

Article

Lexical Translanguaging in Textbook Preparation for Education in the Gamo Language of Ethiopia

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Abstract: As a country where more than 85 languages are spoken, Ethiopia framed, in its Education and Training Policy of 1994, which was revised in 2021, the right to use mother tongue in primary education. Following this, around 33 languages are implemented in schools as a Medium of Instruction (MoI). Gamo is one of the languages used as a MoI in primary education and taught as a subject up to high school. This functional expansion of Gamo into Education required textbook preparation, and accordingly, textbooks for different subjects, including Gamo as a language subject, were published. One major feature of the Gamo textbooks is availability of Amharic and English words, and this research aims to apply translanguaging, which is the discursive language practices of bilingual speakers to describe the practice of using words from different languages in the textbooks. Lexical data were collected from five textbooks written in Gamo and interviews were held with students and teachers to find out information about the process of textbook writing and translanguaging. The strategies identified in the textbooks include alternative translanguaging, borrowing, lexical inventions and bilingual compounds. These strategies were used to address education in the Gamo language and to communicate meaning effectively. Writers used their Amharic and English repertoire to represent meaning when a word for a concept is not available in Gamo. In other instances, alternative words were provided as a means of enhancing meaning clarity.

Keywords: Gamo; textbooks; translanguaging; lexical translanguaging



Citation: Gelagay, Almaz Wasse. 2023. Lexical Translanguaging in Textbook Preparation for Education in the Gamo Language of Ethiopia. *Languages* 8: 154. <https://doi.org/10.3390/languages8030154>

Academic Editor: Eriko Sato

Received: 3 April 2023

Revised: 18 June 2023

Accepted: 19 June 2023

Published: 26 June 2023



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1. Introduction

Ethiopia is a multilingual and a multiethnic country where more than 85 languages are spoken (Lewis 2009). The languages have had different functions in the social domains over the years. Amharic was mainly used for official communication, education, media and publication after Emperor Tewodros II (1855–1868) declared its use in holy books (Dires 2019, p. 2). After coming to power by overthrowing Emperor Haile Selassie, the Dergu regime announced “a multilingual mass literacy campaign” which allowed for use of a few more languages such as Oromo, Somali, Tigrinya and Wolaitta in 1974 (Cooper 1989, pp. 21–24). The Ethiopian People’s Republic Democratic Front (EPRDF) has taken a new initiative to include more languages in education, media and for other social services, and as a result the right to use students’ mother tongue in primary education and to teach them as a subject at all grade levels was declared in the 1994 Education and Training policy. The revised Education and Training policy of Ethiopia (MOE 2021, p. 8) promotes student multilingualism and gives emphasis to learning different regional and local languages in a statement that says, “Students should learn at least three languages” of which one is a regional language, one Federal language and English at different levels of their schooling. With these policy endeavors, orthography was devised for 50 languages, of which 33 are taught in schools (Ado et al. 2021, p. 5). One of the languages implemented as MoI for primary education is the Gamo language.

The word Gamo refers to three aspects. It is used to refer to a zonal administrative area in the Southern Nations Nationalities and People’s Regional State (SNNPRS) of Ethiopia,

the people who identify themselves to be ethnically Gamo and the Gamo language, which is locally called *Gamotstso* ‘the Gamo language’. Since the focus of this research is on the Gamo language, emphasis is given to its linguistic characteristics. The Gamo language is spoken mainly in South-West Ethiopia by 1,070,626 native speakers, according to an old census (CSA 2008). The language comes under the Afro-Asiatic, Omotic, Central Omoto language category (Bender 1975, p.127). Its dialects amount to 42, with varied degrees of intelligibility (Woldemariam 2005, 2013; Gashe 2010). According to Gashe (2010, p. 33), the percentage of shared cognate words among the dialects ranges from 65% to 98% depending on geographical proximity and socio-historical accounts between speakers. There is high intelligibility among dialects sharing a high percentage of cognate words, and mutual intelligibility is low among dialects with a lower percentage of shared lexical items.

