended the concept form the milk processing activity. Moreover, *xumsagara* ‘phrase’ (collection of words) is designated in a similar way. ‘Phrase’ in Amharic extended from creeper that is used house construction. Rather than adopting the Amharic designation we coined form our language. We did not ignore experiences from the literacy campaign; we use words developed during that time if it is necessary. Since such words are already in use we adopt them and create for new concepts (which is not designated yet) via coinage, loan-translation and borrowing. In this process, we did not do in the fragmented way and we decide after making discussion. In general, during dictionary compilation and textbooks development, we use already existing vocabulary. When we come across with the new concepts, we conduct meeting to designate the concepts.

29. ጥ፡- አዳዲስ ስያሜዎች ሲመጡ መጽሀፍ ካዘጋጃችሁ በሁዋላ ሌላ የተሻለ ስያሜ ሲመጣ የተለመደ ይቆይ ትላላችሁ ወይስ አዲሱን ታስተናግዳላችሁ፤

I: When new terms are proposed or emerged after textbooks are prepared, do you prefer the term already in use or replace the new term instead of the previous one?

30. ተ፡- ቀደም ሲል ስንጠቀም የነበረውን አንዳንድ ቃላት የተሻለ ሲመጣ እንቀበላለን፡፡ ለምሳሌ፣ ስለቢል ብለን እንጠቀም ለነበረው በቅርቡ *xiinxo'o* (ቅንጣት) የሚል ቃል ሲመጣ ተቀብለናል፡፡ በጣም ጠቃሚ የሆነና ስሜት በሚሰጥ መልኩ የሚጠቆመውን ስያሜ ከፍት መሆን ወደ ፊትም ያስፈልጋል፡፡ እኔ ያልኩት ብቻ ብሎ ግትር መሆን አያስፈልግም፡፡ ይሄ ነገር የገባኝ በመሰረተ ትምህርት ወቅት መለስተኛ ኤክስፐርት ከሆንኩ በኋላ ነው፡፡ ብዙ ዲያሌክቶች ያሉት ስለሆነ በተመሳሳይ ቃል መጠቀም፡፡ ከቀበልኛዎች ውስጥ የሚያሻማ ሲኖር በአማራጭ ቃልነት እንጠቀማለን፡፡ ተናጋሪው ራሱ ይሄ ቃል የበለጠ ያግባባል ሲል በቀጣይ አሻሽለን አንዱን እንወስዳለን፡፡ ሰፊ ስርጭት ያለውን ከቅንፉ ውጭ ቀድመን እናስቀምጣለን፡፡

P: As more expressive new terms emerges, we accept and replace the old one. For instance, we accept the replacement of previously used term *silabila* ‘syllable’ with *xiinxo'o* (literally, very minute thing). It is important to be open minded and flexible to accept efficient and sensible terms suggested by people. I understood this after I became junior expert. Since there is dialect variation in Hadiyya we use synonyms. When we encounter ambiguous words we use as alternative word. When the language speakers themselves accept the word that has a wider distribution or more expressive we used that word during next edition. We use a word with wider distribution, we put before bracket.

31. ጠ:- ከዲያሌክቶቹ ይሄን እንምረጥ የሚችሉት በምን መስፈርት ነው?

I: What criteria do you use to choose words from the dialects?

32. ተ:- አብረን ተነጋግረን ነው፤ እሱንም አንዱ የሌላውን ተናጋሪ ኔግሌክት አድርጎ አይሰራም፡፡አብረን በመነጋገር ነው ምንሰራው ያ ክፍል ራሱ ሲያምን፡፡ ሁሉንም ያግባባል፤ ይሄ ቀድሞ ቢቀመጥ የሚለው ነገር ተነጋግረን አሳምነን ነው የምንጠቀመው፡፡ ይሄ በጎረቤቶቻችንም ችግር እየፈጠረ አይተናል (የዲያሌክት ምርጫ)፡፡ ችግራቸው ቀደም ሲል ዲያሌክትን አጥርጼት አድርጎ ካለማቀፍ የተነሳ ነው፡፡ የእኛ ከብተና የተረፈው በዚያ ነው፡፡

P: We discuss together before we make decision and we do not neglect dialects of others without discussion. We work by reaching consensus. We give priority to the lexical items that have wider usage and we convince the users before we put the words in the textbooks. We observed that this (dialect choice) has been creating problems in our neighbors. Their problem was that they did not appreciate and accept the dialects. Because of this, our language is maintained as one language.

33. ጠ:- ውስት ግድ ሲሆን ከየትኛው ቋንቋ ነው አስቀድማችሁ የምትወሰኑት?

I: Which language is mostly used when lexical borrowing is needed? Why?

34. ተ:- እኛ አሁን ሸሚዝ የሚለውን ከአማርኛ ተውሰናል፤ አማርኛም ከሌላ ቋንቋ እተዋሰነ ነው ይባላል፡፡ ግን ተቀብለናል፡፡ በቅርባችን ያለውን ሰው እየለመደ ያለውን እንቀበላለን፡፡ ለዚያ ቀጥተኛ ትርጉም ለእኛ የሚገኝ ከሆነ ስያሜ ይሰጣል፡፡ ቀጥሎ የቴክኖሎጂና ሳይንስ ቃላትን አማርኛ ከእንግሊዝኛ ወስዶአቸዋል፡፡ አማርኛም ከእሱ (ከእንግሊዝኛ) ነው የተቀበለው እኛም እንቀበላለን፡፡ አማርኛም የተቀበለው የእኛ ያልሆነ ካለ እንቀበላለን፤ አጻጻፉ እኛ በመረጥነው ፊደል ይሆናል እንጂ ቅርብ ካለው እንወስዳለን፡፡ የሌለውን ደግሞ ከሌላ እንወስዳለን፡፡ ለምሳሌ፤ ሪፖርታ ይላል፤ እስፖርታ ይላል፡፡

P: We borrowed *shamiiza* ‘shirt’ from Amharic and Amharic itself borrowed the word from other language. But we accepted it. We adopt a word that is nearest to us and is being learned by people. If we get direct meaning, we provide a designation. Amharic borrowed Science and technology terms from English. Just Amharic borrowed from English, we also borrow similarly. Since Amharic is nearer to us, we borrow from Amharic which Amharic is essentially borrowed from other language. But we adapt to our script. For instance, *iripoorta* ‘report’ and *isporta* ‘sport’ are borrowed with modification.

36. ተ:- ከኩሽ ቋንቋዎች ለምሳሌ ጭኮ አሮምፋ ነው ይላሉ፡፡ በእኛም የነበረ ነው፡፡ ጨጨብሳ ቃሉ በእኛ የለም፤ ተውሰናል፡፡ አንዱን ከሌላ ኔግሌክት እያደረግን የምንወስደው የለም፡፡ ለእኛ እስከተሰማማን፤ ሰው እስከለመደ ድረስ እንወስዳለን፡፡ የበለጠ ደግሞ መዋስ ካልቀረ አስቀድሞ የተዋሃደውን የሚቀርበውን እንወስዳለን፡፡

P: From Cushitic languages for instance, *cuukko* ‘----’ is Oromo word which we also share. The word *caccabsa* ‘unleavened bread smeared with butter’ is non-existent in our language and we borrowed it. There is no language that we neglect for borrowing. If it is suitable for us and since language users learn /acquire it we adopt it. We give more priority for loans which are already in use and nearest to us.

37. ጥ:- መጻህፍትን ስታዘጋጁ የቃላት የፊደላት /ስፔልንግ/ ወጥነትን በተለይ አንድ ቃል ወጥነት ጠብቆ እንዲጻፍ የምታደርጉት ጥረት አለ?

I: Is there any effort to maintain spelling consistency during material preparation?

38. ተ:- ዲክሽነሪ ከመዘጋጀቱ በፊት ለዚያ የተጠቀምነው ግሎስሪን ነው። በእያንዳንዱ የተማሪ መጽሀፍ ላይ ግሎስሪ አለ። እነዚያን ግሎስሪዎች ወጥ እንዲሆኑ እንጠነቀቃለን፤ እንጠቀማለን። ይሄ ነው ሰዎችን እየጠቀመ የነበረው። በተማሪም እጅ የገባ ስለሆነ። ያን የግሎስሪን ወጥነት ደግሞ በአዘጋጆች ኮምፕዚሽን አብረን ተነጋግረን ስለምናዘጋጅ በጣም ደስ ይላል። የሁሉም ዲያሌክት በዚያ ግሎስሪ ላይ እንዲኖር ይደረጋል። ቀደም ሲል በመጽሀፉ የነበረው ቃል በግሎስሪም ስለሚተነተን ሰው ይሄንንም አማራጭ እየለመደ ይሄዳል። ከዚያ በሁዋላ የሳብጀክት ዲክሽነሪ ብለን አዘጋጅተናል።

P: Before preparing dictionary, we used this [spelling consistency] in glossary. There is glossary in each student's book. We develop the glossaries with a great care to make consistent and we use them. This was very helpful to people since it was accessible to students. That glossary, on the other hand, is prepared with the consultation of textbook developers it was very successful. All dialects will be included in the glossaries. Since the word which is introduced in a text will be explained in the glossary, people learn the alternative words. After that we compiled a subject dictionary.

## Expert E

1. ጠ (ጠያቂ):- የመጽሀፍ/የመዝገበ ቃላት ዝግጅት ሳይጀመር በፊት የወሰዱት ስልጠና ነበር?

I (Interviewer): Have you received training before textbook/dictionary preparation?

2. ተ (ተሳታፊ):- በቋንቋም የቋንቋ ሰዎች በሂሳብም የሂሳብ ባለሙያዎች፤ በሳይንስም የሳይንስ ሰዎች ከሁሉም ነው፤ ከሁለት ሶስት በላይ ሰው ሆነው ረጅም ጊዜ ነው የወሰዱት በተለይ በመዝገበ ቃላት ዝግጅት። ብዙ ነገርም ራዕይ አርገዋል። ዝም በሎ አይደለም የተዘጋጀው ዲክሽነሪው። ቀደም ብሎ የነበሩ የሀዲያን ስነ ጽሁፎች አይተዋል። በተለያዩ ሳብጀክቶች የተተረጎሙ ሾካብሰሪዎችም ነበሩ። ሌሎች ሌሎች ሶርሶችንም አንድ ላይ አድርገው ደግሞ ዲክሽነሪ ለማዘጋጀት የሚያስፈልጉ መርሆች ምንድናቸው? መሰረታዊ የሆኑ ነገሮች እንዴት ነው የሚል ተወስዷል። ቀደም ብሎ የተዘጋጁ የአማርኛም የእንግሊዝኛም የአሮምኛ የስዳማም ቀደም ብሎ የተዘጋጀ ነበር፤ በስልጥኛም የተዘጋጀ ዲክሽነሪ ነበር። የእነዚያን ሁሉ ልምድ አይተን በደንብ ተነጋግረናል። ከዚያ በሁዋላ ወዴት ነው የሄድነው? ወደ ዝግጅት ከመግባታችን በፊት የፈደላት ቅደም ተከተል ላይ ነው የገባነው።

P (Participant): Especially during dictionary compilation, the team that comprised of language, Mathematics, Science took longer time being 2-3 people in a group. They consulted many resources to prepare dictionary. They consulted previous Hadiyya literature. There were also vocabularies translated in different subjects. After making necessary resources ready, we discussed on the dictionary making principles. There were dictionaries prepared in English, Oromo, Sidaama and Sitligna. We (the team) discussed on the experiences that we shared from those dictionaries. We decided on the alphabetical order of the dictionary and then we began the dictionary compilation.

3. ጠ:- ጥሩ። በየሳብጀክት ኤሪያ የተዘጋጀውን መዝገበ ቃል ሲዘጋጅ አዘጋጆቹ ምን አይነት ስልጠና ወሰዱ? የተመረጡ ሰዎችስ የተመረጡበት መስፈርት ከነበረ ይንገሩኝ?

I: Well. Was there any training that had been provided to the subject area dictionary compilers? What was the criteria to select those participants in the dictionary compilation?

4. ተ፡- አዎን ነበረ። መጀመሪያ ሰዎች ናቸው የተመለመሉት። እነዚያ ሰዎች የ1ኛ ደረጃ መጻህፍት ያዘጋጁ ሰዎች ናቸው። ቀደም ብለው ከ85 ጀምሮ ልምዱ በቂ በዝግጅት፣ በትርጉም ስራ በኤዲትንግ ብቃት ያላቸው ናቸው። በሌላም ደግሞ በዚያው በሚሰሩት ሰብጂክት ላይ በቅርብ እየሰሩ የነበሩ ሰዎች መሆናቸውና በስራ ውጤታቸውም ደግሞ ብቃት ያላቸው የተሸለ ነገር መስራት የሚችሉ መሆናቸውን አረጋግጠን ነው የመለመልናቸው። ከዚያ በሁዋላ ደግሞ የጋራ ስልጠና ተሰጥተዋል። በባለሙያዎች፣ ከኛም መካከል ሻል ባሉ ሰዎች በአጠቃላይ ልምድ ወስደው ዲክሽነሪ ለማዘጋጀት የመሚያስፈልጉ ቅድመ ሁኔታዎች ምን ምን እንደሆኑ መጀመሪያ እሱ ላይ ነው ስልጠና የተሰጠው። በዚያ ላይ ደግሞ ስልጠነው አንዱ ሰጭ ሌላው ተቀባይ ሳይሆን የጋራ ውይይት ነው ያደረግነው። ልምዶቹን ነው የቀሰምነው። መግባት የሚገባቸውና መቅረት የሌለባቸው ነገሮች ምንድናቸው የሚባለውን ነገር በደንብ ሀሳብ ለሀሳብ ተለዋውጠን አብስለን እነዚያን ነገሮች በቅደም ተከተል ጽፈን አዘጋጅተን መመሪያ አዘጋጅተን ነው የገባነው። እነዚያ በጋራ ያዘጋጁባቸው መመሪያዎች ናቸው የመሩን። በዚያ ስልጠና ወቅት፣ የፊደላት ቅደም ተከተልም የአጻጻፍ ስልቶችንም በዚያ ውስጥ ነው ያካተትነው።

P: Yes there was training. At first people were selected (recruited). Those people were the primary textbook developers. They are experienced and competent in translation and editing activities since 1985 E.C. On the other hand, the team members also selected based on their performance in the subject they were teaching. After the selection process accomplished, training was given for the whole team. The training was given by experts and more experienced people among us regarding the preconditions to dictionary compilation. The mode of training was not one directional, rather it was discussion based. We shared experiences. We thoroughly discussed in the issues that should be included or not to be included and then we list out important points as a guideline before we start the task. Those guidelines that we prepared together guided us. During the training sessions, the alphabetical order and the writing style were included.

5. ጠ፡- በዚያ ጋይድ ላይን (መመሪያ) ማለትዎ ነው?

I: So, Are you saying that these points are included in the guideline?

6. ተ፡- አዎን በዚያ መመሪያ (ጋይድ ላይን) ውስጥ ነው ያካተትነው - በጋራ ባዘጋጀነው። ያ መመሪያ በደንብ ከተዘጋጀ በሁዋላ እሱን መነሻ አድርገን ነው ያዘጋጀነው። ዝርዝር ቴክኒካል የሆኑ ነገሮችን በየቡድኑ መስራት የጀመርነው። እያንዳንዱ ቡድን በፊደል ቅደም ተከተል ከ ኤ ጀምሮ እስከ መጨረሻ ባሉት ፊደሎች በሀዲይሳ እንግዲህ ከ/ኣ/ ጀምሮ እስከ መጨረሻ እስከ /z/ ድረስ ቴክኒካል ቃላቶቹን በሙሉ ነው ለቀምን፤ ዲክሽነሪ ሲሰራ የሚኖረውን ቅደም ተከተል ጠብቀን። መጀመሪያ በፊደላት አጻጻፍ ላይ ትንሽ ልዩነቶች ነበሩ። አናባቢ ኢ የዛኔ ነው የተሰማማነው፤ አንዳንዶቹ ተነባቢ በሚጠብቅበት ጊዜ ተነባቢውን ሁለቱንም ዝም ብሎ ያለአናባቢ የመተው ነገር ነበረ።

P: Yes we included in that guideline which was designed in group. We prepared based on that guideline and we did detail technical issues in each group. Each group identified technical terms from a-z in the form that the presumed dictionary would include. Before that time there was spelling variations regarding the use of vowel <i>. We agreed during that time. Where there is consonant gemination, the vowel <i> was not written.

7. ጠ፡- በቃል መካከል ነው ወይስ መጨረሻ ላይ?

I: In which part of a word? In word medial or final position?

8. ተ፡- መጨረሻ ላይ። ያውጣው ያናበበው! ብለን ለምሳሌ *annanni* በሚለው *i* ያነበው፤ ዝግግት አይበል ብለን ተስማማን። ሌሎች ሌሎች ቴክኒካል ሚጻፈውን እስትሮክ የሚገባውንም ደብል የሚሆነውንም ሚጠብቀውን ሚላላውን ያንን ሁሉ ዝርዝር መሰረታዊ ነገር በሙሉ እዚያው ነው የጨረሰነው። እሱ (ይሄ) ብቻ አይደለም እያንዳንዱም የቋንቋ ሰዎች ስለሆኑ ሁሉም እየለዩ መሄድ ስለሚኖርባቸው ያ ሚጻፈው ግስ የትኛው መሆን እንዳለበት ወሰንን። 3 መደብ ነጠላ ቁ. ነው የወሰድነው። በዚያ ተስማምተን ሁሉም እያንዳንዱን

ሳብጀክት ሲሰራ ያንን ተከትሎ ያን የአጻጻፍ ስልቱንም ተከትሎ ነው የሰራው። ፋይናሊ ያንን ከሰራን በሁዋላ እንደገና በአንድ ላይ አምጥተን የሁሉንም ጨፍልቀን በቅድም ተከተል እንደገና ጻፍነው። አሁን በሳብጀክት ሳይሆን አንድ ዲክሽነሪ ሆኖ ወጣ።

P: In word final position. For instance, in a word <annanni> ‘different’ the final <i> is added in agreement. We also decided on the writing of glottal stop, gemination issues and the tense the word should be written. Since the people had language background we discussed to use the entry in simple past, third person singular. Based on this consensus, each subject group did the task following the agreed writing style. Finally, after we have done in each group, we combined in an alphabetic order. And then, it become one dictionary.

9. ጠ:- አዳዲስ ጽንሰ-ሀሳቦችን ከመሰየም አንጻር ተግዳሮት አላጋጠመም ወይ? ካጋጠመ እንዴት መፍታት ቻላችሁ?

I: Have you faced challenges to designate new concepts in Hadiyya? If so how did you solved?

10. ተ:- በጣም አጋጥሞናል። ብዙ ችግር ነው የነበረው- ብዙ ተቸግረናል። በጋራ የተስማማነው አለ፤ መጀመሪያ መመሪያውን መዝገብ ቃላትና መማሪያ መጻህፍት ስናዘጋጅ ቀጥታ ሀዲይሳ የማይተረጉማቸው ከባህሉ ውጭ የሆኑትን ማለት ሀዲያ በኢኮኖሚ ውስጥ በማህበራዊ ኑሮ ውስጥ ማይጠቀማቸው የግድ ከውጭ የመጡ የእኛ አገር እድገት ያልደረሰበት ከውጭ የመጡ አሉ። ለምሳሌ፤ እንዲሁትሪ። ኢንዱስትሪን አሁን ሌላ ስም ልንሰጠው አልቻልንም። ኢንዱስትሪን *industire'e* ብለን ነው የወሰድነው። እንዳለ እንግሊዝኛውን ወደ ሀዲያ አዳብት አርገን ነው የወሰድነው። የድሮ ግሪኩ-ሮማን ቃላትን እንዳሉ በተጠሩበት፤ በተሰየሙበት እንዳለ ነው የወሰድናቸው። በሀዲይኛው ለማንበብና ለመጥራት በሚመቸው/ ሀዲያ በሚናገረውና በሚጠራው ነው የወሰድነው። ይሄ ደግሞ በሶሻል ሳይንስ በብዛት ነው የነበረው። እንዳለ ነው፤ እነዚያን ነገሮች ባዕድ እንዳይሆን ባህሉ ማያውቀውን ነገር አምጥተን አዳብት ልናደርግ አልቻልንም። ግን በኛ ውስጥ የዚያ አይነት ሚጠቀማቸው ተመሳሳይ ሆኖ ቀጥታም ባይሆን በዚያ መልክ የሚጠቀመው ሀዲያ በራሱ በቴክኖሎጂው ደረጃ ሚጠቀማቸውና ተመሳሳይ የሆኑት ግን ያን የሀዲያውን አስገብተናል።

P: Yes we faced challenges. There were many challenges. There is consensus in one thing. Initially when we compile dictionary and develop textbooks there are foreign concepts that Hadiyya cannot replace /translate directly. For instance, for the term industry we cannot give another name/designation. We used /took industry by modifying as *industire'e*. We used English as it is by adapting to Hadiyya. The ancient Greek-Roman words were taken as they named in the original languages. We adapted in the way that is appropriate to read and pronounce in Hadiyya. This was frequent in Social science. We could not adapt terms that were not known to the culture. However, if there are similar concept used in our culture even if it is indirectly used or known and if it is used in the technological advancement level of Hadiyya we used the Hadiyya terms.

11. ጠ:- ያን ቃል ወስዳችሁ ለአዲስ ጽንሰሀሳብ (ኮንሰፕት) ትጠቀማላችሁ ማለት ነው?

I: So, do you use by taking that word to designate new concept?

12. ተ:- አዎን። በሀዲያ ያሉትን በማስፋፋት እንጠቀማለን፤ እንደዚያ አድርገን ነው ያሳደግነው (ቃላትን)። ግን ቀጥታ ቤዚክ ሳይንትፊክ የሆኑ ከጥንት ከግሪክ ከሮማን ስቭላይዜሽን ጀምሮ ያሉ ነገሮችን እንዳለ ነው። ቴክኖሎጂ አሁን ቴክኖሎጂ ነው በአማርኛም ቢሆን፤ በሌሎችም ቋንቋዎችም፤ በሌሎች ህብረሰቶችም ቢሆን ሁላቸውም ያንኑ ነው ሚጠቀሙት። ምክንያቱም ያ መነሻ ሀሳብ ነው፤ ይሄን ቴክኖሎጂ የሚለውን ቃል የፈጠሩበት ምክንያት አላቸው። እኛ አሁን አዲስ ነገር (ስያሜ) ሰጥተን የኛ የእድገት ደረጃ ወይም እኛ የምንሰጠው ስያሜ ያንን ሊተካ ስለማይችል እንዳለ ነው የወሰድነው። እንደዚያ በቀጥታ የወሰድናቸውም አሉ። በዚህ አይነት አድርገን ነው የሰራው።

P: Yes. We use by extending the meaning of existing words. This was the way we develop words. However, we directly used expressions of the basic scientific concepts from Greek and Roman civilization. The term for ‘technology’, for example, is technology even in Amharic and in other languages. All use the same term by using this as initial concept and they have reason to develop the term technology. Now we cannot give equivalent designation since there is no good term to replace it for our level of development does not allow us. So, there are such words that we took directly. This is the way we did.

13. ጠ:- ባንድ ጉዳይ/ቃል በግል ትስይማላችሁ ወይም ትነጋገራላችሁ ያ ምን ያህል ተቀባይነት አለው የሚለውን ነገር ከውጭም ከዚያ ቡድን ውጭም ታረጋግጣላችሁ ማለት ነው?

I: Is there any way that you check whether a newly designated term got acceptance within group or out of group?

14. ተ:- አዎ::

P: yes.

15. ጠ:- ተቀባይነት ባያገኝስ?

I: what if it did not get acceptance?

16. ተ:- ያ ሰው የሰጠው የተሸለ ከሆነ ይወሰዳል::

P: If the proposal is sound it will be incorporated.

17. ጠ:- በመዝገብ ቃላት ሆነ በመማሪያ መጻህፍት ዝግጅት ወቅት ወደ ቋንቋው አዲስ ጽንሰ ሀሳብ ሲመጣ በተለይ ቴክኒካል ቴርም ስትሰይሙ ብዙ ጊዜ ቀድሞችሁ ምትሄዱት ወደ ውስት ነው ወይስ በቋንቋው ውስጥ ካሉት ቃላት ገጣጥማችሁ ለመፍጠር የምትሞክሩት?

I: What was your priority from language internal resources and borrowing in designating new concept during textbook development or dictionary compilation for technical terms?

18. ተ:- በአብዛኛው ለመፍጠር ነው የሞከርነው፤ በዚያ ቋንቋ ውስጥ ይነገራል ወይ:: ሁለት ቃላት አንድ ላይ ተጣምሮ ያንን ኮንስፕት ይፈታል ወይ የሚለውን ሙከራ አድርገን ሲያቅተን ነው ወደ ውስት የምንሄደው:: ይሄንን ደግሞ ምንድን ነው ምናደርገው መነጋገር፤ ለዚህ ሀሳብ ይሄ አለ ይላል፤ ሌላም ይሄ አለ ይላል:: ከተነሳው ውስጥ የበለጠ ይሄን ኮንስፕት ሊገልጽ ይችላል የሚባለው ይመረጥና ይወሰዳል::

P: In most of the cases we tried to coin from language internal resources. First we search for terms by combining existing words and if we fail to get terms in this way we resort to borrowing. We discuss in group to search for terms. From the proposals the term that express more will be selected.

19. ጠ:- እሺ ሁለተኛው አማራጭ ውስት ነው ተብሏል:: ውስት ሲሆን ለውስት የምትመርጡት ቋንቋ የትኛው ነው?

I: Well. You said that borrowing is the second option. Therefore, which language is your preference for borrowing?



20. ተ:- በሳይንስ ሌሎችም ቋንቋዎች ውስጥ ሳይለወጥ ሌሎችም ተቀብለው ከጥንታዊ ቋንቋዎች ውስጥ ያሉ ከሆነ እንዳለ እንወስዳለን። አዳዲስ ቃሎች አማርኛ ላይ ያሉ ወይም እንግሊዝኛ ላይ ያሉ ከሆነ ያንን የእኛ ካልፈታ፣ ቀጥታ ሊፈታው ለሰሚው ወይም ለተማሪው ቀጥታ ሊገባው የማይችል ከሆነ የግድ ከሌለ እንወስዳለን -አዳብት አድርገን።

P: When there are Science terms which were already adopted by other languages, we will also adopt. If our language could not represent those concepts or could not directly translate, we will adopt new words that exist in Amharic or English with modification.

21. ጠ:- ለውሰት ከእንግሊዝኛም ከአማርኛውም ከኩሽ ቋንቋዎች ውስጥም ይኖራሉ። ከእነዚያው ውስጥ እንደ ምርጫ (preference) በቅደም ተከተል ማስቀመጥ ቢያስፈልግ እንደ መርህ የምትጠቁሙት አሰላለፍ ካለ ይጥቀሱ።

I: Do you have principle for your preference of borrowing from English, Amharic and Cushitic languages? If you have order of preference please mention.

22. ተ:- ይሄን አጠቃላይ ሁኔታ ነው ማየት ያለብን። እኛም ያኔ ያየነው በኢትዮጵያ ሶሺያ ኢኮኖሚክ ደረጃ ነው። እንግዲህ በመጻህፍት የሚመጡ ተርሞች ሳይንትፊክ የሆኑ ኮንስፕት የያዙ ነገሮች ናቸው። ያንን ኮንስፕት ሀዲይኛ መሸከም የማይችል ከሆነ፣ በኛ ቋንቋ ከሌለ በስዳምኛ፣ በከምባትኛ ወይም በወላይታ የተለየ ነገር አይኖርም። ምክንያቱም የወላይታም የሲዳማም የከምባታም የሀዲያም የኢኮኖሚ ደረጃ ተመሳሳይነት አላቸው። በሌላ በኩል ከሌላው ለመዋሰን መሄዱም አስፈላጊም ያልሆነው ከ85 ጀምሮ ብዙ የትርጉም ስራዎች ተሰርተዋል፤ ብዙ የመጻህፍት ዝግጅቶች ተሰርተዋል። በእነዚህ ወቅት ከሌላ ቋንቋ የምናመጣበት ሌላ ቋንቋ ያንን መግለጽ እየቻለ ሀዲይኛ ድኩም ሆኖ ያንን መግለጽ የማይችልበት ምክንያት አልታየም። በቀጥታ ይሄን የአማርኛውን ቃል ብንወስድ ይሄን ይገልጻል፤ ያስቀምጣል ብለን እንዳለ የአማርኛውን ቃል ያስቀመጥንበት የለም። አማርኛ ራሱ ተወሳኝ ከጥንት ከግሪክ ሮማን የወሰዳቸው ኮንስፕቶችን እኛም እንዳለ ነው የወሰድነው፤ እነሱ እንደ ወሰዱ። ሌሎችም የኢትዮጵያ ቋንቋዎች ለምሳሌ አሮሞዎችም ወሰደዋል፤ ወላይታም ወሰደ ሊሆን ይችላል። ሁላቸውም እንደ ወሰዱ እኛም ያንን ሀሳብ እንዳለ ነው የወሰድነው። ሌላውን አዳብት አድርገናል። ለምሳሌ፣ triangle የሚለው ቃል በኛ ቋንቋ በውሰት መልክ የለም። sasmidaado ብለን ነው የወሰድነው። አሁን triangle ሶስት ጎን ነው ያለው። ይሄ ስለዚህ ሶስቱ ጎኖች ሲገጣጠሙ ነው በሶስቱ ነጥቦች ላይ ወሰደን ስናገናኝ ነው። ያን ፈተነዋል፤ ያን (sasmidaado) ምን ማለት እንደሆነ በደንብ ተብራርቷል። ስለዚህ ይሄ triangle የሚለው ነገር በኛ ሶሳይቲ ውስጥ የለም። የእኛ ማህበረሰብ በዚያ ደረጃ አያውቀውም። ግን ቤት ሲሰራ የዚያ አይነት ቅርጽ አለ። sasmidaado፣ soormidaado ይላል፤ ይናገራል። ይሄንን ነው በጽሁፍ ስንመልሰው ያለውን በህብረተሰቡ ውስጥ ያለውን ኮንስፕቱን ወሰደን ተርጉመነዋል። ከዚያ ውጭ ግን ከሌላ ቋንቋም ለመዋሰን በጣም ያስቸግራል። ምክንያቱም እኛ እንደ መነሻ ጽሁፍ አድርገን ስንጠቀም የነበረው እንግሊዝኛ ወይም አማርኛን ነው። አማርኛ መግለጽ የሚችለውን በአብዛኛው ብዙም የተቸገርንበት አይደለም። በጣም አስቸጋሪ ከሆነና በአማርኛ ኖሮት በኛ ካልቸር ከሌለ ግን እንዳለ ወሰደነዋል። ስኩዌር ረሱ እንግሊዝኛ ነው። ስኩዌርን እንዳለ ነው የወሰድነው፤ አማርኛም ስኩዌር ብሎ ነው የሚወሰደው።

P: We should see the general situation. We previously considered this in the Ethiopian socioeconomic level. Hence, the terms introduced into textbooks include scientific concepts. If Hadiyya does not carry those concepts or if there were no in our language, the same is true for Sidaama, Kambaata or Wolayta because there is no significant differences among Wolayta, Sidaama, Kambaata and Hadiyya. On the other hand, a number of translation works and textbook developments have been made since 1985 E.C. During this time we did not see Hadiyya became incapable while other languages are able to express those concepts. Amharic itself borrowed terms from ancient Greek and Roman concepts. Similarly we borrowed such terms as Amharic did. Other Ethiopian languages such as Oromo and Wolayta may also borrowed. As other languages borrowed, we adopted or borrowed the concepts. And we also adapted other concepts. For instance, ‘triangle’ is not direct borrowing in our language. We coined as *sasmidaado* (lit. three side) since a ‘triangle’ has three sides which the three sides formed by joining three points. Hence, *sasmidaado* (lit. three sides) is very clear and self-explanatory. Therefore, the concept ‘triangale’ is not known directly in our society. However, there is concept of three side shape in a house construction. As a result, the society calls *sasmidaado* ‘three side’, *soormidaado* ‘four side’. We used

such terms or expressions while translating these concepts. Other than this, it is not feasible to borrow from other languages since we used English or Amharic resources as a basis. We did not face problems for the terms that Amharic able to express. If it became difficult to represent in our language and Amharic has expression of the concept, we borrowed as it is. ‘Square’ is English term. We borrowed it and Amharic also borrowed as ስከዌር /(i)sk<sup>w</sup>er/ ‘square’.

23. ጠ:- የአካባቢ ሳይንስ እሳቤዎችን ስትተረጉሙ ብዙ ጊዜ እንደ ምንጭ ቋንቋ ሆኖ በእጃችሁ የሚገባው አማርኛ ነው ወይስ እንግሊዝኛ ነው? ለምሳሌ፣ ኢዳብት ስታረጉ ወይም ስትተረጉሙ ከየትኛው ቋንቋ ነው ብዙ ጊዜ የምትተረጉሙት?

I: When you translate Environmental Science concepts, which language do you use as a source most of the time?

24. ተ:- አብዛኛው ኤክስፖዘር ሚኖረው አማርኛ ነው። አማርኛ ግን ከየትኞቹ የወሰዳቸው ናቸው? ከእንግሊዝኛ የወሰዳቸው ናቸው።

P: Usually we have exposure to Amharic. However, Amharic itself borrowed form English.

25. ጠ:- እርስዎ ከ1985 አ.ም ጀምሮ ተሳትፈዋል። ብዙ ጊዜ ሳይንስ ላይ ሂሳብ ላይ የሚመጡ ቴርሞች ይኖራሉ። መጀመሪያ ዙር የተተረጎመውና ቀጥሎ መጽሃፍ እየተሸሻለ ሲመጣ ቴርሞቹ ላይ የመቀያየር እድል አልነበረም? ማለትም አንዳንድ ጊዜ የማያረካ ቃል ሲፈጠር ወደ መቀየር ነው ምትሄዱት ወይስ ተለምዶአልና ብላችሁ ያንኑ ቃል መጠቀምን ትመርጣላችሁ?

I: You have been participating in textbook development and translation since 1985 E.C. Was there any occasion of replacement or change of terms in another edition? Or were you giving priority for maintaining already adopted term?

26. ተ:- ይሄ ግልጽ ነው።ይሄ ብዙ ጊዜ የተጠቀምንበት ነው። ሁል ጊዜም ነው ምናሻሽለው። ምክንያቱም እኛ ጀማሪዎች ነን እኮ! ሰርጾ እኮ ብዙ ውስጥ አልገባም። ኮንሰፕቱ እኮ ገና ዴቨሎፕ የሚደርግ ነው። የተሸለ ስንሰራ በመስክ ላይ ከተማሪ ጋር በመማር ማስተማሩ ሂደት በከፍል ውስጥ በህብረተሰብ ውስጥ አይተነው ኮንሰፕቱ ያንን መግለጽ ላይ ችግር ያለበት ከሆነ ብዙዎቹ ተሸሽለዋል፤ ብዙ ጊዜ ደጋግመን ደጋግመን አሻሽለናል። እና ወደፊትም እናሻሽላለን። መጀመሪያ ላይ በተሰራው ኮንሰፕቶች ላይ የተሳሳተ ትርጉም ተሰጥቶትም ከሆነ ትክክለኛውን ትርጉም በተሰራራ ሁኔታ ማስገባት ነበር ። እንደዚህ አድርገን ሰርተን ስለነበረ እነዚህ ነገሮች ለኛ ትልቁ መነሻችን ነው የሆኑት። በስራ ሂደት መቆየታችን እያሻሻልን፣ እየሰራን መቆየታችን ችግሮቹን መጀመሪያውኑ እየለየን እንድንመጣ አድርጎናል። ድክነሪ ስንሰራም ቶሎ ብለን አልጀመርንም። ብዙ አመት ሰርተን ብዙ ልምድ ካካበትን በሁዋላ ነው ይሄን ወደ ድክነሪ የመለስነው።

P: This is very clear. We usually use this. We always modify terms because we are beginners. It is not inculcated yet. The concepts are still in the process of development. When we found the problem of expressing the original concepts after testing in the field with students in class rooms and in the society, most of them were improved. We frequently modified and this also continues in the future. If concepts were given wrong explanation in the first work, they would be corrected in the next edition. Since we did in this way, it became a good experience and we identified problems from the beginning. After many years’ experience, we compiled the dictionary.

27. ጠ:- ቅድም ቃላትን ስለማሻሻል ሲያነሱ ምናልባት በዋናነት የመማሪያ መጻህፍት ተጠቃሚዎች መምህራንና ተማሪዎች ናቸው። የተማሪዎችና የመምህራንን ግብዓት ለማሻሻል ስራ ለመጠቀም የምታገኙበት መንገድ ነበር?

I: I: You mentioned earlier about replacement of inefficient terms. Was there a way of getting feedback regarding the designated terms for future improvement from teachers and students?

28. ተ:- እዚህ ላይ በደንብ ነው የተጠቀመው:: መምህራን ስርአተ ትምህርቱን ሁል ጊዜ ይገመግማሉ:: የእኛ ዲፓርትመንት የስርአተ ትምህርት ግምገማዎችን ያካሂዳል:: እያንዳንዱ መምህር በዚያ ተሳትፎ ምላሹን በወረዳ በኩል እያንዳንዱ ያገኘውን በጽሁፍ ለወረዳ ሲያቀርብ ወረዳው ደግሞ ሰብስቦ ሲያመጣ እኛ ደግሞ ይሄንን አንድ ላይ አድርገን ለክልል ትምህርት ቢሮም እንልክ ነበር:: ለማሻሻያ ጊዜ ደግሞ እናስቀምጣለን:: እነዚያ በሙሉ ተመዝግቦ ይቀመጡና በማሻሻያ ላይ እነዚያ ነገሮች አሻሽለን እንሰራቸዋለን:: መምህራን ይሳተፉ ነበር:: እና ሽልማትም ነበር፤ የምስክር ወረቀትም ይሰጣል:: እነዚያ ወረቀቶች ደግሞ መምህራን ለሚፈልጉትም ይጠቀሙም ነበር:: ዋጋ ያለው ነው፤ እንሰጥታቸውም ነበረው:: ፎርማትም አለ-ገምግመው ሚያቀርቡት ፎርማቱን አሰልጥነን ሰጥተን ትምህርት ቤቶቹ ወስደው በዚያ መሰረት ነው ገምግመው ሚያቀርቡት:: ያ ማለት ሁሉም መምህር ሰርቷል ለማለት አይደለም:: ግን ለእኛ በበቂ ሁኔታ ተሰርቶ ይቀርብ ነበር:: ስለዚህ እነዚህ በግምገማ የተገኙ ነገሮች ይሄ ችግር ነው፤ ይሄ ችግር ነው ከነምክንያቱ ነው፤ ከነገሩ ነው:: የስፔልንግ ስህተት ካለ የስዕል ስህተት ካለ ፣ የኮንሰፕት ስህተት ካለ ግር የሚል ሀሳብ ካለ እዚያ የሚጠይቅበት ኮለም አለ:: ከነገሩ ተጠቅሶ ሲቀርብ እንሰበስብና እኛ ምላሽ መስጠት የምንችለው ከሆነ ትርጉሙን አብራርተን እንመልሳለን:: ማይሆንም ከሆነ ደግሞ ይቆይና በማሻሻያ ወቅት ተሸሽሎ በሚቀርበው መጽሀፍ ላይ ይሰራል:: እንደዚያ አድርገን ነው ስንጠቀም የነበረው::

P: In the regard, we exploited much. Teachers always evaluate the curriculum. Our department also conducts curriculum evaluations. Every teacher sends feedback through *wereda* office to us. We also send their comment to Regional Education Bureau and keep them for future revision. Hence, teachers were actively participating and we provided them a reward and certificate. The teachers also use those certificates for their own purpose because they have value or incentive. We distributed the evaluation format for schools so that they provide their assessment. This is not to say that every teacher do the assessment but for our purpose we receive adequate feedback. Hence, the evaluation result will be provided to us by mentioning pages. If there is spelling problem, error of picture, error of concept there is column to put. After teachers send to us by mentioning with pages, we summarize the comments and respond to the teachers if explanation is needed. If revision is needed, we keep the comments and incorporate in the next revision. So, this was the way we use teachers' feedback.