Writing in the Gamo language for education purposes began after a Latin-based orthography was devised in 1993. Following orthography development, there was an effort to fix a standard written grammar and to create terms that make textbook publication and classroom instruction possible in the language (Gelagay 2016, 2021). Textbooks to use Gamo as MoI for primary education and to teach it as a language subject in the middle and secondary grade levels were published. There are two dictionaries, one is Gamo-Amharic bilingual dictionary by Tedla (2000) and the other is by Hayward and Eshetu (2014), which includes English meanings of some Gamo words and a grammatical description of the language. A few other publications are available in offices and school libraries, but they are not accessible to the wider public. Most of the people, who live in Gamo administrative zone, especially in urban places, are multilingual. In addition to Gamo, other languages spoken in the area include Amharic, Wolaitta, Gofa and other Omoto languages. English is also used in education, office communication and in the media. In the coming paragraphs of this section, I will review the theoretical and empirical bases of one of the multilingual practices, namely translanguaging.

Multilingualism has been a recognized norm of communication at a societal and individual level long time ago. In addition to policy initiatives, other strategies are also implemented to accommodate the communicative needs and abilities of multilingual speakers in classrooms or other social settings. One of the pedagogical strategies used in multilingual schools, mostly in Europe and North America, is a bilingual education method. The tendency of bilingual education to consider two languages as being developed and practiced independently without one crossing the linguistic boundary of the other in classroom use was not viewed as appropriate by teachers in Welsh schools (García and Lin 2016, p. 118). So, Welsh educators started to deliberately use both English and Welsh for different instructional purposes (García and Li 2014, p. 20). For instance, students were permitted to read a text in English and to write a paragraph in Welsh. This approach is termed as translanguaging and is taken to be a more flexible means of interaction in bilingual classrooms.

Translanguaging theory refers to a strategy where bi-/multilinguals use their entire linguistic and non-linguistic repertoire to communicate, understand and interpret meaning (García and Li 2014). Initially, translanguaging was meant to include a pedagogical practice of using more than one language to enhance students’ learning and understanding of subject matters taught in a classroom. Later on, researchers such as García and Li (2014, p. 23) expanded its meaning to include “a discursive norm in bilingual families and communities”. It considers that multilingual communication is dynamic and embeds “assembling” of linguistic resources to respond to communicative needs. Blackledge and Creese (2017, p. 250) argue that translanguaging is transformative and creative in providing multilinguals the freedom to select a means of communication amongst the linguistic resources they possess without being constrained by the rules of use of one or the other languages they speak. It is the way bilinguals/multilinguals use their language resources to create meaning, understand their environment and integrate themselves into circumstances they deal with. Translanguaging as a recent development of language practice disrupts the long-standing culture of considering learners’ use of resources other than a target language

to be a mistake, and that promotes a monolingual approach of classroom language use in the auspice of standardization, immersion or of providing sufficient exposure to language learners (García 2019, p. 370).

Earlier theories of bilingualism such as diglossia, balanced bilingualism, additive bilingualism and language transfer reflect that the two languages are developed independently in the minds of the learners. In a diglossic situation, separate functions are allocated to each of the languages of a community. When it comes to a classroom, bilingual speakers are not permitted to mix their languages. Classroom lessons are allocated to each language of the learners and mixing resources from one language during the lesson of the other is not a welcomed practice in bilingualism theory (García 2019, p. 369). Translanguaging, on the other hand, believes that languages are developed in a unitary system. García and Li (2014, p. 22) assert this by saying, “Bilinguals have one linguistic repertoire from which they select features strategically to communicate effectively.” In the view of translanguaging, the two or more languages individuals speak are functionally interrelated. In an earlier work, García (2012, p. 3) positions bilingualism as, “A bilingual person is not two monolinguals in one, with each language linked to a separate culture. Instead, a bilingual person is one person with complex language and cultural practices that are fluid and changing depending on the particular situation and the local practice”. From our everyday practice, it is not difficult to observe that though languages traditionally maintain certain functions in a bilingual community, speakers spontaneously use both languages in a single conversation. Talking without translanguaging has become rare or impossible.