29. ጠ:- ጥሩ፣ መዝገብ ቃላትም ይሁን መማሪያ መጻህፍት በሚዘጋጅበት ጊዜ በተለይ ደግሞ በአካባቢ ሳይንስም ሆነ በሂሳብ አንድ ቃል ሲኖር ከ1ኛ ክፍል እስከ 4ኛ ክፍል ወጥነቱን እንዲጠብቅ የምትጠቀሙበት/የምትከታተሉበት መንገድ ነበር ወይ?

I: Well. Was there any follow up mechanisms to maintain consistency of terms during dictionary compilation and/or the development of grade 1-4 Environmental science and Mathematics textbooks?

30. ተ:- ይሄ ችግር መጀመሪያ ከሚያዘጋጁ ወይም ከሚተረጉም ሰው ሊመጣ ይችላል:: ግን በመሃሉ ኤድተሮች አሉ:: ይሄን ነገር የሚያውቁ ኤድተሮች ስላሉ፣ ኤድተሮቹ እዚህ (ባለፈው) ክፍል ይሄን ብለናል:: ስለበስም አለ:: እዚህ ጋ ደግሞ እንዴት ነው የቀየርከው? ተብሎ ይያዛል:: እዚህ ክፍል እንዲህ ተብለዋል፤ የትኛው ይሻላል? ለመቀየር ምክንያት ምንድነው? ይሄ ማለት ይሄ ማለት ነው ተብሎ ግሎሰሪ ላይ እንዲቀመጥ አዲሱ ሰው ያመጣው ሀሳብ የበለጠ ሚተረጎመው ከሆነ ይቀበላል:: አይ ግር እያረገ የሚወስድ ነው ካለ ይሰርዝና ይሄን ቃል ተካ ይለዋል:: ይተካልም:: ያም ሆኖ ኤድተርም ሳይይ አልፎ ሚከሰት ነገር (ስህተት) ይኖራል:: የመጻህፍት አዘጋጆች አንተ እንደምትፈልገው ማስቀመጥ ያስቸግራል:: አዎ...ተግዳርቱ ነበረ አሁንም ይቀጥላል:: ግን ወጥነት የማስጠበቅ ጥረቱ ያ ነው ሚሆነው::

P: This problem may arise from developers or translators. However, there are editors who understand this problem. They say that we used this term in previous grade and it is also mentioned in syllabus. So, the editor controls by asking why should you changed this term in this grade? It is termed in this way; so, which one is better? What is your reason to change this term? Based on the argument, if the new proposal is more expressive, the editor accept. However, if it is confusing, he/she rejects and replace by more relevant term. Despite this efforts, sometimes errors may occur. The book writers may not follow this as

you wish. Of course, there was challenge and may continue as well. But there is effort to reduce such inconsistencies.

31. ጠ:- ሀዲይኛ ቋንቋን በተለያዩ አውዶች ይበልጥ ለማሳደግ እንዲህ ቢደረግ የተሸለ ነው የሚሉት ካለ?

I: What do you recommend to develop Hadiyya in different contexts?

32. ተ:- እዚህ ላይ የግል አስተያየት ነው ሚሆነው። ህብረተሰቡ ሙሉ በሙሉ መጠቀም አለበት ከትምህርት ቤት ግቢ፣ ከክፍል መማር ማስተማር ውጭ መውጣት አለበት ቋንቋ እንዲያድግ ከተፈለገ። ቋንቋውም የሚያድገው ሲጠቀምበት ነው። እና የስራ ቋንቋ መሆን አለበት። በመስሪያ ቤቶች መጠቀም መቻል አለበት። ፍርድ ቤት መጥቶ በቋንቋው ተናግሮ፣ ዳኛውም የሚለውን ሰምቶ እሱም የሚለውን ሀሳብ በደንብ ገልጾ መገልገል አለበት። ገቢያ ውስጥ እንደሚነጋገር በመስሪያ ቤቶች ውስጥ ገብቶ በዚህ መነጋገር አለበት። ሁሉም መጻፍ አለባቸው፤ ሁሉም ማንበብ አለባቸው። የተወሰነ ክፍል ብቻ የሚያበውና የሚጽፈው ከሆነ ለቋንቋ እድገት ብዙም አይፈይድም። ለእድገት የትምህርት አያደርስም። አሁን ሳየው ብዙ ጊዜ በዚህ ጉዳይ በምክር ቤትም ተነጋግረዋል። ብዙ ሰዎች ተችተዋል፤ ብዙ ሀሳብ ቀርቧል። የስራ ቋንቋ ለማድረግ ብዙ ብዙ ተብሏል፤ ሰዎችም ብዙ ቃል ገብተዋል፤ ይሄን እናደርጋለን ብለዋል። ግን ሆኖ አላየሁትም። ይሄ እስካልሆነ ቋንቋው በትምህርት እስከ ዩኒቨርሲቲም እስከ ፕሌቶዲ ቢሰጥም ጎደሎነቱ አይቀርም። የተማሩ ሰዎች ብቻ ሀዲይኛን ሚጽፉና ሚያነቡ ከሆነ በጣም አስቸጋሪ ነው። ሀዲይኛ እንዲያድግ ከተፈለገ የስራ ቋንቋ ማድረግ አለብን። መጠቀም አለብን። አለዚያ ጌጥ ነው ሚሆነው። መጽሀፍ ውስጥ ተጽፎ ቁጭ ነው የሚለው። ህዝቡ አይጠቀምበትም።

P: Regarding this, I have personal opinion. If the language needs to be developed, the society should use it out of school compounds and classroom teaching learning process. The language develops when it is used. Hence, it should be working language in different offices, for example in court with a judge. Just people communicate in a market, they should also communicate or use in offices. Everyone should write and read in the language. If some portion of people only read and write, it does not contribute much for the language development. This is meaningless. According to my observation, the Hadiyya Zone Counsel discussed many times. People discussed and proposed the language to be the working language. People promised to implement, but it was not practical. Even if the language would have been given in a University until PhD level, still the gap will not be filled. It is problematic if only educated people read and write Hadiyya. If Hadiyya is expected to be developed it should be working language. We should use it unless it will be just an ornament. It will be simply appear in books only. People will not use it.

## Expert F

1. ጠ (ጠያቂ):- ቀደም ሲል ሀድይኛን በሚመለከት የሰራተኛው ስራዎችን ወይም ተሳትፎዎን ቢገልጹልኝ?

I (Interviewer): Would you please tell me your participation and role in development of Hadiyya materials?

2. ተ (ተሳታፊ):- በሀዲይኛ ላይ በትክክል ስራ የጀመርነው 1987 ላይ ነው። 1985 ላይ የቀደሙት ነበሩ፤ እንዳለ የተወሰነ ትርጉም ነው። እዚያ ላይ ግን በተለይ 1ኛ ና 5ኛ ዝግጅት ነው የጀመርነው 86 ላይ። ከመሰረቱ ጀምረን ምንም መነሻ ስላልነበረን አዋሳ ላይ ጊዜ ወስደን ከሀዲያ ዞን ትምህርት መምሪያ ያው በማቲማቲክስ ፓናል ከነበሩት አንዱ እኔ ነኝ፤ በዚያ ሰአት ማለት ነው። በተለይ 1ኛና 5ኛ ምንም ከሌለበት ነው የተነሳነው፤ ምንም ርፌር የምናደርገው ነገር አልነበረም። በኋላ ከ88 ጀምሮ 2ኛ- 6ኛ ያለውን ሸለጎክ (ማቴማቲክስ) በትርጉም ሰርቻለሁ። 1 እና 5 ትን ዝግጅትም ጭምር ከሰለበስ ጀምሮ፤ ፍሎው ቻርት ትምህርት ሚኒስቴር ሰጠን። 1 እና 5 ትን ከሰለበስ ጀምሮ ሰራተኛው ጊዜ የወሰደብን እሱ ነበር። ያን 4 ወይም 5 አመታት ያህል ከተጠቀሙ በኋላ ነበር የተቀየረው። ስለበስ አሰራሩን ምናልባት አገራዊ ሊያደርጉ ታስቦ መሰለኝ። ሁዋላ ለዚህ ነው እነ አቶ ዘኪየስ ቡሌ ክልል ይሄዱ የነበሩት ስለበሱን ለመቀየር። ከ88 ጀምሮ በአማርኛ የተዘጋጁትን መተርጎም ነው የጀመርነው 2ት፣ 3ት፣ 4ት፣ 6ት ትርጉም ሰርቻለሁ። 2ኛ አመት ላይ የብሄር ብሄረሰቦች ቋንቋን የመጠቀም መብት እየተጠናከረ ሲመጣ፤ የአማርኛው ይዘት ብዙ ልዩነት እንዳይፈጠር ስለተፈለገ እንግዲህ ወደ ትርጉም መጣን። በአጠቃላይ በእነዚህ ጊዜያት በትምህርት ማቴሪያሎች ትርጉም፣ ዝግጅትና ኤዲትን ተሳትፎአለሁ።

P (Participant): We started working Hadiyya language exactly in 1987 E.C. There were others who started in 1985 E.C translation of books. We started material development for grade 1 and 5 in 1986 E.C. Since there was no basis, we took time to develop the books in Hawassa. During that time, I was one of the participants from Hadiyya Zone Education office in mathematics panel. Especially for grade 1 and 5 we begun from the scratch since there were no reference. Later on, starting from 1988 E.C I was also participated in the translation of Mathematics textbooks for grade 2-6. We developed grade 1 and 5 textbooks including syllabus development base on the flowchart which was provided by the Ministry of Education. This took a longer time. Having used the materials for about 4 or 5 years, they were changed or revised. This was probably made to develop the national syllabus. Later Ato Zekiyos Bule went to Hawassa to revise the syllabus. After 1988E.C we started to translate grade 2, 3, 4, and 6 from Amharic. In second year, following the promotion of Nations' and Nationalities' right, Amharic materials were used as a source for translation to keep consistency of content throughout the country. In general, during these times I participated in translation, development and editing educational materials.

3. ጠ:- በሀዲይኛ መጻህፍት ሲያዘጋጁ በእነዚያ ጊዜያት አጠቃላይ አወቃቀሩ ምን ይመስል ነበር?

I: How do you explain the organization of teams during material (textbooks) development in Hadiyya?

4. ተ:- ሌላው ከትርጉምና ኤዲትን በተጨማሪ የተሳተፍኩበት የመማሪያ መጻህፍት ማሻሻል ነበር። ኤዲትን ለቀማ ማለት ነው፤ የተዘለሉ ነገሮችን (ይዘቶችን)። በዝግጅት ወቅት የተለያዩ ፓናሎች ነበሩ። ራሱን የቻለ ፓናል ማለት ነው። ያው... ሀዲይሳ ፓናል ራሱን የቻለ የነበረ ነው። ፓናል ነው ምንለው። አንዳንዴ ትርጉም ስንቸገር እንግሊዝኛ እንወስዳለን። የአማርኛ አቻ ሲጠፋብን እንወስዳለን፤ ምክንያቱም አንዳንድ ጊዜ ቴክኖሎጂካል ቴርምስ እንግሊዝኛም ከሌላ ቋንቋ ስለሚጠቀም አማርኛም ይጠቀማል- ማይመቹትን ለትርጉም። ስለዚህ አሁን ስንተረጎም ቀጥታ ትርጉም ያጣነውን እንግሊዝኛ ነው የምንወስደው። የተሰማማንበት ነው በሰአቱ ጥንስሰ ላይ ስንጀምር ከዚህ አንጻር ነው ፓናል ያልኩት ማቴማቲክስ ማነው ሸለጎክ ፓናል ሀዲይሳ ፓናል፤ ሄጌቅ ሳይንሳ ፓናል አለ። እስቴስቲክስም አለ። እስቴስቲክስ ሶስት ነገር ነው። አርት፣ ሙዚክ እና ሰውነት ማጎልመሻ አካዩ ነው የቀረበው። ስለዚህ የኛ አንድ ፓናል ነው፤ ሻለጎዕ ፓናል እንል ነበር።

P: Another area that I participated was textbook revision. Editing is about checking spelling and missed contents. There were different panels during development. Hadiyya panel was an independent panel. We said panel. Sometimes when we come across with lexical gap, we borrow English terms. Even English borrowed technical terms from other languages. Amharic also uses such terms which are not convenient for translation. Therefore, we agreed on the term panel from the very beginning to classify different areas. There are Mathematics panel, Hadiyya panel, Environmental science panel. There is also Aesthetics panel which includes three things: art, music and sport. Therefore, the panel which I was involved was called Shallago'o (Mathematics).

5. ጠ:- በጣም ጥሩ፡ እዚያ ላይ ሲያዘጋጁ ወይም ሲተረጉሙ ጅማሪ ላይ በተለይ አዲስ ነበርና የወሰዱት ስልጠና ነበር?

I: Well. Have you received a training before embark on textbook development or translation?

6. ተ:- ኤ...ስልጠናዎች እኛን ቀድመው የወሰዱት ነበሩ። እኛን ቀድመው ብዙን ጊዜ ያኔ ላቲን ስክሪፕት አጻጻፍ ላይ ስልጠና እሱን ወሰድን። ከኛ ቀድመው ትምህርት ሚኒስቴር ላይ የወሰዱ ነበሩ። ከኛ ቀድመው የወሰዱ ነበሩ። እነ ጋሽ አሰፋ ቡንጤ፣ ተስፋዬ ወ/መስቀል እነሱ ትንሽ ይቀድሙናል። ታገሰ ኤረንጎ ...እነሱ ቀድመው ትምህርት ሚኒስቴር ወሰዱ። እኛ ትምህርት ሚኒስቴር አልሄድንም። መጀመሪያ እንዲያውም ትርጉሙም ዝግጅቱም ምኑም ትምህርት ሚኒስቴር ላይ ነው ተጠርቶ 1985 ላይ የተደረገው። ያ ማለት ከኔ በፊት ነው 85 ላይ በአገሪቱ ውስጥ ካሉት ብሄር ብሄረሰብ ከሱማሌ ክልል ሁሉ መጥተው ያኔ ነው የተጀመረው። በኋላ ራስን የመቻል ነገርም ሲመጣ፣ ወደ ክልል ማእከል መጣ፤ ያኔ እኔ ከአዋሳ ነው የጀመርኩት። ስለዚህ ስልጠናውን ወስደናል። ስልጠናውም ያተኮረበት አንደኛው ላቲን ስክሪፕት ነው። አነባብ፣ ላቲን እንዴት እንዴት እንደሚነበብ፣ ይልቁንም ከሳባና ከላቲን የቱ ይመቸናል የሚለው ራሱ ምሁራኑን ብዙ አከራክሯል ከዚያ በፊት 85 ላይ። እንዲያውም 85 ሳይሆን ከ83 ጀምሮ 84 እንግሊዝኛ የሆኑ የሀዲያ ምሁራን አዲስ አበባ ላይ ይገኙ ነበር። የተጋበዘው ያኔ ሳባ ወይስ ላቲን ይሻላል ለሀዲያ ተብሎ በኦሮሞ አጠቃቀም ላይ ዶክተር ጥላሁንን ጋብዘን ምንጊዜ ሀይስኩል አደራሽ ላይ ነው የተሰበሰቡት። ስለዚህ ላቲኑ ለኛ እንደሚሻል ነው ያኔ የተወሰነው። ከዚህ አካባቢ የተወሰኑ አሉ፤ በአብዛኛው አዲስ አበባ የነበሩ ምሁራን ነበሩ። ያኔ እኔ 4 ኪሎ ዩኑቨርሲቲ 3ኛ አመት ተማሪ ነበርኩ፤ በዚያው ተጋብዝኩ። ተሳትፌአለሁ ወርክሾቼ። ስለዚህ አሁን ላቲን የተመረጠው 84 እና 85 መግቢያ ላይ ነበር። ለሀዲያ በተለይ ለኩሽቲክ ካታሪ ላቲን እንደሚያስፈልግ፤ ስለተስማማን ወርደንም ስንሰራ አልተቸገርንበትም። አማርኛ ላይ ገና እና ገንን በጽሁፍ መለየት አትችልም ግን በላቲን ይቻላል። አዎ፤ ስለዚህ ማጥበቅ ማላላቱ ላቲን ምቹ ነው፤ ለሀዲያ በጣም የተመቻ ነው። ሸለጎኦ (ሂሳብ) ላይም አልተቸገርንም ስንተረጉም።

P: There were people who received training previously. We received training on how to write using Latin script. Before we received training there were some people who had received training. Assefa Bunte, Tesfaye Woldemeskel, and Tagesse Erango received training organized by the Ministry of Education before we got the training. We did not go to Ministry of Education. Initially the translation and development were done in the Ministry of Education in 1985 E.C. During this time, there were different languages including Somali in the ministry of Education (Addis Ababa). Later when the regions became autonomous, it was moved to regional centers. I joined in Hawassa during this time. Hence, we received training on how to read Latin-based orthography. Of course, scholars argued for and against Latin and Sabeen/Ge'ez script in 1985 E.C. In fact, the discussion had been made in Addis Ababa among Hadiyya scholars since 1983 or 1984. During script choice discussion, we invited Tilahun Gemta, who has done in Oromo orthography where we were gathered in Minilik high school. Finally, the Latin script was chosen during that time. From Hadiyya zone there were some people in the discussion, but majority of the scholars were from Addis Ababa. I was also 3<sup>rd</sup> year student in Addis Ababa University (Arat kilo) and I was invited for the workshop. Latin script, therefore, was chosen at the end of 1984 and at the beginning of 1985 E.C. We opted for the script since it was considered as a convenient for Cushitic languages

including Hadiyya. When we use (the script), it was suitable for us. In Amharic you cannot identify between *gəna* ‘still’ vs. *gənnā* ‘Christmas’. For gemination and vowel length, Latin is suitable and it is also convenient for Hadiyya. We did not face a problem when we had been translated textbooks of Mathematics in Hadiyya.

7. ጠ:- በስክርፕት ምርጫ ወቅት በተቃራኒ በኩል የሚከራከሩ ሰዎች አልነበሩም? ከነበሩ የክርክር ነጥቦችን ብነግሩኝ።

I: Wasn't there opponents during the script choice for the language? Please mention if there were.