Students who speak one language but receive education in another language have always been regarded as inadequate, incapable of using standard classroom language or ones who have inaccurate proficiency. Translanguaging scholars aim at addressing the needs of such bilinguals whose language practices have been considered inappropriate and non-standard (García and Kleifgen 2019, p. 5; Vogel and García 2017, p. 4). In relation to this, García (2012, p. 2) emphasizes, “Translanguaging is not something that those who do not know do. It does not connote ignorance, or alien status, or foreignness”. For a long time, students who use linguistic features that differ from the medium of instruction have received negative attitude and teacher feedbacks towards their language performance. Translanguaging targets to defy this assumption by expanding the communicative practices of bilingual speakers in a family or community and legitimizing its use in the classroom.

One significant dimension of translanguaging is its multimodality. Multimodality refers to the use of “gestures, objects, visual cues, touch, tone, sounds and other modes of communication besides words (García and Li 2014, p. 28)” to express ideas, understand others and make effective communication. Li (2022, p. 409) states, “A key objective of the translanguaging project is to build a new way of thinking and talking about languages, not as sets of abstractable codes but as multimodal semiotic systems of meaning and sense making”. From this point, it can be understood that bilinguals translanguage when they speak, write, draw, sing or in any actions they take to interact with the world. Writing, which is the focus of this research, is also one mode of communication where translanguaging occurs. Written translanguaging dates back to ancient times when multilinguals used many languages in one text or used the script of one language to write in the other one (García and Li 2014, p. 26).

Many research works confirm that translanguaging is a widely used strategy across the world in classrooms teaching (Zhou 2021), educational material preparation (Fang et al. 2022) and in spoken and written communications of students and teachers (Schwarzl and Vetter 2019), outside the classroom contexts like in business communication, in Karate classes (Zhu et al. 2020) and in translation works (Sato 2017) to name but a few of the contexts. In the classroom context, Cole (2019, p. 244) describes dynamic translanguaging strategies in a lesson designed in English and Spanish for Spanish speaking students in the US. In this strategy, both languages were used to talk to the teachers, but mostly students’ home language was used in conversations between students. Students also drafted paragraphs in their first language Spanish and wrote the final version in English.

Use of translinguaging strategy in the writings of bilingual speakers has also been attested in many contexts. [Dutton and Rushton \(2021, p. 105\)](#) explored how a translinguaging strategy was used in reading and writing poetry classes that “created ‘space’ to support a dynamic process in which students could use all their linguistic resources to produce identity texts”.

Writing, specifically, textbook writing is mostly taken to be formal, consistent and where conventional standard forms are adhered to. Textbooks go through strict editorial and review processes in many contexts. However, recent practices reveal that bilingual writings trespass these establishments, and bilinguals translanguage not only in speaking but also in writing as well. With regards to this, [García and Kleifgen \(2019, p. 6\)](#) assert, “translinguaging in the literacy actions of multilinguals happens even when interacting with and producing what are perceived as monolingual texts.” Researchers in translinguaging field identified strategies bilingual writers use to exploit their entire language repertoire to communicate meaning effectively in writing. Some of these strategies include rehearsal as a strategy of writing, borrowing, translating, lexical invention and code mixing ([Khan and Muhammad 2019, p. 616](#); [Moore and Stoelting 2021, p. 10](#)).

In the Ethiopian context, the Education and Training Policy ([MOE 1994, 2021](#)) requires the use of English in secondary and tertiary education, and regional or provincial languages can be used in primary and middle schools. Though not officially acknowledged and there is no structured bilingual education program, local Ethiopian languages are exhaustively used in many English medium classroom communications at secondary and tertiary levels. English language and content classrooms widely apply students’ languages for different purposes in the form of code-switching or code-shifting ([Temesgen and Hailu 2022](#); [Sime 2019](#)). Though the term is relatively new in Ethiopia, translinguaging is a better, flexible and contemporary term that describes the code-switching scenario. Many Ethiopians are bilinguals, and translinguaging fluidly from one language into the other while speaking or writing is a very common and natural experience. Speakers mix words from one language into the other while speaking. Schools are not out of these kinds of realities. Classroom communications embed teacher translations and code-mixings. However, bilingual practices have never been appreciated by the regulating bodies and the ministry of education. Teachers’ and students’ have always been criticized for not using English exclusively in their classrooms and their translinguaging has been wrongly taken to be an outcome of poor proficiency in the English language.

Though translinguaging research has focused mainly on students’ use of resources from their first language in a second language classroom, a few researchers also showed that translinguaging in a first language classroom and curriculum is also common. [Tai and Wong \(2022, p. 3\)](#) showed that in a first language classroom, translinguaging strategies broaden students’ repertoire and understanding of the world, build their linguistic and cultural repertoire. Translinguaging as a strategy has been attested at planning, drafting and even at the production stage of student writings ([Velasco and García 2014](#); [Khan and Muhammad 2019, pp. 615–19](#)). Translinguaging work in published teaching materials is rare, but [Hallberg \(2022\)](#) identified instances of translinguaging strategies, such as translation and code-switching, in English textbooks of Swedish speakers. In this paper, I will show lexical translinguaging in the textbooks of the Gamo language. Translinguaging practices of Gamo Amharic bilingual writers, who also learn and use English in the education sector, are described in line with translinguaging strategies in writing. Emphasis is given to the lexical aspect because the data showed mainly lexical translinguaging than other grammar aspects.

[Gelagay \(2021\)](#) described the techniques of terminology creation for textbook preparation in the Gamo language. The researcher illustrated in detail the efforts of language development for education in terms of terminology expansion or modernization in Gamo. The present research takes a different path and applies translinguaging theory. Some techniques such as borrowing are also included but the purpose is to appraise how bilinguals’ repertoire is successfully employed to address education in the language. Words that

demonstrate writers' strategies of translanguaging to create meaning and to communicate effectively are selected. The research shows that translanguaging is unstoppable even in published products which pass through different editorial and review processes.

2. Materials and Methods

Translanguaging as a theory of analysis and as a classroom pedagogy is a new paradigm in the Ethiopian research context, but it has been practiced naturally in every classroom for every subject since most Ethiopian teachers and students are bilinguals. Exclusively monolingual approach of teaching is promoted and required in the Ethiopian classrooms at all levels (MOE 1994, 2021). In English lessons, English is required to be exclusively implemented by teachers and students regardless of the fact that teachers' and students' proficiency to communicate in it allows for that or not; and in Amharic or Gamo lessons, no translanguaging from one to the other is appreciated. However, this official demand has never been exercised in real classroom settings. Classrooms are mostly full of translanguaging and teachers, especially content subject teachers, spend much time in translating lessons from English to learners' languages. Therefore, it can be said that translanguaging is the default but an effective approach of teaching in Ethiopian classrooms as well.

Similarly, the teachers who wrote the Gamo textbooks might have had no clue about translanguaging theory. However, they employed it naturally by using all their linguistic resources from the languages they knew in preparing the textbooks for education in the Gamo language. In this research, I will show how translanguaging skills were used to construct knowledge effectively. The research is limited to showing translanguaging with lexical data since they were the major grammar features collected. To this end, interviews and lexical data were collected from key informants and from textbooks, respectively. The key informants were teachers and students who spoke Gamo as a native language, Amharic as a second language and learnt English at school. The teachers played different roles in textbook preparation processes. One of them edited the Gamo language textbooks, and the other directly participated in textbook preparation. The data from interviews helped the researcher to have a better understanding about the process of textbook preparation in Gamo.