8. ተ:- የምናውቃቸው ሰዎች ሳባን የሚፈልጉ ነበሩ። የመከራከሪያ ሀሳባቸውም፣ ሀብቱ ወይም ሪሶርስ አለን፤ ቀደም ሲል በአማርኛ የተዘጋጁና ከሌላም ቋንቋም ተተርጉመው የተቀመጡ ነገሮች ስላሉ እነሱን ለማንበብ ያስችለናል። ስለዚህ ለኛ ሳባ ይሻላል የሚሉ በቁጥር አነስተኛ ቢሆኑም ነበሩ። እንዲህ አይነት የሀሳብ ልዩነት ነበር። ነገር ግን የአብዛኛው ምሁራን አስተያየት በዛ፤ አሳማኝም ነበር። በተለይ የወሰድነው የአንድ ቀን ስልጠና ያ ዶክተር ጥላሁን የሰጡን ስልጠና አግዞናል። የኛ ቋንቋ ኩሽቲክ ካታጎሪ መሆኑ ተረጋገጠ። በተለይ እንደ ሀዲያና ከምባታ ላሉ የኩሽ ቋንቋዎች የላቲን እስክርፕት እንደሚመች ምሳሌ እየሰጡ ካሳዩን በኋላ ምርጫው የራሳችሁ ነው አሉን። መጨረሻ ላይ የተስማማነው በላቲን ስክሪፕቱ ላይ ነው።

P: There were some people arguing in favor of Ethiopic. Their point of argument was that since there are ample resources in Amharic and translated from different languages into Amharic, we can easily access those resources. Hence, even though they are few in number, there were people claimed Ethiopic should be preferred for us (Hadiyya). There were such kind of idea differences. However, most of the scholars commented against this idea; actually it was which actually was convincing. The one-day training which we received from Dr. Tilahun Gamta helped us much. We have also been informed that our language is in Cushitic category. He illustrated with examples about how to use Roman-based script particularly for Cushitic languages such as Hadiyya and Kambaata. Finally, he left the decision for us and at the end we agreed on the Roman-based script.

9. ተ:- በጣም ጥሩ! አዳዲስ ጽንሰ ሀሳቦች (ኮንሰፕቶች) ሲመጡ ምናልባት ሲሰየም ከቋንቋ ባለሙያዎች ጋር የምትገናኙበት እድል ነበር ወይ፤ ከቋንቋ ወይም ከስነልሳን ባለሙያዎች ጋር የመወያየ እድል ነበር ወይ ስያሜ ለመስጠት

I: Ok. Was there any occasion to discuss with language experts or linguists in the designation of new concepts?

10. ተ:- እዚህ ጋ ጥሩ ነገሩ ምንድነው ባንድ አዳራሽ ነው እኛ የሀዲያ ቡድን የነበርነው። ባንድ አዳራሽ ውስጥ ማን አለ አብዛኛው ልንገብትክስ ግራጁዌት ነበሩ፤ አማርኛ የተመረቁት ነበሩ፤ የአማርኛዎቹ በጣም ነው ያገዙን።ዲክሽነሪ ራሱ ስናዘጋጅ እራሱ ሂደት (ፕሮሲጀር) አለ። ያን ሁሉ የቋንቋ ምሩቃን ነበሩ ከኛ ጋር። እነሱ ናቸው ጋይድ ሲያደርጉን የነበሩት። እንደነ ታገሰ ኤረንጎ፤ ገብረ ኪዳን አንኪሶ፤ ተስፋዬ ወልደመስቀል ከኛ ጋር ነበሩ። እኛ ሳብጀክት ኤርያ ላይ ኮንቴንት ላይ ነው የነበርነው፤ እኛ ምንም አልተቸገርንም። ቋንቋውን በደንብ ስለምንችልም።

P: The good thing is that the Hadiyya team were in one hall. There were linguistics and Amharic graduates in one room. The Amharic graduates assisted us much. There were procedures while we were preparing a dictionary. All these language graduates were with us. They were guiding us. To mention some of them Tadesse Erango, Gebrekidan Onkiso, and Tesfaye Woledemeskel were with the team. We were in the subject or content area and the task was not difficult for us because we speak the language very well.

11. ጠ:- ስለዚህ ይህ የውይይት ጊዜ ውጤታማ ነበር ማለት ይቻላል?

I: So, could you say that the discussion time was successful?

12. ተ:- ውጤታማ ነው በጣም። የተቸገርንባቸውን ቃላት እንመዘግብ ነበር፤ ባንድ አዳራሽ ነዋ የነበርነው፤ ሀዲያ ዞን መጥተንም ከልል ላይም አንለያይም። ባንድ አዳራሽ ውስጥ እያለን ትርጉም ስንቸገር እንመዘግባለን። ትርጉም የተቸገርንባቸውን እንይዝና ምን ላይ እንሰይም ብለን እንነጋገር ነበር። ምክንያቱም ወደፊት ለህብረተሰቡ ሚበተን አንድ ወጥ መሆን አለበት ብለን የሁሉም ፓናል ምሁራን ቴርሞች አሰያየም ላይ ምንነጋገርበት ክፍለ ጊዜ ነበር ። ከርከሩም ይኖራል፤ ስምምነት ነው ትልቁ ነገር። ግን ስምምነት ላይ ከተመጣ በሁዋላ ምንም አልተቸገርንም። ሌላው ከዚያ በሁዋላ ፊድ ባኮች ከህብረተሰቡ መምጣት ጀመሩ- ከሁለትና ከሶስት አመታት በሁዋላ። የተሻሻሉት ጥቂት ናቸው ከዚያ በሁዋላ። በተለይ ሀዲይሳና አካባቢ ሳይንስ ላይ የሚሻሻሉ ሀሳቦች ይመጡ ነበር። ህጻናት ትህርት ቤት ውስጥ የተማሩዋቸውን ለወላጆቻቸው ሲናገሩ (እንዲህ ተብሎ ተምራለሁ ሲሉ) ይሄ ልክ ነው ወይ ሲባል፤ ይህ እንዲህ ቢባል የተሻለ ነው ሲሉ ያን ህጻኑ ይዞ ወደ መምህሩ ይመጣል። መምህሩ ደግሞ መቀየር ስለማይችል ወደ አዘጋጆች ጥያቄ ይልካል። ያን ደግሞ ስርአት ትምህርት ዲፓርትመንት ተቋቁሞ ስለነበር ከመምህራንና ተማሪዎች የመጠው ጥየቄ እዚያ ተመዝግቦ ይቀመጣል። ከታች የሚመጡት ሀሳቦች ይመዘገቡና ርቫይዝድ ኤድሽን በሚዘጋጅበት ጊዜ ይሰጠናል። አሁን በዚህኛው ህትመት ላይ እንዴት እናድርግ የሚል ነገር ሲመጣ እሰየው እያልን ስንቀበል በርቫይዝድ ኤድሽን ላይ ጥቂት ናቸው የቀረቡት፤ እንደ አማራጭ ሞር ይሻላል የሚሉ ናቸው እንጂ ኮንስፐትን ከመግለጽ ደረጃ ብዙም ችግር አልነበራቸውም። ሌላው መጽሀፉ ታች ሲወርድ የተለያዩ ዘዴዎች ናቸው ያሉት- ባዳዋሾች አለ፤ ሶር አለ፤ ሊሙ፤ የምሻና የግቤም አለ። ስለዚህ ከቀበልኛዎቹ የሁሉም ፓናል ምሁራን ደግሞ ስብጥር አለ። መሳሳቱ የለም- ቅንፍ ውስጥ ማስቀመጡ ላይ ስለተስማማን። ስለዚህ ቀበልኛዎችን እንደ አማራጭ በቅንፍ ውስጥ ስለምናስቀምጥ ያለምንም መሳሳብ ነው ሲሰራ የነበረው።

P: Yes it was very much successful. The team always share the same hall even when we moved to Hadiyya zone from the region. We were recording the difficult words for translation and then we had been making discussion to designate the concepts. Since it would be disseminated to the community, we had time for discussion regarding the terminology designation and checking consistent way of naming. There is always debate, but the most important thing is consensus. We did not face problem after we reached in consensus. After the implementation period of 2 and 3 years, we begun to receive feedbacks from the community. The corrections or the revised terms were very few. Particularly in Hadiyya and Environmental science subjects, suggestions were provided. When children share what they learn in class, parents suggest some words to be replaced by some other words. And then children bring the idea to the teacher. As the teacher could not make a change in the textbook s/he send to development team. The curriculum department collects the comments. The recorded comments are given for us to consider during revision of textbooks. And we consider those comments gladly. The comments provided were more of suggesting alternatives for terminology usage; they were not about conceptual problem. The other thing is when the textbooks were used in the community, there are different dialects: Badawwacho, Sooro, Leemo, Gibe, and Misha. Therefore, there are writer from each dialects and we agreed to put words in bracket to include different dialects. There were no complaints regarding dialect usage since we put as alternative terms.

13. ጠ:- Feedbaaku ጥሩ ነበር ቅንፍ ውስጥ ስታስቀምጡ በነበረው?

I: what about the users' feedback regarding your suggestion of alternative words in bracket?

14. ተ:- ምንም ችግር አላጋጠማቸውም፤ ህጻናትን ትሪት ያደርጋል። ህጻናት በራሳቸው ቋንቋ ሲማሩ ኮንስፐት አይቸገሩም፤ በተለይ የገጠሩ፤ ከስር ነዋ ሚማሩት። የከተማው በአማርኛም ቢማሩ ችግር የለውም፤ ግን ለታችኛው ላቲኑ እንዳለ ሀዲይሳን ያስቀምጣል። ቃላት ከየቀበልኛ በመካተታቸው ደግሞ ህጻናት ግራ እንዳይጋቡና የራሳቸውን ዲያሌክት ቃል እንዲያገኙ ይረዳቸዋል። በተጨማሪም አንዱ የሌላውን አካባቢ ዲያሌክት እንዲማር ያግዛል። ከዚህ አንጻር ችግር አጋጠመን ተብሎ የቀረበ ነገር አስከሁን የለም።



P: Since such usage is helpful for children, they were not faced any problem. For the children learn in their mother tongue, they did not encounter any conceptual problem especially the rural area children learn in mother tongue from first grade. It is not problematic for the urban children to learn in Amharic but for rural children the Latin put Hadiyya language clearly. The inclusion of different dialects also help children to get their own words which facilitate comprehension. Moreover, it enables to learn other dialect. Regarding dialect usage, we did not come across with complaints until now.

15.ጠ:- በሀዲይሳ መማሪያ መጽሀፍ ሲያዘጋጁ የሚያጋጥሙትን አዳዲስ ጽንሰ-ሀሳቦች ለመሰየም እንደ መመሪያ ሆኖ የሚያገለግል መመሪያ (guideline) ነበር?

I: Did you have a guideline to designate new concepts when you prepare textbooks?

16. ተ:- አኬ! በሁዋላ የተመረከብን በፊት ከእንግሊዝኛ መጀመሪያ ላይ 1ኛና 5ኛ ሽለንኦ ስናዘጋጅ ሌሎችም እንደዚያው 1 እና 5 ሲያዘጋጁ በሱ ነው የጀመርነው፡፡ ትምህርት ሚኒስቴር ትእዛዝ ስለሰጠን ነው፤ በዚያ ወቅት፡፡ አንዱ ጅምር ነው፤ 5 ደግሞ ለ 6ት መነሻ ነው፡፡ ለሁለት ደግሞ 1 መነሻ ነው፡፡ አማርኛ ያኔ ከእንግሊዝኛ ይልቅ ለትርጉም ተመቸን- ቀጥታ ለመተርጎም፡፡ ከእንግሊዝኛ ስንተረጉም የመጀመሪያውን የሁዋላኛውን ቀል (ቦታ) እናቀያይራለን፡፡ ግን አማርኛ ላይ ቀጥታ ካለው፤ ቦታ ሳይቀያየር ማለት ነው፡፡ ከእንግሊዝኛ ወደ ሀዲይሳ ስንተረጉም፤ ልክ በአሮምኛ እንደሚኖረው የቃላት አሰላለፍ ነው፡፡ ስለዚህ ከእንግሊዝኛ ወደ አማርኛ ከአማርኛ ወደ ሀዲይሳ ነው ሲመቸን የነበረውና፡፡ አሁን ለዚህ ለዘመናዊ እሳቤዎች የተጠቀምነው አማርኛ ራሱ ሚጠቀማቸው (አማርኛ ራሱ ቀጥታ ምላሽ ሲያጣ) በላቲን ፊደልም ሆኖ እንግሊዝኛውን ነው ሚገልጻው፡፡ ስለዚህ ልጆቻችን ይልመዱ የሚል ነው፡፡ ምክንያቱም እንተርናሽናል ወርድ ነው፡፡ ይልመዱ፤ ከለመዱ በሁዋላ የራስ ያደርጋሉ፡፡ እና እኛ አሁን ለሱ (ለትርጉም) ብለን ሌላ ይዘት እንዲጠፋ አልፈለግንም፡፡ ትርጉሙን በጣም ከተከታተልክ ይዘቱ ይጠፋል፡፡ ስለዚህ አማርኛም ቀጥታ ትርጉም ከእንግሊዝኛ ሲያጣ ቃላቱን ሳይቀይር ነው የሚወስደው፡፡ ለምሳሌ፤ ሞባይል በእንግሊዝኛ ነው፤ እኛም ሞባይል ብንል ምንም ችግር ውስጥ አንገባም፡፡ እንተርጉም ብለን ሌላ ውስብስብ ውስጥ ለምን እንገባለን፡፡ የአማርኛ አወሳሰድ ስልት አፊንት ይሆናል፤ በልንግስትክስ ምሩቃን ማለት ነው፡፡ ድግሪም ድጥሎማም የተማሩ ነበሩ፡፡ በዚህ ምክንያት አልተቸገርንም፡፡ አማርኞች ሚጠቀሙትን ስልት ወሰድን፡፡

P: Ok. By the order of Ministry of Education, initially we developed textbooks for grade 1 and 5 and this helped us to gain experience. Grade 1 is a beginning while grade 5 is a foundation for grade 6. Grade 1 is also a foundation for grade 2. During that time Amharic was more suitable for translation than English. When we translate from English, we need to alter word order. However, when we translate from Amharic, we do not need to change the word order. When we translate from English, we need to alter the word order just like Oromo. That is why translation from Amharic is more suitable. Just Amharic did, we used transliteration using Roman script for the modern concepts. We agreed that as they are international words let our children learn them. Let them learn; after they learn they would be familiar. This is to take care of content. If we give more attention to translation, the content may be distorted. When Amharic itself fails to get direct translation, it adopts directly from English. For instance, *mobayl* ‘cellphone’ is English. It is not problematic if we [Hadiyya] use as it, *mobayl*. We should not worry about translating such terms. We have been oriented by the linguistics graduates who got degree and diploma. As a result, we did not face problems and followed the techniques that Amharic used.

17. ጠ:- ስለዚህ ከቋንቋ ክራሱ የሚፈጠሩ ቃላት አሉ፤ ውስትም አለ፡፡ አንድ ጽንሰ ሀሳብ ወደ ቋንቋ ሲመጣ እሳቤዎችን ለመሰየም ለየትኛው ስልት ቅድሚያ ትሰጣላችሁ?

I: Therefore, there are language internal resources and borrowing. When new concept appear to the language, which of the techniques are your priority?

18. ተ:- እኛ አሁን ለሂሳብ በእንግሊዝኛ የተቀመጠውን ነው ምንወስደው፤ አንጥልም። እንደ ሂሳብ ምሁራን ሸለጎሉ ሂሳብ የሚለውን ቃል ራሱ አይወክልም ባይ ነን። ሸለጎሉ ስምጥል አርትሜቲክን ነው ሚገልጸው ማቲማቲክስ ብንል ይሻል ነበር። ፓናሉ አሁን ቁጭ ብንል ኖሮ በአማርኛም ሂሳብ አይወክልም። በተመረቅንባቸው ድግሪዎች ራሱ ማቲማቲክስ ነው ሚለው። ለምንድነው ሂሳብ የማይለው። ምክንያቱም ማቲማቲክስ በጣም ዋይድ (ሰፊ) ነው። ሳይንስም ጭምር ነው። ሸለጎሉ ስምጥል አርትሜትክስ ነው። አሁን ህጻናትም ህብረተሰቡም ስለለመደው ተውን እንጂ በሂደት ይቀየራል የሚል እምነት አለን።

For Mathematics we prefer the English term if it is already present in English. We do not reject. As Mathematics expert, the term *shallago* 'o' 'mathematics' does not represent the concept Mathematics. The Hadiyya terms *shallago* 'o' indicates simple arithmetic and therefore, it would have been better if we said mathematics. If the panel were active, we would replace it. The area that we graduated is also said mathematics since mathematics is very wide concept. It is also science. *Shallago* 'o' refers to simple arithmetic. We left it as it is since children and the community have already acquired. I think it will be changed in the future.

19. ጠ:- ከሌላ ቋንቋ ቃላትን መዋስ ሲያስፈልግ፤ አብዛኛውን ጊዜ የውሰት ምንጭ ሆኖ የሚያገለግል ቋንቋ የትኛው ነው? ያ ቋንቋ ለምን ተመራጭ ሆነ?

I: Which language is mostly used when lexical borrowing is needed? Why?

20. ተ:- ለውሰት ሲሆን በአብዛኛው ወደ እንግሊዝኛ ነው፤ ቀጥሎ አማርኛን እንጠቀማለን። ለውሰት የረዱን ቋንቋዎች ሁለቱ ናቸው። ምክንያቱም ሁለቱም ቋንቋዎች ሳይንሳዊ የሆኑ ጽንሰ ሀሳብን በመግለጽ ያደጉ ናቸው።

P: For borrowing purpose we mainly use English and next to English we use Amharic. The two languages are used for borrowing because they are developed to express scientific concepts.

21. ጠ:- ሌላ ከ1-4 ሲዘጋጅ የጽንሰ ሀሳቦች ኮንስትሬንሲ ወጥነት ስያሜ ቃላቱ (ቴርሞች) በፊደላትና በቃላት ደረጃ ወጥ እንዲሆኑ መከታተያ ስልት ነበር ወይ?

I: Well. Did you have controlling mechanisms to maintain consistency of terms in spelling and lexical level?

22. ተ:- እሱን ምን ያደረግን መሰለህ? በእያንዳንዱ መጽሀፍ መጨረሻ ገጽ ላይግሎሰሪ አዘጋጅን። አሁን ያ ግሎሰሪ እየበዛ ሲመጣ ነው ዲክሽነሪ ያስፈልጋል ያልነው። ግሎሰሪ ህጻኑም እንዳይቸገር፤ መምህሩም አዲስ ነው ያኔ በእንግሊዝኛ ወይ በአማርኛ ነበር የተመረቀው። ስለዚህ ግሎሰሪ በመጨረሻ ገጾች ላይ ስለዘጋጀን ለቴርሞቹ አይቸገሩም። በተለይ አዳዲስ ቴርሞች የፈጠርናቸውን እዚያ ላይ ስለስቀመጥን አልተቸገሩም።

P: What we did was that we developed and added a glossary at the end of every textbook. When that glossary became expanded, we agreed to compile a dictionary. The glossary helped children and teachers because teachers were graduate in Amharic or English medium. Therefore, since we prepared a glossary at the end of textbooks, they could easily understand particularly newly coined the terms.