The textbooks were those ones prepared for teaching Gamo for both native and second language speakers. A textbook used to teach mathematics was also reviewed to show how translanguaging was applied for the transmission of mathematical content. The textbooks were "The Gamo Language Textbook, Grade 1 (2012), The Gamo Language Textbook, Grade 2 (2003), The Gamo Language Textbook, Grade 3 (2012), Mathematics Textbook in Gamo, Grade 3 (2010) and The Gamo Language Textbook, Grade 10 (2010)". These textbooks were used as sources of data because of their accessibility to the researcher. That means, a purposive approach was applied to select the data sources.

A content analysis method was used to analyze lexical data, and the interview data were integrated with the analysis and the interpretation of the lexical contents. In the content analysis method, lexical translanguaging from Amharic and English were identified and categorized into translanguaging types identified by former researchers such as Moore and Stoelting (2021) and Khan and Muhammad (2019). A phonetic writing system was followed to write all examples in Gamo and Amharic, and words borrowed from English.

3. Results

In this section, analysis of the data is presented in sub sections that set an overview of textbook development in Gamo (in the following paragraphs), words used as alternative translanguaging, borrowed words, lexical inventions and bilingual compounds. All of these techniques show the presence of translanguaging in Gamo, Amharic and English languages in the Gamo textbooks.

Efforts to developing the Gamo language were begun by devising orthography that bases on Latin Script to be used for education. Following this, textbooks were prepared

for use at different grade levels. According to one of the key informants for this research, most of the Gamo textbook writers by that time were teachers of the respective subjects, and accordingly Amharic and English teachers wrote the textbooks for the Gamo language education. According to the informants, one of the major problems writers faced was lack of materials written in Gamo to refer to during textbook preparation. To overcome this challenge, many contents and activities were taken from books written in Amharic and English and were translated into Gamo. Writers sometimes left end notes in the textbooks indicating a reading passage or an activity was taken from Amharic or English books or textbooks. Reference materials listed in the end of each textbook also witness that materials prepared in other languages such as Amharic and English were used as sources of information. That means the very idea of textbook writing included translanguaging in the form of translating contents from one language into another.

Amharic was introduced into the public system when it was prescribed as a language of holy books in the Church by Emperor Tewodros II (Dires 2019). Though written documents were not found, informants told the researcher that it was brought to Gamo during when Menilik II led war in his campaign for national unity. It is now spoken as a second language by many Gamo native speakers, and a significant number of Amharic first language speakers live in the area. It is widely used in private, official and market communications. English is also the medium of instruction in upper primary, in secondary and college classes and is given as a subject from Grade one onwards. Though English was not introduced through colonization in Ethiopia, it plays a significant role in education, economy and trade, in conferences and meetings, academic and non-academic publications and other social activities in the country. Knowledge of English and the ability to demonstrate good communication skills in it increases one's possibility to get a good job in the private and government sector. It also increases the chance for national and international mobility. Therefore, everyone, especially the youth, aspires to learn English, and it is considered a prestigious language and one who uses it is also considered to be a highly educated and civilized person.

3.1. Alternative Translanguaging

The first form of translanguaging that is exhaustively used in the Gamo textbooks is alternative translanguaging. In alternative translanguaging, the Gamo words were used alongside the Amharic and English words as alternative ways of creating understanding. Alternative words show the writers' reliance on their bilingualism to transmit clear message as much as they can. The following table includes word counts of this type from the five textbooks.

As can be seen from Table 1, alternative translanguaging at lower grade levels were not wide. There were one and four Amharic words in Grade 1 and Grade 2 Gamo textbooks, respectively, and there were no English alternatives in Grade 1–3 textbooks for the Gamo language. Alternative translanguaging increased in Grade 10 (13 Amharic and 7 English alternatives). The number of words used as alternative translanguaging also increased when the content of knowledge transferred included mathematical analysis (14 Amharic and 12 English words in Grade 3 mathematics textbook).

Alternative translanguaging was applied by putting words of one of the languages in brackets. Example alternative Amharic and Gamo words with their English meanings are indicated in Table 2 below.

In the textbooks, the above Gamo words were written in brackets next to the Amharic ones. These kinds of translanguaging strategies that writers put in brackets are termed as "rehearsal" in Khan and Muhammad (2019, p. 616). They describe that rehearsal strategies were used during the drafting stage of students' writings to process information, to analyze and to revise it at the final stage. However, some translanguaged words, as shown in this research, could be carried on to the final stage of a written material. Sometimes, Gamo words were also placed in brackets while the Amharic words were put outside the

brackets. The technique of putting a word as an option could be a means of reassuring meaning clarity.

Table 1. Number of Amharic and English words used as alternatives.

No.	Textbooks	Number of Pages	Languages Alternative Words Were Taken from		
			Amharic	English	Total
1	Gamo Language, Grade 1 (2012)	120	1	-	1
2	Gamo Language, Grade 2 (2012)	62	4	-	4
3	Gamo Language, Grade 3 (2012)	48	7	-	7
4	Mathematics in Gamo, Grade 3 (2010)	140	14	12	26
5	Gamo Language, Grade 10 (2010)	87	13	7	20
Total			34	19	58

Table 2. Amharic and Gamo words with their English meanings.

Amharic	Gamo	English
et'ara ¹	k'adara	fate/lottery
kilote	hila	skill
k'alata	turata	words
makina	kame	car
siḡara	sarbo	cigarette
tamarida	ekida	learnt
bomba	gelsiyo	water pipe

¹ Some Amharic words were adapted into the grammatical system of the target language.

Alternative translanguaging was also attested in the use of English. English words were placed in brackets next to the Gamo words. The following Gamo and English words in Table 3 were taken from the textbooks as an example.

Table 3. Gamo and English words used together in the textbooks.

Gamo Words	English Words	English
k'awosa	giramere ¹	Grammar
isikotsamatsa	komiyunitiy	community (of bee)/one hive bee
kara	topic	topic
bila-t'aḡo	poetry	poetry
sitadata	direct spitḡ	direct speech
tḡ'oḡugidi	arbitrary way	arbitrary way
zaribeyo	ireviḡine	revision
ayḡek'opa	topic sentence	topic sentence

¹ Some English words were adapted into the grammatical system of the Gamo language.

According to the informants, all of the above Gamo words were used to introduce new concepts into the Gamo textbooks by terminology creation. Gelagay (2021) discussed in detail a number of techniques used to create terms for education in the Gamo language. Some of the words indicated above such as the word *kara* 'topic' were created with a technique called semantic extension (p. 28). Most of these new words were used simultaneously with the English source words of the concept as indicated in the examples. The major purpose of creating new terms was to make words available in Gamo for textbook writers. Further to that effort, English words were used along with the new Gamo terms for effective classroom communication. These kinds of alternative approaches were followed to give the bilingual learners the chance to benefit from their English repertoire as well. It lays a

legitimate ground and the opportunity for learners and teachers to use either of the words in classroom communications and instructions.

Students, who were interviewed for this research, had a positive attitude to the use of Amharic and English words in the textbooks. Since these languages were used as the only mediums of instruction for education in Gamo before the 1991 regime change, and since they are still MoI for junior, high school and college education, the informants said that it would not be difficult to understand them. In the following excerpt, the informant explains how Amharic and English words could be helpful for students:

(Excerpt 1)

It is easy for students if words are borrowed from Amharic than other languages. If a student does not know the Amharic word, he or she can ask people educated in Amharic in his or her area. There are many people in Gamo who were educated in Amharic in the former times. It is easy to get help from others if Amharic words are used. Most of our elders learnt in Amharic and it is also the means of official communication in the area until now. So using Amharic words is more preferable than using the other languages simply because they are neighbors or related to Gamo. (Bereket, a Grade 10 student)

As can be noted from the above quote, translanguaging into Amharic during textbook writing was not considered a problem. Amharic was actually used to increase understanding of lessons taught in English as well. In the same manner, new words or concepts were also clarified in Amharic or English. Hence, employing multilingual skill in the textbooks, as is in the classroom sessions, was of great help in addressing educational contents.