23. ጠ:- መዝገብ ቃላትም ሆነ የሂሳብ መማሪያ መጻህፍት ስታዘጋጁ ከአጻጻፍ አንጻር ወጥነት እንዲኖር የቋንቋን መደበኛነት (ስታንዳርድ) ከማስጠበቅ አንጻር የቋንቋ ሰዎችን ተጠቅማችሁ ነበር? ካልተጠቀማችሁ ምክንያታችሁ ምን ነበር?

I: Had you been working with language experts to keep consistency in spelling when you were preparing Mathematics textbooks or dictionary? If not, why?

24. ተ:- በጣም ጥሩ! ጥሩ ጥያቄ ነው። እንግዲህ በዚያ ሰአት የኛ ዞን ምሁራን ተጣምረን ነው የነበረው። ለእያንዳንዱ ለሻለጎ አንድ የቋንቋ ምሩቅ ነበረን። ከእኔ ጋር የነበሩት ጋሽ ገብረኪዳን አንኪሶ ናቸው። ቋንቋ ምሩቅ ናቸው፤ የቋንቋን ህግ እንዳይጣስ እሳቸው አሉ። እኔ ይዘቱ ደግሞ እንዳይዛባ እኔ አለሁ። ስለዚህ ከመነሻ ራሱ አፊንት የሚያደርጉት የቋንቋ ሰዎች አልተለዩንም ነበር። አሁን ለምሳሌ፣ ለአካባቢ ሳይንስ ራሱን የቻለ ባለሙያ አለ፤ በራሱ በዚያው የተመረቀ አለ። የቋንቋ ሰው ከሱ ጋር አንድ ነበር። የሀዲይሳ አዘጋጆች ሙሉ በሙሉ የቋንቋ ባለሙያዎች ስለሆኑ አልተቸገሩም። ግን እነሱም ከኛ የሚወስዱት ነገር አለ፤ አንድ አዳራሽ ውስጥ ነዋ ያለነው። አንዳንድ ሳይንትፊክ ወርዶች (words) ሲያጋጥሙ የግድ በኛ እንዲዘህ ብንተረጉም ትርጉም ሊያጣ ነው። የተፈለገው ስለሳይንስም ስለሂሳብም ግንዛቤ እንዲኖር ነው የዚህ ቃላት ትርጉም ይላሉ - ሀዲይሳ ሲያዘጋጁ። ይጠይቁናል፤ እኛም ሀሳብ እንሰጣለን። ስያሜ አሰጣጥ እንዳይደበላለቅ እዚያው እንጠይቃለን ወጥነት እንዲኖረው። መለወጥ አይችልም አንዴ የወሰነው ቴርም አይለወጥም። አሁን የሚለወጥም ከሆነ እንደገና መቀመጥ ያስፈልጋል። የሚለወጠው ምንጊዜ ነው? ፊድ ባክ (feedback) ሲመጣ ነው። ዝም ብለን አንለውጥም። ታች ወርዶ ሲመጣ፤ ግን ያ ሶስት አራት አመታትን ይፈጃል።

P: Very good. It is good question. During that time scholars from our zone were in pair. For every Mathematics writer there was one language graduate. Gebrekidan Onkiso was with me. He was language graduate and he check the language rule. I took care of content so as not be distorted. From very beginning people from language area were with us. For Environmental science, for instance, there is independent expert who graduated in the area. From language area, one individual was assigned. Since the Hadiyya language developers were all language experts, they did not encounter problems. However, they had a chance to share experience from us because we were in one hall. The Hadiyya language developers sometimes encountered problem of translation for the meaning of some scientific words and we suggest terms. To avoid inconsistency of terms, we ask each other immediately while we were working there. Once we decided on a term we use it consistently. After some year's usage, some terms could be revised and replace based on the feedback.

## Appendix VI: Transcripts of focus group discussion

### FGD 1

1. ጠ (ጠያቂ):- የ\_\_\_\_\_ ትምህርት ሲያስተምሩ በ\_\_\_\_\_ ትምህርት ውስጥ ባሉት ቃላት የሚያጋጥሙ ችግሮች ካሉ ጠቁሙ።

R (Researcher, henceforth) : Please discuss terminology or word related problems that encounter when you teach \_\_\_\_\_ subject.

2. ተ (ተሳታፊ)1:- አንዳንድ ጊዜ የውሰት ቃላት ተማሪዎችን ያደናግራል። ለምሳሌ፣ አንድ ጊዜ ሳስተምር አንድ ተማሪ ጂኦሜትሪ የሚለውን ቃል በአማርኛ እንዴት (በምን ልንገልጽው እንችላለን ብሎ ጠየቀኝ። የቃሉን ጥንተ፡አመጣጥ ከግሪክ እንደሆነ ገለጽኩለት። የሚወከለውንም ሀሳብ ገለጽኩለት። ሌላ ጊዜ ሌላ ተማሪ፣ አንግል ማለት ምን ማለት ነው ብሎ ጠየቀኝ። ቃሉ ራሱ ቀጥታ መምጣቱና ወደ እኛ አለመተርጎሙ ግርታን እንደፈጠረ አስተዋልኩኝ። በውሰት የሚመጡ ቃላት ናቸው ግር የሚያደርገው። ይህ ቃል ቅርብ ጊዜ በተሻሻለው የሂሳብ መጽሀፍ ዘዌ በሚል ተተክቷል።

P1: (Participant, henceforth): Sometimes loanwords confuse students. For instance, sometimes ago while I was teaching about geometry one of my students asked me to tell him its meaning in Amharic. I told him the etymology of this word that comes from Greek. And I also told him the idea which is represented by the term. Some other time, one of my students had also asked me that the meaning of angle in Amharic. I recognized that direct borrowing has made a confusion to my students. This word, of course, has been replaced with *zawe* in recently revised Mathematics textbook.

3. ጠ:- በ\_\_\_\_\_ ትምህርት (መማሪያ መጽሀፍ) ውስጥ ለሚታዩ የቃላት ችግሮች (ግርታ) ምክንያቶቹ ምንድናቸው?

R: What are reasons for the lexical problems or confusions that appeared in \_\_\_\_\_ textbook?

4. ተ2. :- ከውሰት ይልቅ ሲነገር የሚሰሙዋቸውን ቃላት አስፋፍቶ መጠቀም ቢቻል ግር አይላቸውም።

P2: It is better words if familiar words are used by extending their meaning rather than using borrowing.

5. ተ3.:- ብዙ ጊዜ በውሰት ቃላት የመግባታቸው ምክንያት ስልጣኔ ልዩነት ይመስለል። የስልጣኔ መቅደም፣ በአገራችን ቋንቋዎች ተጽእኖ እንዳለ ይታያል። በሌላ በኩል፣ አማርኛ የተለያዩ ዘዎች አሉ። እዚህ የሚነገረው ግን ማእከላዊው (ሴንተራል) አማርኛ ነው። ሆኖም በአዲስ አበባ የመማሪያ መጽሀት አዘጋጆቹ እዚህ የሚነገረውን ዘዌ የሚጠቀሙ አይመስልም። የራሳቸውን ጠበቅ ያለ ዘዌ ሲጠቀሙ ይስተዋላሉ። ያ ደግሞ ተማሪዎቹን አንዳንዴ ግራ ያጋባል።

P3: It seems that in most of the cases the reason for borrowing is emanating from the difference of civilization. The impact has been observed in our languages due to the primacy of civilization by others. Amharic has different dialects. The variety spoken here in Addis is the central Amharic. However, the textbook developers have not been using the variety used in Addis Ababa. They are using their own dialect and this confuse students.

6. ተ4:- በውሰት የገቡት ቃላት ፍቻቸው አይሰጥም፤ ለምሳሌ በአማርኛ ትምህርትም ጭምር ፍች ስለማይሰጣቸው ግራ ያጋባቸዋል። ለምሳሌ አምፖል የሚል ቃል ለተማሪዎቹ ግር እንዳያስኛቸው ትርጓሜ መስጠት ቢቻል ጥሩ ነው። ብዙ የእንግሊዝኛ ቃላት በአማርኛ ፊደላት ተጽፈው ይታያሉ። እሳቤዎቹ ግን ለተማሪዎች ግልጽ እይደሉም። በእርግጥ እሳቤዎቹ በአማርኛ የሌሉ ናቸው።

P4: Including Amharic subject, meanings for loanwords were not given. As a result, this confuse students. For instance, the word አምፖል *ampol* 'bulb' should be defined to avoid confusion for students. There are

many English loanwords which are written in Amharic symbols. The concepts are not clear for students. In fact, the concepts do not exist in Amharic.

7. ጠ:- እንዴት ቢሆን ይሻላል ትላላችሁ?

R: what do you recommend so as to minimize such problems?

8. ተ3:- አሁን እዚህ ጋ መጻህፍት ሲዘጋጁ መምህራንን መርጠው ቢያሳትፉ በጣም መልካም ነው ብዬ አስባለሁ። በተጨማሪም የቋንቋ ባለሙያ የሆኑ፤ እሳቤዎችን መተርጎም፤ መሰየም የሚችሉ መምህራን ተመራማሪዎችም ቢሳተፉ የተሸለ ይሆናል ብዬ አስባለሁ። ያ ነገር ቢቀረፍ በራሳችን ቋንቋ የራሳችንን ዜጋ መቅረጽ እንችላለን።

P3: I think engaging selected teachers in the textbook development team is advisable. Moreover, language experts, teachers and researchers who can translate and designate concepts should take part in the process. In this way, if this problem is solved, we can shape our citizen using our language.

9. ጠ:- በ\_\_\_\_\_ ትምህርት ውስጥ አለስፈላጊ ስያሜ ወይም ሀሳብን በትክክል የማይወክሉ ስያሜ ቃላት ካሉ ያስረዱ።

R: would you explain if there are words that do not represent concepts in the subject you are teaching?

10. ተ1:- መጽሀፎቹ በአማርኛ ቢዘጋጁም ጠጠር ያሉ ቃላት አሉ። በአካባቢ ሳይንስ፤ የተዘጋጀበት ቋንቋ አማርኛ እንኩዋን ሆኖ ለተማሪም ለመምህራንም ያልተለመዱ አዳዲስ ቃላት ይበዛሉ። የቃላቱ ክብደት የሚመጣው ደግሞ በአካባቢ አኗኗር ምክንያት ነው። ለምሳሌ ሸዋ ውስጥ የሚወራ አማርኛና ወሎ፤ ጎጃም የሚወራ ቋንቋዎች ይለያያሉ። አዲስ አበባ ውስጥ የምናወራው አማርኛና ወጣ ብለን የምናገኛቸው ቃላት ይለያያሉ። ምናልባት ከዚያ የመጣ ነው። በመጻህፍት ዝግጅትም ወቅት ከየቦታው የመጡ ሰዎች በዝግጅት ውስጥ ተካተው ይሆናል እንደዚህ አይነት የቃላት ልዩነት የመጣው። ለዚህም እንደ መፍትሄ በአዲስ አበባ የሚዘጋጀው አማርኛ ወይም ሌሎች መጻህፍት በዚያ ክልል ባሉ መምህራን ቢዘጋጁ ለተማሪዎቹ አጋዥ ይሆናል።

P1: Even though the texts are prepared in Amharic, they include a bit difficult words. In Environmental science, for instance, even though medium of instruction is Amharic there are unfamiliar words for both students and teachers. The reason for the difficulty of words is geography. For example, the Amharic spoken in Shewa, Wollo and Gojjam are different. There are lexical variations between Amharic spoken in Addis Ababa and out of Addis Ababa. Perhaps the difficulty arises from this. Such lexical variations occurred probably due to the inclusion of people from different dialects during textbook development. As a recommendation, therefore, if Amharic and other textbooks are prepared by teachers who are selected from the same region, it would be helpful for students.

11. ጠ:- በ\_\_\_\_\_ ትምህርት ውስጥ አዳዲስ ቃላትን ለመፍጠር ለአዳዲስ ቃላት ስያሜ ለመስጠት ውጤታማ መንገድ የሚሉት ካለ ይጠቁሙ።

R: Would you suggest productive way of designating concepts in the subject you are teaching?

12. ተ5:- እንደ እኔ አስተሳሰብ ወደ ውስት ከመሄድ ይልቅ ነባር ቃላትን አገጣጥሞ መሰየሙ ተማሪዎች የበለጠ እሳቤውን እንዲረዱ ያግዛቸዋል ብዬ አስባለሁ። አንድን ቃል መዋስ ግድ ሲሆን የተውሰውን ምንጭ ቢታይ ለምሳሌ በትእምርተ ጥቅስ ማስቀመጥ ይቻላል። ወይ ደግሞ በመጽሀፉ መጨረሻ ላይ ማብራሪያ መስጠት የተሸለ ነው ብዬ አስባለሁ።

P5: I think designating concepts by combining the existing words would help students easily understand the concepts. When it is mandatory to borrow its source should be indicated in quotation or it is better to give explanation at end of the book.

13. ጠ :- የ\_\_\_\_\_ ትምህርት ተማሪዎች ሲማሩ ብዙ ጊዜ የሚገጥማቸው ቃላትን የተመለከቱ ችግሮች ካሉ ምን አይነት ናቸው?

R: What are frequently occurred word/terminology related problems in \_\_\_\_\_ subject? If there are.

14. ተ1:- ዘዬ፤ ቃላትን ባንጠቀም፤ አሁን አ.አ የሚነገሩ ቃላት አሉ እነሱን አዘጋጃቸው ቢጠቀሙ ተማሪዎቻችን በቀላሉ ሊረዱ ይችላሉ። አብዛኛው እንዲያውም ወደ ባህር ዳር አካባቢ የሚጠቀሙ ሰዎች ያዘጋጁት ነው የሚመስለው። ያ ነገር ለኛ ተማሪዎች በጣም አስቸጋሪ ነው የሚሆነው። እኔ አሁን አማርኛ ሳስተምር፤ ለእኔ ቀላል ነው ብዬ ያስብኩት ለእነሱ በጣም ይከብዳቸዋል። በእርግጥ የእኔ ቤተሶቼ ከጎጃም አካባቢ ስለሆኑ ለእኔ አይከብደኝም፤ ግን ተማሪዎቼ ከተለያዩ ብሄር ብሄረሰብ የሚመጡ ስለሆኑ ለእነሱ ይከብዳቸዋል፤ ማእከላዊ የሆነ የአማርኛ ቋንቋ ቢጠቀም ተማሪዎቻችን በቀላሉ ሊረዱ ወይም ሊገነዘቡ ይችላሉ።

P1: It is better if we do not use words from dialects. It is advisable if the textbook developers to use words from Addis Ababa variety since it help students' comprehension. The language use seems the books are mostly developed by people from Bahirdar. This would be difficult for our students. While I am teaching Amharic, words which appear simple to me become complex for them. In fact, my families are from Gojjam it is not difficult to me to understand. However, since my students are from different nation and nationalities, it would be difficult for them to comprehend. If words from common (standard) Amharic have been used, our students would understand the concepts easily.

15. ጠ:- እርስዎ በሚያስተምሩት ትምህርት የአጻጻፍ ስርአትን በሚመለከት ተማሪዎች የሚገጥማቸው ችግሮች ካሉ ባጭሩ ይግለጹ።

R: Explain in short, if there are spelling related problems in the subject you are teaching?

16. ተ2:- ተማሪዎች አንድ ቃል በተለያዩ አይነት ቅርጽ/ፊደል ሲጻፍ ሌላ ትርጉም የሚሰጥ ይመስላቸዋል። ለምሳሌ እኔ ሳስተምር ውኃ የሚለውን አንዳንዴ ኃ አጠቀማለሁ፤ አንዳንዴ ሐ ን አጠቀማለሁ። አንዳንዴ ሃ ን አጠቀማለሁ። እኔ አይታወቀኝም። እኔም ...አንድ ተማሪ አንድ ጊዜ ይሄ ነገር ልዩነት አለው ወይ ብሎ ጠየቀኝ። ትቸር አንዳንዴ በሐመሩ ሐ አንዳንዴ በሀሌቱ ሀ አንዳንዴ ደግሞ በኃ ይጻፋል። ይሄ ነገር ልዩነት አለው እንዴ ብሎ ጠየቀኝ። በዚያ ጊዜ ድምጹም አንድ ነው፤ ምንም ልዩነት የለውም አልኩት። ተማሪውም ፣ ሲለያይ የሚለያይ ይመስለኛል አለኝ መልሰ።

P2: When one word is written in different forms or symbols, students perceive that those forms have different meanings. For example, while I am teaching, sometimes I use ኃ <xa> to spell the word for 'water' using ኃ <xa>, as in ውኃ <wixa>, sometimes ውሐ <wiha> or ውሃ <wiha>. I would not be conscious while I am writing such words. One day, one of my students asked me that whether there is meaning difference among those words or not. I responded that the symbols have the same sound and there is no meaning difference. My students told me that when the symbols are changed he perceives that the change brings meaning difference.

17. ጠ:- ሌሎቻችሁ ያጋጠማችሁ ነገር ካለ?

R: Who else would share us his/her encounter?

18. ተ5:- እሺ እኔ ደግሞ ያጋጠመኝ አንደሱም ባይሆን ሀለሐ...ብለን አዘምድ ላይ ንጉሱ ሠ እና እሳቱ ሰ ሚባሉት ላይ ግራ ያጋባቸዋል። የትኛው እንደ ሆነ መለየት ያቅታቸዋል። በፈተና ወቅር ምርጫ ወይም አዘምድ ላይ የትኛውን /s/ አንጻፍ ይሉኛል።

P5: Ok, my encounter is somewhat different. When I provide matching exercises by the symbol order ሀ <h>, ለ <l>, ሐ <h>... the symbols so called ንጉሱ ሠ *nigusu s* and እሳቱ ሰ *issatu s* usually confuse them. It would be difficult to identify for them. During exam, in multiple choice and matching items they asked me that which of the /s/ symbols they should write.

19. ጠ:- ወጥነትን ከማስጠበቅ አንጻር ምን ቢደረግ ይቻላል ብላችሁ ታስባላችሁ?

R: What do you suggest to follow regular way of writing for Amharic words which include redundant symbols?

20. ተ1:- የአማርኛ ፊደላት ውስጥ የሚደጋገሙ አሉ። ከድግግሞሹ በተቻለ መጠን ማስቀረት የሚቻለውን ማስቀረት የተሻለ ይመስለኛል። ለምሳሌ አሁን ሰ፣ ሠ አለ። ሀ፣ ሐ፣ ኃ አለ። አ፣ ዐ አለ። ጸ፣ ፀ ም አለ። ስለዚህ አሁን ከእነዚህ አንዱ ለዚህኛው ያገለገለው ለዚህኛም ማገልገል አስከቻል ድረስ አንዱን ብንወስድ ምን ችግር አለው እላለሁ።

P1: There are redundant symbols in Amharic. In my opinion, it is better if the redundant symbols are dropped. For instance, there are symbols ሰ, ሠ for <s>; ሀ, ሐ, ኃ for <h>; ጸ, ፀ for <s'>. Therefore, it is not problematic if we use one of the redundant symbols since one symbol serves the function of the other.

21. ተ2:- ትርፍ ፊደላትን መቀነስ በሚለው ላይ የእኔ ሀሳብ ደግሞ የተለየ/ተቃራኒ ነው። ምናልባት መጀመሪያውኑ ለምን ተቀረጸ? አገልግሎት ከሌለ ይሄ ለምን ተቀረጸ ማለት ፈልጌ ነው። ምክንያቱም ለምሳሌ ኃይለ ማርያም፣ ኃይለ ሥላሴ በሚሉት ኃ ን የምንጠቀመው። ብዙ ጊዜ ሓ ብንጠቀም ውይይት እኮ ብዙ ጊዜ አይጠቀሙም የሚሉ አሉ። እና የተቀረጹ ፊደላት የራሳቸው ትርጉም ሊኖራቸው ይችላል። በስርአት ስትሄድ የራሱ መሰረታዊ ምክንያት ሊኖር ይችላል። ስለዚህ ፊደል ቀራጮች ሲቀርጹ ፊደሎቹ እራሳቸው እሚገቡበት ቦታ ያለ ይመስለኛል። ስለዚህ እኔ ይቅር የሚለው ነገር የሚያስኬድ አይመስለኝም። ግን ትርጉማቸው በግልጽ መጻህፍት ላይ ቢታተም ጥሩ ነው። ለምሳሌ ብዙኃኑ ኀ ን ምንጽፍባቸው ቃላት እነዚህ ናቸው። ሐመሩ ሐ ን ምንጠቀምባቸው ቃላት እነዚህ ናቸው የሚል መግለጫ መጻህፍት ላይ ቢኖር። አብዛኛው አርቶዶክስ ቤተ ክርስቲያን አካባቢ ሲታይ በጣም ተጠንቅቀው ነው የሚጠቀሙት። አገልግሎት ከሌላቸው ሲጀመር አይቀረጽም ነበር። ነገር ግን እነዚህ እናስወግድ ሳይሆን፣ የሆነ መግለጫ ነገር ቢኖር እነዚህን ሆሄያት ስንጠቀም ለዚህኛው ቃል ነው የሚል በመማሪያ መጻህፍቱ ላይ ቢሰጥ/ቢኖር እንጂ ተመሳሳይ የሆኑት ይቅሩ የሚለውን በፍጹም ተቃዋሚ ነኝ።

P2: I have different opinion with regard to the idea of dropping symbols which are called extra. If there was no purpose, why were the symbols devised in the first place? For instance, we use the symbol ኃ <xa> in writing proper name ኃይለ ሥላሴ <xaylā šillase>, or ኃይለ ማርያም <xaylā mariyam>. When those symbols had been devised there could have been good reason as to where and how to use those symbols. Thus, I do not think discarding the symbols is advisable. Their usage should be indicated in books rather than omitting them. It is better if a brief guide or explanation is provided. The guide, for example, could indicate that these are the words we use ብዙኃኑ ኀ *bizuxanu xa*, ሐመሩ ሐ *haməru ha*. In the Orthodox Church contexts, people use those symbols with a great care. If there is no function, they would not be devised. The solution is not dropping the symbols, rather providing guideline of usage in textbooks. I strongly disagree with the idea of dropping the symbols.

22. ተ4:- ቤተ ክርስቲያን አካባቢ ጥቅማቸውን ያውቋቸዋል። ያለ ጥቅማቸው አይጽፉም። በዚህ በኩል ግን ደካማ የሆነው መንግስት ትምህርት ቤት አካባቢ ነው። ሀሌታው ሀ ን ለምን እንደሚጠቀሙ ፣ ሐመሩ ሐ የት ጋ እንደምትገባ ወይም በየትኞቹ ቃላት ውስጥና ለምን? እንደሚጠቀሙ ያውቃሉ። አሁን እንደተገለጸው መጽሀፉ ላይ ጠቀሜታቸው ተቀምጦ በስርአቱ ስላልተጠቀምነው ነው። ዝም ብለን እጃችን ላይ ብቻ በመጣው እየጻፍን ነው። የፊደሎቹ ጥቅም (አጠቃቀም) ምን እንደሆነ አናውቀውም። አጠቃቀሙ እንደ ቋንቋ (አጻጻፍ) ህግ ቢቀመጥ ጥሩ ነው። ከድሮ በርግጥ የሚጻፍበት ስርአት ነበር። ነገር ግን በመማሪያ መጻህፍት ስላልተቀመጡ እየተረሳ መጥቷል። የፊደላት አጠቃቀሙ ከስርአቱ ውጭ እየሆነ መጥቷል።

P4: The use of those symbols is well-known in the Church context and they do not write without their function. In this regard, noting has been done in public schools. They know why or how to use symbols such as ሀሌታው ሀ *halletaw ha* and ሐመሩ ሐ *haməru ha* and they know where or in which of the words the symbols are used. As explained by other colleagues, the problem is lack of guidance in textbooks as to

how to use those symbols in writings. We usually write words as we wish. And we do not understand the proper usage of those symbols. It would be better if the usage is indicated or summarized as writing conventions. In fact, there had been writing conventions starting from earlier times. However, they are being forgotten since the use of graphemes are not indicated in textbooks and the use of symbols is becoming out of order.

23. ጠ:- ስለዚህ ከአጻጻፍ አንጻር አማርኛ ስታንዳርድ አለው ማለት ይቻላል (በአሁኑ ጊዜ)? (ቢያንስ በትምህርት አውድ)

R: Do you think Amharic has standard in relation to spelling convention at least in the educational domains?

24. ተ3: አለው ማለት ይከብዳል። ምክንያቱም ባንድ መጽሀፍ ውስጥ በአንድ ቦታ የተጻፈ ቃል በሌላ ቦታ በሌላ ፊደል ተጽፎ ልታገኘው ትችላለህ። ህግ ያለ አይመስለኝም። ነገር ግን ህግ ወጥቶ ግልጽ አቀማመጥ ቢኖር ሁሉም ሰው ቢማረው ሁሉም አንድ አይነት ወጥ ጽሁፍ መጻፍ ይችላል ነበር። ለምሳሌ፣ ሀሌታ ሀ ለዚህ ነው፣ ሐመሩ ሐ ለዚህ ነው። እንደዚህ ተብሎ ቢዘረዘርልን ሁላችንም አንድ አይነት ጽሁፍ መጻፍ እንችላለን ነበር። ለምን እንደዚህ የሚያደርግ በትምህርት ቤት ደረጃ በፍጹም አላየሁም። በየትኛውም የመማሪያ መጻህፍት ላይ አላየሁም። በዚህ ጻፍ፣ በዚህ ጻፍ ያለኝ መምህር የለም። ስለዚህም ባገኘሁት (በተመቸኝ) ነው የምጽፈው። ህግ ቢወጣለት ወይም ማብራሪያ ያለው ለሁሉም እንዲዳረስ ሆኖ ቢወጣ ሁላችንም ወጥ የሆነ አጻጻፍ እንከተል ነበር። አንድን ቃል ወጥ በሆነ ፊደል መጻፍ እንችላለን ነበር ማለት ነው።

P3: It is difficult to say it has standard because you may observe a word that is written with one grapheme in one place could be written with another grapheme in the other place. I don't think there is a rule/convention. However, if there has been a writing convention and taught for people everyone could write consistently. For instance, if we told that we should use *halleta ha* for such words, *hamaru ha* for such words, we all could write in a similar way. But I did not come across when this is exercised in any school. I did not see in any textbooks. I had not been taught to follow certain way of spelling. Therefore, I write as I wish. If spelling convention is set, we all will follow the same way of writing/spelling. We would have written a word in similar way.



## FGD 2:

1. ጠ (ጠያቂ):- የ\_\_\_\_\_ ትምህርት ሲያስተምሩ በ\_\_\_\_\_ ትምህርት ውስጥ ባሉት ቃላት የሚያጋጥሙ ችግሮች ካሉ ጠቁሙ::

R(Researcher, henceforth): Is there terminology related problems when you are teaching \_\_\_\_\_ subject for children?

2. ተ(ተሳታፊ)1:- በሂሳብ ላይ ያሉ ቃላት/ ቴርሞች በጣም እየከበዱ ሚሄዱት 5ኛ ክፍል ጀምሮ ነው:: 4ኛ ክፍልና በታች ብዙም አይከብድም:: አንዳንድ ቀደም ሲል በነበረው የሂሳብ መጽሀፍ ከነበሩት ቃላት የተለወጡ ቃላት አሉ:: ባር ግራፍ የሚለውን ድሮ ቁም ግራፍ ይለው ነበር ድሮ:: ያ የድሮው በጣም ቆንጆ ቃል ነበር፤ አሁን አቻ ትርጉም (ኢኩቫለንት ምንገግ) እያለው ለምንድነው ወደ እንግሊዝኛ ያመጡት:: እንዲያውም ኢለመንተሪ ላይ ከውስት ይልቅ የቋንቋው ቃል ነው ሚፈለገው:: እሱ ነገር ቢታሰብ::

P1: Terms in Mathematics become more complex starting from grade 5. For grade 1-4 most of the terms are not complex. However, some designations which were proper in the previous Mathematics textbook is replaced with the less proper terms. For instance, the term ‘bar graph’ had the term ቁም ግራፍ *qum giraf* (stand + graph). The previous one was good; while there is equivalent word for bar why should they have taken the English one. It is better to use words form the language than borrowing particularly for elementary level. This should be considered.

3. ተ2:- አሁን ባልደረባዬ እንደ ደካማ ጎን ከጠቀሰው በተቃራኒ በቅርብ ጊዜ በተገቢ መንገድ የተሻሻሉ የሂሳብ መጽሀፍ ቃላት አሉ:: ለምሳሌ፡ ላክል/ታህት የሚሉት (ካላይ/ከታች) የሚለውን ለመወከል የተሰጡ ስያሜዎች ናቸው:: የድሮ መጽሀፍት ላይ ጠሪና ቆጣሪ ይባል ነበር (ድሮ እኛ ስንማር):: ጠሪ ከላይ የሚቀመጠው ነው፤ ቆጣሪ ከታች የሚቀመጠው ነው:: በዚህ ስያሜ በፍራክሽን ከላይ የሚቀመጠውና ከታች የሚቀመጠው ለተማሪዎች ለመለየት ግልጽ አልነበረም:: የአሁኑ ስያሜ ቁጥሮች ከላይ ወይም ከታች መሆናቸውን ለመለየት ልጆች/ህጻናት አይቸገሩም፤ ይህ የተሻሻለው ስያሜ ጥሩ ነው::

P2: in contrast to weak side mentioned by my colleague, there are also relevant substitutions of words. For instance, the terms *laʔil* ‘upper’ and *tahit* ‘lower’ are designations to represent ‘numerator’ and ‘denominator’. In previous textbooks they were named as *t’əri* (literally, caller) ‘numerator’ and *got’ari* (literally, counter) ‘denominator’. The term *t’əri* ‘numerator’ written above the line in fraction whereas *got’ari* ‘denominator’ written below the line. As to this designation, the number written above the line or below the line in a fraction is not clear for students. In the present designation, however, children can easily understand the numbers which are written above or below the line.

4. ጠ:- አካባቢ ሳይንስ ላይ ከቃላት ስያሜ አንጻር የሚያጋጥሙ ችግሮች ካሉ? ተማሪዎች እሳቤዎችን ለመረዳት በአጠቃላይ እንደ ችግር የሚያነሱት ነገር ካለ?

R: Could you explain if there are terminology related problem encountered in Environmental science? If there are issues/problems raised by students in relation to clarity of concepts?

5. ተ3:- የቃላት ግድፈት (ስፔሊንግ) ስህተት ይኖራል/አለ:: በትክክል አለመጻፍ አለ:: እኛ ቀይረን ነው የምናጽፋቸው::

P: We usually encounter the spelling error. There are incorrectly spelled words. In this situation we write the correct form for students.

6. ጠ:- የአማርኛ ተደጋጋሚ (ትርፍ) ፊደላት ከሚባሉት አንጻር በአማርኛ ስታስተምሩ የሚያጋጥሟቸው ተግዳሮቶች ካሉ አስረዱ።

R: Due you have challenges in relation to the Amharic redundant symbols? If so what are the challenges when you teach your subject in Amharic?

7. ተ4:- አንድ ጊዜ አንዲት ባልደረባዬ ስታስተምር ያጋጠማትን ገጠመኝ ሰምቼ ነበር። የአንደኛ ክፍል ተማሪዎች ሲማሩ ሀ /ha/ ብላ አስተምራ ለ ትላለች። ከዚያም እንደገና ሐ /ha/ ትላለች አስተማሪዋ። ተማሪዋ (ህጻንነኗ) የነቃች ነች። እች አታውቅም አለቻት አስተማሪዋን። ቅድም ሀ /ha/ ብለን አሁንም ለምን /ha/ እንላለን። እኛ ...ቅድም /ha/ ብለሻል ትቸር ረሳሽው እንዴ አለች ህጻኗ። እነዚህ እንኩዋን ህጻናትን እኛን መምህራንንም ይፈታተናሉ። በተለይ ብዙሃኑ ኀ እና ኸ ዘሮች። እነዚህ ወደ ፊት በጽሁፍ ውስጥ አለም በተቻለ መጠን ይወገዱ ባልልም አጠቃቀማቸው ግልጽ ሚሆንበት መንገድ ቢኖር እላለሁ።

P4: I heard the experience of my colleague that she encountered while she was teaching grade 1 students. When she was teaching Amharic alphabet she said ሀ <ha>, ለ <la> and then she repeated the same [ha] for the grapheme ሐ <ha>. One of the students, who was active, considered the teacher as foolish. She asked her teacher, “We said [ha] previously for ሀ <ha> and why we say [ha] again for ሐ <ha>. Have you forgotten?”. Such redundant symbols, let alone students challenges we the teachers, especially ብዙሃኑ ኀ *bizuhanu ha* and ኸ *ha* variants. Even though I would not say should be dropped, there should be ways to make clear their usage in writings.

8. ተ2:- እነዚህን የምንጠቀምባቸው ጊዜ አለ መሰለኝ። ለምሳሌ ኃ ኃይለ ማርያም የሚሉ ቃላትን ለመጻፍ የምንጠቀምበት ነው። እንዲህ አይነት ስም ሲጻፍ በአብዛኛው የማየው በ ኃ ነው። የተለመደ ነው እንጂ የድምጽ ለውጥ የለውም።

P2: I think there is context where we should use these graphemes. For instance, we use ኃ *ha* to spell the proper name ኃይለ ማርያም *haylā mariyam*. I observe such names are spelled in most of the cases using ኃ. This is the tradition though there is no sound difference.

9. ጠ:- በትምህርት አውድ የአማርኛ ቃላት ወጥነት ባላቸው ፊደላት የማይጻፉበት ምክንያቱ ምን እንደሆነ አስረዱ።

R: What are the causes for the inconsistency of Amharic spelling especially in educational contexts?

10. ተ5:- በአብዛኛው እኛ ራሳችን አስተማሪዎች ይሄን (ፊደል) መቼ ይሄን ደግሞ መቼ መጠቀም እንዳለብን አናውቅም። ከዚህ የተነሳ ልጆቼንም ይሄ በዚህ ሲሆን የቋንቋ ህግ አይፈቅድም ለማለት አቅሙ ላይኖረን ይችላል። ስንማረውም ራሱ ስለአጠቃቀሙ ይሄን በዚህ ሁኔታ ነው ምንጠቀመው ተብለን አልተማርንም፤ በኢጋጣሚ ተጽፎ እናገኛለን እንጂ። በቃ ስትጽፍ ይሄን ነገር በዚህ ጻፈው የምንለው የለም። ከዚህ የተነሳ ልጆቼም እንደፈለጋቸው ነው የሚጽፉት። እንግሊዝኛ ላይ ለምሳሌ photo ማለት ሲገባው foto ብሎ ቢጽፍ ተማሪውን እናቃናለን፤ እንዲህ አይባልም ብለን (ኤክስ እናደርጋለን)። እዚህ ጋ ግን...እኛ መምህራን ራሳችን የፊደላትን አጠቃቀም በሚመለከት በትክክል ተምረን አልመጣንም፤ በቤተክህነት እንደ ህግ የሚጠቀሙትን በወፍ በረር የምናየው ነገር ነው በቃ ብዬ አስባለሁ።

P5: Most of us (teachers) we don't know when to use this and that grapheme. Due to this, we may not have capacity to say children (students) that this is not allowed in the rule of language. When we had been educated as a learner we were not taught about the usage of graphemes; rather we encounter in a written form. There is no way to guide students by saying write this word using this letter. As a result, children write as they wish. We teacher ourselves had not been instructed regarding the use of graphemes except bird's eye view of the use in the Ethiopian Orthodox Church.

11. ጠ:- ሞክሼ ፊደላትን በሚመለከት መወገድ አለባቸው የሚሉና መጠበቅ አለባቸው የሚሉ አሉ። እናንተ ምን አስተያየት አላችሁ?

R: There are people who suggest that redundant symbols should be dropped in the one hand and to keep those extra symbols on the other hand. What is your position (suggestion)?

12. ተፈ:- ሞክሼ ፊደላት ፊደላቱ ከተወገዱ ወይም ማንጠቀምበት ከሆነ ልጆቹ እነዚያን ፊደላት የማወቅ እድላቸውን ያሳጣል። ይሄኛውን ፊደል ምንጠቀመው በየትኛው ቦታ ነው የሚለውን እውቀት መስጠት ይሻላል እንጂ ከመወገድ ይልቅ አሁን ለምሳሌ፤ ንገሡ ሠ ን ምንጠቀመው በምን አይነት ቃላት ነው? እሳቱ ሰ ንስ የምንጠቀመው በምን አይነት ቃላት ነው የሚለው ቢታወቅ ነው እንጂ መወገዱ አስፈላጊ ነው ብዬ አላምንም። ግን የትኛው ጋ ነው ምንጠቀመው የሚለው ቢታወቅ የተሻለ ነው። ይበልጥ አሁን ችግር የሚፈጥረው አማርኛም ያልተማርን አለን፤ ግን ገብተን አማርኛ የምናስተምር አለን። እዚያ ጋ ግን ችግር አለ፤ ግን ከኛ የበለጠ አማርኛ የተማሩ ወይም በአማርኛ የሰለጠኑ ሰዎች የተሻለ እውቀት ይኖራቸዋል ብዬ አስባለሁ።

P6: If the redundant graphemes are omitted, children may not have opportunities to learn those symbols. Rather than omitting the redundant symbols it is better to provide the knowledge of where to use the symbols. It is better if proper use of the graphemes is known. For instance, it should be indicated that in which words ንገሡ ሠ <nigusu sə> or እሳቱ ሰ <issatu sə> is used? Another problem is some of us did not learn Amharic as a major, but we teach Amharic. I believe that those who received training in Amharic would have better knowledge.

13. ጠ:- ስለዚህ እስታንዳርዱን ለማስጠበቅ የሚያስችል የፊደላቱ አጠቃቀም መመሪያ ቢኖር ያግዛል ነው የሚችሉት?

R: so, are you suggesting that spelling guideline is important to keep standard way of writing Amharic?

14. ተ5:- አዎን! በአማርኛ ተመሳሳይ ድምጽ ያላቸውን ፊደላትን አጠቃቀም የሚያሳይ መመሪያ ቢኖር የአጻጻፍ ወጥነትን በቀላሉ ለመጠበቅ ያግዛል።

P5: yes! If there some guideline in relation to the usage of Amharic homophones, it will be easier to follow consistent way of writing.

### FGD 3:

1. ጠ (ጠያቂ):- የ\_\_\_\_\_ ትምህርት ሲያስተምሩ በ\_\_\_\_\_ ትምህርት ውስጥ ባሉት ቃላት የሚያጋጥሙ ችግሮች ካሉ ጠቁሙ።

R (Researcher): Please discuss lexic related problems that encounter when you teach \_\_\_\_\_ subject.

2. ተ (ተሳታፊ)1:- ሂሳብን ሳስተምር የመምህሩ ጋይድ የለውም። በአንዳንድ ርእሶች ከተማሪ ችሎታ ጋር አይመጣጠንም። አሁን ጂኦሜትሪ ውስጥ ስንገባ እንኳን ያለው የ7ኛ ክፍል ነው። ከ3ኛ ጋር የሚመጣጠን አይደለም። እንደነዚህ አይነት ርእሶች ስር የቀረቡት ከተማሪዎች የአቀባበል ደረጃ ጋር ተመጣጥኖ ቢዘጋጅ እንደ እኔ አመለካከት ጥሩ ነው። ጂኦሜትሪ ላይ ያለው 7ኛ ቀርቶ 8ኛ ክፍልም ያለው አይችልም። ያንን የጂኦሜትሪ ፓርት ለመስራት ደግሞ የመምህሩ መመሪያ ያስፈልጋል። ጋይዱ የትምህርት ቤትም የዘንም ችግር ሊሆን ይችላል። ከሌላ ከአማርኛ ጋርም እያዛመድኩ በራሴ ጥረት እያስተማርኩ ነው ያለሁት። ሌላ ግን የቃላት ግድፈት ይሄን ያህል አላየሁም። ሌላው ሀዲይኛን እንደ ሳብጃክት እንደምሰለጥን ሁሉ ሂሳብን በሃድይኛ ስልጠና ወስደን አናውቅም። አካባቢ ሳይንስም በሚመለከት በዘን ደረጃም ስልጥንን አናውቅም፤ ድሮ ካለን ልምድ ተነስተን ነው ምናስተምረው። ስልጠና ብናገኝ ግድፈቱም ምን ላይ እንደሆነ መለየት የራሳችንንም ችሎታ ማዳበር እንችል ነበር አዳዲስ ግኝቶችን ብናገኝ ኖሮ። በእርግጥ በትምህርት ቤታችን መጻህፍት ግምገማ፣ ጥናትና ምርምር አለ ይላሉ። ግን ለትምህርት ቤቱም አላወጣሁም የጎላ ችግርም አላጋጠመኝም ግን ከተማሪ ጋር አይሄድም- አንዳንድ ይዘት ከደረጃው በላይ ነው።

P (Participants)1: There was no teacher's guide while I was teaching Mathematics. Some topics were not compatible with students' level of understanding. When we see the geometry part, it is relevant for grade 7. It is not compatible with grade 3. I think such kind of contents should be prepared in accordance with the students' level of understanding. The content presented in the geometry part even difficult for grade 8. To work on that part teacher's guide is important. Lack of teacher's guide is probably due to a problem of the school and the zone. I am teaching by comparing to the the textbook prepared in Amharic. Other than this, I did not encounter lexical problem this much. The other thing is, as we received training on Hadiyya as a subject, we have never received training on Mathematics prepared in Hadiyya. Furthermore, we also have never received training on Environmental science rather we have been teaching based on our previous experiences. If we received training and got recent development, we would easily identify problems and we enrich our skills. In fact, it has been said that there is book evaluation or research in our school but I did not encounter serious problem except some contents are beyond the level of students.

3. ተ4:- አካባቢ ሳይንስን ሳስተምር አንዳንድ ቃላት ፍቻቸው ግልጽ አይደለም፤ ሁለት አይነት ይሆናል። ከወዲህ ያለው ሀዲይሳና ከወዲያ ያለው የተለየ ነው። ስለዚህ ተማሪዎችን ስናስተምር እንቸገራለን። ቀበልኛው ወጥ አይደለም። ለምሳሌ፤ የሶሮ ሀዲይሳ የሊሞ ሀዲይሳ ተብሎ ዘዬ አለ። ሁለቱን አዋህዶ አንድ አይነት ትርጉም መስጠት ያስቸግራል።

P4: Sometimes the meanings of some words are not clear when I am teaching Environmental science since they are two types. The dialect difference is some times difficult to give single meaning. For instance, there is the Sooro variety and Leemo variety. It is difficult to give one meaning by fusing the two.

4. ተ5:- እኔ በማስተምርበት ጊዜ ሀሳቡ ግልጽ ነው፤ ነገር ግን አልፎ አልፎ የላቲን ፊደላት ግድፈቶች አሉ።

P5: When I teach Hadiyya it is very clear except some problem of spelling errors.

5. ተ6. አካባቢ ሳይንስ ላይ አንዳንድ ግድፈቶች /የስፔልንግ/ አሉ። ከዚህ ውጭ የቃላት አጠቃቀምን በሚመለከት የጎላ ችግር አለ ብዬ የማስበው የለም። በአካባቢው ባለው ተጨባጭ ሁኔታዎች ላይ ተመስርቶ የተዘጋጀ ስለሆነ ለልጆች ተጨባጭ ነው፤ ከተማሪዎቹ ሩቅ ነገር የለም። ለምሳሌ፤ ተክሎችም እንስሳትም ለእነሱ ቅርብ ናቸው።

P6: In Environmental science there are some spelling errors. As to me, there is no serious problem regarding usage of words. Since the textbooks are prepared based on the existing situations, the concepts are concrete for children; there is no abstract concept or thing. For example, the plants and animals are very familiar for them.

6. ጠ :- በ\_\_\_\_\_ትምህርት (መማሪያ መጽሀፍ) ውስጥ ለሚታዩ የቃላት ችግሮች ምክንያቶቹ ምንድናቸው?

R: What are reasons for the lexical problems that appeared in \_\_\_\_\_textbook?

7. ተ4:- ሂሳብ ላይ ይዘቱ ከተማሪ ደረጃ ጋር ቢመጣጠን፤ ይዘቱ ቢሻሻል

P: Regarding Mathematics the problem is complexity of the content and the content should be revised. Other than this, I did not see serous problem.

8. ተ5: በርግጥ የጎሉ ችግሮች የሉም፡፡አንዳንድ መምህራን ለአንዳንድ ቃላት የእንግሊዝኛ ወይም የአማርኛ አቻ በቅንፍ መቀመጡን ይተቻሉ፡፡ ለተማሪዎች እንዲገባቸው ተብሎ በቅንፍ በእንግሊዝኛ ወይም በአማርኛ ተተክቶ ይገኛል፡፡ ያ ጠቃሚ ነው እላለሁ ለማያውቁት አማራጭ መግለጫ ይሰጣል፡፡ አዲሱን ኮንስፕት እንዲረዱት ያደርጋል ብዬ አምናለሁ፡፡

P5: Of course there are no serious problems. Some teachers criticize the English or Amharic alternative words which is written in bracket. The English or Amharic words which are written in bracket is vital to add clarity for students. I believe that is helpful to provide alternative explanation for students who do not know the meaning of words. I think, this will help students to comprehend a new concept.

9. ጠ :- በመማሪያ መጻህፍት ውስጥ የሚኖሩ ስያሜ ቃላት በፍቻቸው የማያሻሙ፣ ቀላል፣ ወጥነት ያላቸው እና ሲጻፉ ቦታ የማይፈጁ ሊሆኑ ይገባቸዋል፡፡ ከዚህ መስፈርት አንጻር በ\_\_\_\_\_ትምህርት ውስጥ ያሉትን ቃላት እንዴት ትገመግማላችሁ፡፡

R: The terms/lexical items that are written in textbooks should be *clear, simple, consistent* and *short*. In relation to this criteria how do you evaluate lexical items that are used in \_\_\_\_\_ subject?

10. ተ6:- እርግጥ ቃላት በአማርኛ ሲጻፍ አጭር ነው፡፡ በቡሉ አማርኛም አስተምሪ አውቃለሁ፡፡ ከዚህ አንጻር በሀዲይኛ ሲጻፍ በጣም ረጅም ነው፡፡ ርዝመቱ ለህጻናቱ ከባድ ነው፤ እንኳን ለአነሱ ይቅርና አንዳንዴ ለመምህራንም ርዝመቱ ያስቸግራል፡፡ አንድን ቃል ሲጻፉ ቦታ ይፈጃል፡፡ ያ ርዝመት ቢኖርም በራሳቸው ቋንቋ ስለሆነ የጎላ ችግር አይኖርም፡፡ በተለይ በአካባቢ ሳይንስ ተማሪዎች ደስተኞች ናቸው፤ እኛም ደስተኞች ነን፡፡

P6: In fact, words are short when they are written in Amharic. I had been teaching Amharic. In relation to this, when words are written in Hadiyya they are very long. The word length is difficult for children; let alone children some times the length is difficult even for teachers. When one word is written consumes much space. Even though this is a problem, since it is their mother tongue the problem is not serious. Particularly when students are learning Environmental science, they are very happy and we are also happy.

11. ተ7 :- የ3ኛ እና የ4ኛ ክፍል አካባቢ ሳይንስ ስፋቱ ረጅም ነው፡፡ አንድን አንቀጽ ለማብራራት ብዙ ይወስዳል፡፡ የቋንቋ ችሎታ ያላቸው ሰዎች መጥነው ያለማቅረብ ችግር ይመስለኛል፡፡ ይህ ብዙ ቦታ ይፈጃል፡፡ መተኪያ ቃላት ሲያጡ እንደ ድርሰት በጣም ያስፋሉ፤ በማብራራት፡፡ ያ ቋንቋ ለምናውቀው ቶሎ ይገባናል፡፡ በአጭሩ መረዳት ለሚፈልግ ግን ቶሎ እንዲረዳ አያደርግም፡፡ ስለዚህ ተማሪዎቻችን ለማንበብ ፍላጎት አይኖራቸውም፡፡ በአማርኛ ምጥን/እጥር ብሎ የሚቀርበው በሀዲይኛ በስፋት እንደ ድርሰት ሆኖ ይቀርባል፤ ቦታ በመፍጀት ነው ሚቀርበው፡፡ ለዚህ ምክንያቱ የሚመስለኝ ከአዘጋጆቹ የቋንቋ ችሎታ ያላቸው በትርጉም ወይም በዝግጅት ስለማይሰተፉ ይመስለኛል፡፡

P7: Grade 3 and 4 Environmental science textbooks are very long. To explain a paragraph, it takes too much space. I think it due to the problem of developers who could not able to present in short. This take much space. When they fail to find a good word, they write as a longer composition to explain. This is clear for those who speak the language. However, for those who want to understand briefly, it is not useful. Therefore, students will not be motivated to read. The points presented in Amharic briefly presented in Hadiyya in length by consuming much space. In my opinion, the possible reason for this is that people with high language skills are not participating in textbook development and translation.

12. ጠ:- በ\_\_\_\_\_ትምህርት ውስጥ አለስፈላጊ ስያሜ ወይም ሀሳብን በትክክል የማይወክሉ ስያሜ ቃላት ካሉ ያስረዱ፡፡

R: Would explain if there are terms that do not represent concepts clearly in \_\_\_\_\_ subject?

13. ተ4:- አዎን አሉ። በተለይ ከእንግሊዝኛ ወደ ሀዲይኛ በቀጥታ የሚገቡ አሉ። የራሳቸው የሆነ ስያሜ ቢሰጣቸው ልጆቹ የበለጠ ይገባቸዋል። በተለይ በሳይንስ ቀጥታ ከእንግሊዝኛ የሚወርዱ ቃላት አሉ። ስለዚህ እነዚህ ቃላት የራሱ ትርጉም/ፍች ከቋንቋው ቢኖረው የበለጠ ለልጆቹ እንዲረዱ ይመቻቻል ብዬ አምናለሁ።

P4: Yes there are. Especially there are words directly incorporated INTO Hadiyya from English. If terms are designated from the language itself, children understand more. Particularly, in Science there are words adopted from English. Therefore, if those words are designated from a language itself, it would be easier for the comprehension of concepts.

14. ጠ :-በ\_\_\_\_\_ ትምህርት ውስጥ አዳዲስ ቃላትን ለመፍጠር ለአዳዲስ ቃላት ስያሜ ለመስጠት ውጤታማ መንገድ የሚሉት ካለ ይጠቁሙ።

R: Would you please suggest effective ways to designate for new terms in \_\_\_\_\_ subject?

15. ተ4:- ብዙ ጊዜ በሀዲይኛም ቋንቋ ከቋንቋ ውስት አለ፤ መዋዋስም ግድ ነው። ያም ቢሆን ለልጆች መደረግ ያለበት በቋንቋው ካለው ልጆቹ ቋንቋቸውን በደንብ ማሳደግ የሚችሉበት የራሱ የሆነ ነገር/ፍች ቢኖረው የበለጠ በልጆቹ አእምሮ ይቀረጻል። እነዚህ ልጆች ሀዲይኛውን በደንብ ማሳደግ እንዲችሉ የራሱ የሆነ ትርጉም ቢሰጠው ጥሩ ነው ብዬ አስባለሁ። ውስት ላይ ብቻ ከተኮርን ቋንቋው እየሞተ ሊሄድ ይችላል።

P4: There is frequent borrowing in Hadiyya, of course it is mandatory. However, if words from language internal resource is used, it will facilitate children's language development and will be more concrete for their imagination. I think, loanwords should be replaced by native equivalents so as to develop their language (Hadiyya).

16. ተ7:- አካባቢ ሳይንስን በሚመለከት ሀዲይኛ በቃላት የበለጸገ በመሆኑ በሀዲይኛ የማይተኩ የውጭ ቃላት የሉም ማለት ይቻላል። ብዙ ወደ ውስት መሄድ አያስፈልግም። እነዚያን ቃላት ግን ያንን በአግባቡ ስለማንጠቀም ነው እንጂ። ይህም ከፍተኛ ሊፈጠር የቻለው ችሎታ ያላቸውን ሰዎች ስለማንጋብዝ ነው።

P7: Regarding Environmental science, since Hadiyya is rich in its vocabulary, it is possible to say that majority of the foreign words could be replaced by Hadiyya equivalent. We do not need to go for borrowing frequently. The problem is that we usually do not use the words properly. This gap is occurred since skillful people are not invited to the textbook development.

17. ጠ :- የ\_\_\_\_\_ ትምህርት ተማሪዎች ሲማሩ ብዙ ጊዜ የሚገጥማቸው ቃላትን የተመለከቱ ችግሮች ካሉ ምን ዓይነት ናቸው?

R: What are frequently occurred word/terminology related problems in \_\_\_\_\_ subject? If there are.

18. ተ4 :- በሀዲይኛ አፋቸውን የፈቱ ልጆች ጽንሰ ሀሳቦችን በሀዲይኛ ለመረዳት አይቸገሩም። ቶሎ ይረዳሉ፤ ትንሽ የሚቸገሩት በከተማ ውስጥ ተወልደው ሀዲይኛ ውስጥ ሲገቡ ይምታታባቸዋል። ምክንያቱም አፍ የፈቱበት በአማርኛ ወይም በሌላ ቋንቋ ሊሆን ይችላል። ከዚህ ውጭ በሀዲይኛ አፋቸውን የፈቱት ቶሎ ይረዳሉ፤ ትምህርቱንም ቶሎ ለመቀበል ይረዳቸዋል።

P4: Hadiyya mother tongue students have no problem to understand concepts. They easily understand. Students who brought up in town they get confused when learn in Hadiyya media because their mother tongue could be Amharic or other language. Those who are Hadiyya mother tongue, easily understand the lesson.

19. ተ7 :- በአካባቢ ሳይንስ ተማሪዎች ከቃላት አንጻር ተቸግረው አያውቁም፤ ብዙ ጊዜ ግልጽ ናቸው።

P7: Regarding Environmental science, in most of the cases terms are clear for students.

20. ጠ:- እርስዎ በሚያስተምሩት ትምህርት የአጻጻፍ ስርዓትን በሚመለከት ተማሪዎች የሚገጥማቸው ችግሮች ካሉ ባጭሩ ይግለጹ።

R: Explain in short, if there are spelling related problems in the subject you are teaching?

21. ተ2:- ሂሳብ በአብዛኛው ቁጥር ስለሚበዛበት የጎላ ችግር የለውም። በተለይ ረጃጅም ቃላትን ሀዲይሳ ትምህርትን ራሱ ሲማሩ ያጋጥማቸዋል። ተማሪዎች ብዙ ጊዜ የሚጠብቅና የሚላላ ወይም የሚረዝም የሚያጥር ድምጾችን ሲጽፉ ይሳሳታሉ። ለምሳሌ፣ marukko, waarukko የሚሉትን ቃላት ሲጽፉ ሊቸገሩ ይችላሉ።

P2: In Mathematics there is no this much problem because the textbooks mainly include numerals. Longer words prevalent while students are learning Hadiyya subject itself. Students usually make errors while they are writing geminated/non-geminated and long/short sounds. For instance, they will struggle in writing words like *marukko* ‘went’, *waarukko* ‘came’.

22. ተ4:- ቅድም በባልደረባዬ እንደተባለው ብዙ ጊዜ የቃላት የመርዘም ችግር አለ። ቶሎ ሀሳቡን እንዳይረዱ ያደርጋል። ለምሳሌ፣ ሲጠብና ሲላላ ቃላት በጣም ይረዝማሉ፤ ቁጥብ ሆኖ አይገለጽም። በተለይ ሀዲይኛ ላቲንን ስለሚጠቀም ደብል ፊደላት ይበዛሉና። እነዚያ ነገሮች አጠር ባለ መንገድ የሚገለጹበት መንገድ ቢኖር ቦታ በማይፈጅ መልኩ። በጣም ለመረዳት አይደለም ለተማሪ ለመምህሩ ግራ የሚያጋቡ ቃላት አሉ። የሚደጋገሙ ወይም የሚጠብቁ ድምጾችን የያዙ ቃላት አጠር ባለ መልኩ የሚጻፉበት መንገድ ቢኖር ቃላትን በንባብ ወቅት በቶሎ ለመረዳት ያስችላል ብዬ አምናለሁ።

P4: As mentioned by my colleague, there is problem of word length. This distract quick comprehension. For example, gemination and vowel length make words longer, and make cumbersome. Parricularly Hadiyya uses Roman-based script, digraph symbols are recurrent and I think a way should be found to represent words in a brief manner. There are difficult words let alone for students even for teachers. If there is a way to write in shorter mode the words that contain repeated or geminated sounds, I think, it enables comprehension.

23. ተ6:- ጥሩ። ተማሪዎች ብዙ ጊዜ ሲጽፉ ይቸገራሉ። ፊደላትን ይገድፋሉ። ብዙ ጊዜ ስማቸውን እንኳን ስጽፉ የሚጠብቁትን ያስቀራሉ። ለምሳሌ፣ lachchaamo የሚለውን ቃል ሲጽፉ ‘ch’ ን ያስቀራሉ። ደግሞም ‘ch’ ን ሲያነቡ ህጻናት ጩ እና ሀ ብለው ለይተው ያነባሉ። ምጠብቀውንና ሚላላውን ሚረዝመውንና ሚያጥረውን መለየት ላይ እኛ ስናስተምር አጥብቀን ብንናገርም ብዙ ጊዜ ያስቀራሉ።

P6: Well. Students struggle while they are writing. They omit symbols. Most of the time even when they were wirting their names, they omit the geminated symbols. For instance, to writer Lachchaamo (proper name, Lit. ‘full of wisdom’), they drop one of the <ch> symbols. On the other hand, when children read <ch>, they read <c> and <h> discretely. Even though we read or pronounce gemination and non-geminated, and long and short vowel properly, they usually omit them.

24. ተ7. አንዳንድ ለህጻናት የሚያስቸግሩ ፊደላት አሉ። እንደ <ph> ያሉ ፊደላት አሉ። ፕ <p> እና ህ <h> አንድ ላይ ነው ጳ <ph> የሚለው። እንደገና ጎሮሮ የሚነኩ አሉ፤ ለምሳሌ waa’a፣ wo’la የሚሉትን ቃላት ሲጽፉ ይቸገራሉ። እነዚህን ፊደላት ከስር ከስር አብጠርጥረው አውቀው ከክፍል ከፍል ቢመጡ ይሻላል። በተለይ ከሌላ አካባቢ የሚመጡ ተማሪዎች ወይም የከተማ ተማሪዎች የሀዲይኛ ድምጾችን የመለየት ችግር ያጋጥማቸዋል። በተጨማሪም የሚረዝምና የሚያጠረውን ሚጠብቀውንና ሚላላውን ለመለየት ይቸገራሉ።

P7: There are some symbols which are difficult for children, for example, <ph>. They symbols <p> and <h> combined together to form <ph> [p’] sound. There are also glottal sounds which is problematic while children are writing words such as <waa’a>, <wo’la>. Students who come from other area or urban area encounter problem of identifying Hadiyya sounds. Moreover, they struggle to identify long or short and geminated or non-geminated sounds.

25. ጥ:- ሀዲይኛን የተማሩት እንግሊዝኛ ወይም አማርኛን ሲያነቡ የሚያጋጥማቸው ችግር ካለ ያስረዱኝ?

R: Would you explain if there is problem of reading for students who learn in Hadiyya mother tongue?

26. ተ5:- ተማሪዎች እንግሊዝኛን ሲማሩ አንዳንድ ፊደላትን ብዙ ጊዜ በሀዲይኛ መንገድ እያነበቡ ይቸገሩ ነበር። ለምሳሌ፣ ኤክስ <x> የሚለውን /ጣ/ [t'] እያሉ ይቸገሩ ነበር። ሀዲይሳ ጩ <c> የሚለውን እንግሊዝኛም ሲማሩ ጩ [c'] እያሉ ይቸገራሉ በተለይ በጀማሪ ክፍሎች። አሁን አሁን በብስለትም (እየተማሩ ሲቆዩ) እየተሻሻለ ነው። ችግሩ በተለይ ሴልፍ ኮንቴንት ስናስተምር ይጎላል። ይሄ በላቲን ፊደል አጠቃቀም የመጣ ነው፤ ልመዱ! እያልን እንዲለዩ ለማድረግ እንጥራለን።

P5: When students learn English they often get confused to pronounce some symbols for they read as they read Hadiyya. For instance, they read the symbol x as [t'], c as [c'] particularly in early grade reading. When they got matured or in later grades the problem is minimized. This problem is more recurrent in a self-contained class. We tell students to identify that this has happened due to the use of Roman script. We encourage the (students) to recognize the differences.

#### FGD 4:

1. ጠ (ጠያቂ):- የ\_\_\_\_\_ ትምህርት ሲያስተምሩ በ\_\_\_\_\_ ትምህርት ውስጥ ባሉት ቃላት የሚያጋጥሙ ችግሮች ካሉ ጠቁሙ።

R (Researcher): Please discuss terminology or word related problems that encounter when you teach \_\_\_\_\_ subject.

2. ተ1 (ተሳታፊ):-በቅርቡ ተሻሽሎ የመጣው አካባቢ ሳይንስ ከተማሪ አቅም ጋር ተመጣጣኝ አይደለም። ጠንከር የሚሉ ቃላት አሉ። ለምሳሌ የደም ዝውውርን በሚል ርእስ ስር የቀረበው ይዘት ውስጥ አንዳንድ ጠንከር ያ ቃላት አሉ። ሳስተምር በጠም ጎበዝ የሚባሉ ተማሪዎች ናቸው የሚረዱት። መካከለኛና ደካም ያሉ ተማሪዎች ይከብዳቸዋል። የመጽሀፉ ሾሊዩምም በጣም ትልቅ ስለሆነ ለመያዝ እንኳን አይመችም። ከዚህም በተጨማሪ መጽሀፉ በመጽፉ የእስፔልንግ ስህተቶች አሉ።

P1: The revised Environmental science textbook is not compatible with the students' level. It included complex words. For instance, the content presented under the topic 'blood circulation' included difficult words for the children. When I was teaching, only few high achiever students comprehend. The words are difficult for medium achiever and low achiever students. The volume of the textbook is not comfortable for students even to carry. Moreover, there are some spelling errors in it.

3. ተ2:- የሶስተኛ ክፍል ሂሳብ ሳስተምር መልመጃዎቹ በግልጽ ቃላት ተብራርተው አልቀረቡም፤ ግልጽነት ይጎለጻል። በተለይ የመጨረሻ ምእራፍ እንኳን ለልጆች ለእኔም ግልጽ አይደለም። የድሮ መጽሀፍ ቢረዝምም ለተማሪ በግልጽነት ያብራራ ነበር። የአሁኑ ግልጽነት ይጎድለዋል።

P2: When I am teaching grade 3 Mathematics, the activities are not presented in clear words or explanations. It lacks clarity. Particularly, the last unit is not even clear for me. The previous version was clearly presented the content though it had longer volume. The present one lacks clarity.

4. ተ3:- ባልደረባዬ እንዳለቸውም መጻህፍት ይቀያየራሉ እንጂ ጥራታቸውን የጠበቁ አይደሉም። የአሁኑ ሂሳብ መጽሀፍ ከድሮው አጥሯል፤ ግን ግልጽነት ይጎድለዋል። 4ኛ ክፍል የመጨረሻ ዩኒት ለእኔ ራሴ ግልጽ አይደለም። ስለመረጃዎች የሚያወራው ዩኒት baa'yaata ይላል፤ ተገቢነቱም ግልጽ አይደለም።



P3: As stated by my colleague, the textbooks are frequently changed without maintaining the quality. The new Mathematics textbook became shortened compared to the previous one but lacks clarity. The unit that presents about *baa'yaata* 'information' is not clear since its relevance is not clear.

5. ተ5:- በሀዲይኛ ስያሜዎች ላይ ችግር የለባችም፡፡ በተመሳሳይ ፍች የሚቀርቡ ነገሮች ተማሪዎች እንዲረዱ ያግዛቸዋል፡፡ ቀበልኛዎች መካተታቸው/ አማራጭ ፍች ተመሳሳይ ይሰጣል፤ ይህም የተለያዩ ቀበልኛ ያላቸውን ተማሪዎች ከማስተናገዱም በላይ ለእነሱ ግልጽነትን ይሰጣል፡፡

P5: As to me in Hadiyya, there is problem of terminology. Providing synonyms helps students to comprehend easily. The inclusion of different dialects provides alternative meaning of words and add clarity to students who has different dialect background.

6. ጠ:- በ\_\_\_\_\_ትምህርት (መማሪያ መጽሀፍ) ውስጥ ለሚታዩ የቃላት ችግሮች ምክንያቶቹ ምንድናቸው?

R: What are reasons for the lexical problems that appeared in \_\_\_\_\_textbook?

7. ተ2:- እንደ እኔ አንድ መጽሀፍ ሲዘጋጅ አስፈላጊው ነገር መዘጋጀት ያስፈልጋል፡፡ አዘጋጁ ኮሚቴ ከዝግጅቱ ቀድሞ የቀደመው መጽሀፍ ያለውን ክፍተት ማጥናት አለበት መጽሀፉን ሲያሻሽል፡፡ በቀደመው መጽሀፍ ላይ ከመምህራን አስተያየት (ፊደባክ) መሰብሰብ ነበረባቸው፡፡ አንድ መጽሀፍ ሲዘጋጅ ለብዙ ጊዜ እንዲሰራ ተደርጎ ለማዘጋጀት አስቀድሞ ጥናት ማድረግና ክፍተቱን በሚገባ መለየት ይገባል፡፡ መጽሀፍት ወዲያው ተቀይረው እናገኛለን፤ የመጣው ለውጥ ግን አይታይም፡፡

P2: As to me, before a textbook preparation is started, the necessary issues should be considered. The textbook development team should study the gap that was observed in the previous books. They should have gathered feedback on the previously prepared books. In order to use a book for longer period of time, the gap should be identified clearly. Though we see the revision of books frequently, we did not see the major change.

8. ጠ:- በመማሪያ መጽሀፍት ውስጥ የሚኖሩ ስያሜ ቃላት በፍቻቸው የማያሻሙ፣ ቀላል፣ ወጥነት ያላቸው እና ሲጻፉ ቦታ የማይፈጁ ሊሆኑ ይገባቸዋል፡፡ ከዚህ መስፈርት አንጻር በ\_\_\_\_\_ትምህርት ውስጥ ያሉትን ቃላት እንዴት ትገመግማላችሁ፡፡

R: The terms/lexical items that are written in textbooks should be *clear, simple, consistent* and *short*. In relation to this criteria how do you evaluate lexical items that are used in \_\_\_\_\_ subject?

9. ተ2:- ሂሳብ ሳስተምር እኔ እንዳየሁት ከሆነ አሻሚነት ያላቸው ቃላት በብዛት አይኖሩም፡፡ ቁጥርም ካልኩሌሽንም ስለሚበዛበት እንደ ሌላው ሳብጀክት ማብራሪያ (ቴክኒክ) አይበዛም፡፡ በቃላት አጻጻፍ ወቅትም የወጥነት ችግር ጎልቶ አይታይም፡፡

P2: According to my observation, there are no confusing terms in Mathematics. Since numerals and calculations are recurrent, there are no lengthy explanations or texts. Furthermore, there is no major problem of consistency of spelling in writing words.

10. ተ1:- በአካባቢ ሳይንስ ላይ ረጃጅም ቃላት አሉ፡፡ ለቃላቱ መርዘም ምክንያቱ የመሚደጋገሙ ደብል ፊደላት በአጻጻፍ ስርአቱ መኖራቸው አንዱ ምክንያት ይመስለኛል፡፡ ከዚህ በተጨማሪ የቋንቋ አጠቃቀም ላይ ቁጥብና ግልጽ አገላለጽ ቢኖር የተሻለ ይሆን ነበር፡፡ መጽሀፉ በአገላለጽ መርዘሙ የተማሪን ፍላጎት እንዲቀንስ ያደርጋል፡፡

P1: There is longer words in Environmental science. I think one of the reasons for the presence of longer words is that there are geminated digraphs in the orthography. Furthermore, the language use in the textbooks should be expressed by brief and clear expressions. Unnecessarily longer expressions reduce students' interest.

11. ጠ:- በ\_\_\_\_\_ትምህርት ውስጥ አለስፈላጊ ስያሜ ወይም ሀሳብን በትክክል የማይወክሉ ስያሜ ቃላት ካሉ ያስረዱ::

R: Would explain if there are terms that do not represent concepts clearly in \_\_\_\_\_ subject?

12. ተ3:- በተለይ በአካባቢ ሳይንስ አንዳንድ ጊዜ በቋንቋው ውስጥ ሊተኩ የሚችሉ ቃላት እያሉ እንዳለ የእንግሊዝኛ ቃላት በሀዲይሳ ውስጥ ይታያሉ:: ይህ አይነት የስያሜ ችግር አልፎ አልፎ በሂሳብ ትምህርትም ይታያል:: ይህ አይነት አጠቃቀም ትንሽ ግራ ያጋባል፤ በተለይ በታች ክፍሎች ላሉ ተማሪዎች::

P3: There English loanwords that can be replaced by Hadiyya words particularly in Environmental science. This kind problem of designation is also occurred in Mathematics occasionally. Such kind of usage confuses especially the lower grade students.

13. ጠ:- በ\_\_\_\_\_ትምህርት ውስጥ አዳዲስ ቃላትን ለመፍጠር ለአዳዲስ ቃላት ስያሜ ለመስጠት ውጤታማ መንገድ የሚሉት ካለ ይጠቁሙ::

R: Would you please suggest effective ways to designate for new terms in \_\_\_\_\_ subject?

14. ተ1:- ብዙ ጊዜ ስያሜዎች በሂሳብም ሆነ በሳይንስ ሲሰየሙ መጀመሪያ ወደ ውስት ከመኬዱ በፊት ከሀዲይሳ ራሱ መፍጠር ላይ መተኮሩ የተሻለ ነው:: ምክንያቱም ተማሪዎች በቀላሉ ሀሳቦችን መገንዘብና ከሚያውቁት ነገር ጋር ማገናዘብ ይችላሉ:: ስያሜ በቋንቋው ማይገኝ ወይም ለመሰየም የሚከብድ ከሆነ ውስትን እንደ ቋንቋው ባህርይ አስማምቶ መውሰድ ይቻላል ብዬ አስባለሁ::

P1: During the designation of concepts, rather than using borrowing it is better to coin words from Hadiyya. If language internal resources are used, students easily comprehend the concepts. In my opinion, if it is difficult to coin terms from the language, adapted borrowing is possible.

15. ጠ :- የ\_\_\_\_\_ ትምህርት ተማሪዎች ሲማሩ ብዙ ጊዜ የሚገጥማቸው ቃላትን የተመለከቱ ችግሮች ካሉ ምን አይነት ናቸው?

R: What are frequently occurred word/terminology related problems in \_\_\_\_\_ subject? If there are.

16. ተ4:- አንዳንድ ጊዜ በሂሳብ ትምህርት ላይ የማየው ለተማሪዎች የሚሰየሙ ስያሜዎች ግልጽ አይመስሉም:: አንዳንድ ቃላት በሀዲይሳ ቋንቋ ውስጥ እያሉ ወይም መተካት ሲቻል የውስት ቃላት ይታያሉ:: ለምሳሌ፤ *tirangila* ከማለት *sasmidaado* ቢባል፤ *iskuweera* ከማለት *soormidaado* ቢባል የተሻለ ለተማሪ ግልጽ ይሆን ነበር:: ስለዚህ እንዲህ አይነት የስያሜ ችግሮች አልፎ አልፎ ይታያል::

P4: As to my observation, designations of some Mathematical terms are not clear. Some terms are borrowed from English even though they can be replaced by Hadiyya words. For instance, *tirangila* ‘triangle’ can be replaced by *sasmidaado* (three+side) ‘triangle’, *iskuweera* ‘square’ by *soormidaado* (four+side) ‘square’. This kind of designation of terms is better for clarity of the concepts. Hence, such kind of terminology problems is seen occasionally.

17. ተ5:- ሀዲይሳን ሳስተምር የጎላ ችግር አላየሁም:: ሆኖም አንዳንዴ ከሌላ ቀበልኛ ያሉ ቃላት ሲያጋጥማቸው ተማሪዎች ትንሽ ግራ ይጋባሉ:: ከዚህ ውጭ አልፎ አልፎ በመጽሀፎቹ የስፔልንግ ችግሮች ይታያሉ::

P5: I did not see a major problem while I was teaching Hadiyya subject. However, students confused somewhat when words form other dialects occur. Moreover, there is some spelling errors in the books.

18. ተ3:- እንደ እኔ አስተሳሰብ አካባቢ ሳይንስ ሳስተምር ተማሪዎች በራሳቸው (በአፍ መፍቻ) ቋንቋ በመማራቸው ብዙ አይቸገሩም። ምናልባት የተማሪዎቹ የመገናኘብ ችግር ካልሆነ በቀር ብዙ አይከብዳቸውም።

P3: As to me, since students learn in their mother tongue, the concepts are not much difficult to understand. Probably the students rather may have a problem of focus.

19. ጠ:- እርስዎ በሚያስተምሩት ትምህርት የአጻጻፍ ስርዓትን በሚመለከት ተማሪዎች የሚገጥማቸው ችግሮች ካሉ ባጭሩ ይግለጹ።

R: Explain in short, if there are spelling related problems in the subject you are teaching?

20. ተ3:- ሌላው ሀዲይኛን የሚመሩ ልጆች እንግሊዝኛን ሲማሩ ይቸገራሉ። ለምሳሌ፣ /l/ ን la ብለው ያነባሉ። ሲ<c> የሚለውን ጫ [č'] ይላሉ የሚያነቡት። ኤክስ <x> አለ፣ እሱን ጣ [t'] ብለው ያነባሉ። ለማንበብ ፍጥነት አላቸው አማርኛን አንበበው ከመጡት ይልቅ። ችግሩ ያችን ፊደል ይሳሳታሉ እንጂ

P3: In children who learn Hadiyya script encounter some problems when they learn English. For example, the read <l> as [la], <c> as [č'], and <x> as [t']. These children have a good reading speed compared to children who learn in Amharic. The problem is they make spelling mistakes.

21. ተ:- ከመጀመሪያ ችግሮች ሲባል የላቲን ፊደላትን ከመሰረቱ ተማሪ በደንብ ከያዘ/ካወቀ አነባብ ላይ ችግር አይኖረውም። ተማሪዎችም ንባብን ሳለማምድ በጥሩ ሁኔታ ይሞክራሉ።

P5: As to me, if students identify the script from very beginning, reading problem will not happen. When I ask them to exercise, they try in a good way.

22. ጠ:- ሀዲይኛን የተማሩት እንግሊዝኛ ወይም አማርኛን ሲያነቡ የሚያጋጥማቸው ችግር ካለ ያስረዱኝ?

R: Would you explain if there is problem of reading for students who learn in Hadiyya mother tongue?

23. ተ5:- አዎን የጽህፈትና የንባብ ችግሮች በተማሪዎች ዘንድ አንዳንዴ ይከሰታል። ለምሳሌ <ph> የሚለውን ሲያዩ ያን በእንግሊዝኛ ላይ እንደ ሀዲይኛ አድርገው የሚወስዱበት ጊዜ አለ። ለምሳሌ ph የሚለውን p እና h አንድ ላይ ሆነው ነው ph [p'] የሚል ፊደል የሰጡት፤ ስለዚህ እንደ ጳ [p'] ያነቡታል። በሌላ በኩል ሀዲይኛን ሲያነቡ p ን ብቻውን ለመውሰድ የሚሞክሩበት ጊዜም አለ። እንደዚህ አይነት ነገሮች በተመሳሳይ የፊደላት አጠማመር ላይ ይታያል። ሀዲይኛን ራሱ ሲያነቡ የሚያጋጥም ችግር ነው።

24. P5: sometimes spelling problem happens in student writing and reading. For instance, when children come across with the symbol <ph> in English, they read ph as [p']. On the other hand, when they read Hadiyya, they try to read discretely the sound [p] from <ph>. Similar kind of problem occur in digraph symbols even they are reading Hadiyya.

## Appendix VII: Summary of interviewees (experts)


Place of data collections: Addis Ababa, Hosaena

No.	Experts	Age	Sex	Academic level	position	Date of interview
1	Expert A	37	F	BA in Amharic	Amharic expert (Addis Ababa Regional Education bureau )	February 17, 2015
2	Expert B	41	M	BA in Geography	Environmental science expert (Addis Ababa Regional Education bureau )	June 10, 2014
3	Expert C	40	M	B.Sc. in Mathematics	Mathematic expert (Addis Ababa Regional Education bureau )	February 18, 2015
4	Expert D	52	M	BA in Edu. planning and mgt', (English minor)	Hadiyya expert (Hadiyya Zone Education bureau)	January 2, 2015
5	Expert E	53	M	Curriculum and Instruction (Geography minor)	Environmental science expert (Hadiyya Zone Education bureau)	May 25, 2014
6	Expert F	43	M	MA in Curriculum and Instruction, B.Sc. in Mathematics	Hosaena College of Teachers Education	May 26, 2014

## DECLARATION

I, the undersigned, declare that this thesis is my original work. This thesis has not been presented for any academic study in any other university, and all sources of material used for this work are clearly acknowledged.

Name: Samuel Handamo

Signature: 

Date: 10/10/2016

Place: Addis Ababa University

This thesis has been submitted for examination with my approval as university advisor.

Confirmed by the advisor: Dr. Ronny Meyer

Signature: 

Date: 10/10/2016