3.2. Translanguaging by Borrowing

Borrowing from a language that writers know well to a language they know less is common, but according to [Moore and Stoelting \(2021, p. 10\)](#), “borrowing implies inserting L1 ‘as is’ into L2 (or, indeed, L2 into L1—since nowadays the relationship between the languages in speaker’s repertoire is understood as bi-directional”. Bi-directionality explains well the practice of borrowing Amharic and English words into the Gamo textbooks.

The following examples in Table 4 are examples of words borrowed from Amharic.

Table 4. Words borrowed from Amharic.

Amharic	Gamo	English
zik'	zik'k'i	down
ji	jiye	thousand
däbdabe	dabdabe	letter
amäl	amale	behavior
s'äbay	x'abaye	behavior
timhirt	timirte	education
se'at	se'ate	watch/time
märfe	marpe-narpe	needle
ḡäbäna	ḡabana	coffee pot
mäs'ihaf	mat'afa	book
masimäria	masmaria	ruler
tämari	tamare	student
mängist	mengiste	government

These and other Amharic words were widely available in the textbooks written in Gamo. The words under the second column are Amharic words written in the textbooks with Gamo phonological rules. Some of the expressions such as the words *k'ala* ‘word’, *timirte* ‘education’ were established by using them in word formation processes. They were used as parts of compound words such as *k'ala-fik'o* ‘dictionary’ and *timirte-ketsa* ‘school’.

Some of the above words are given other Gamo terms in publications such as a dictionary. For instance, [Tedla \(2000, p. 123\)](#), a Gamo-Amharic bilingual dictionary, uses the word *kawo* to mean ‘government’. He further defines *kawo* to mean *balabat* ‘(land) lord’,

nigus ‘king’ and *māngist* ‘government’. The word *kawo*, which mainly means ‘king’, is also used in the dictionary to refer to all other concepts that relate to government, such as *kawo-gesta* ‘government administration’, *kawo-mura* ‘government’s follow up/control’. The word *kawo* ‘king’ may be extended to cover the concept ‘government’ but for a Gamo speaker, it may not be contextually fit since the word refers to a traditional leader of a community. This indicates that a word that is close in meaning to a concept needed to be stated is used in other publications such as the said dictionary, but textbook writers preferred to use the Amharic words already available in their repertoire. As has been mentioned earlier, Amharic and English, as a long-established language of education, serve as sources of educational concepts in Gamo.

Just like the above Amharic words, English words were also borrowed and used in the textbooks. Included in Table 5 are English words used in the textbooks.

Table 5. Mathematical words from English.

Gamo	English
diḡite	digit
pirobileme	problem
rediyese	radius
diyametre	diameter
santimetre	centimeter
paralelo	parallel
iskuwere	square
angile	angle
baweile	vowel

According to informants for this research, these were words for which equivalent Gamo terms were not available. The textbook writers relied on their bilingualism to provide science education in Gamo. Had it not been for their bilingual skills, there would not have been an easy means to convey this mathematics knowledge since there were no terms for these concepts in Gamo. The related concepts were expressed by taking the words directly from English. Borrowing is another technique of lexicalization in Gamo (Gelagay 2021, p. 20), and the languages where words were borrowed from during textbook writing were mostly Amharic and English. Most of these borrowed English words are also used in Amharic and other Ethiopian languages as well. Lack of terms for these concepts did not discourage inclusion of respective contents as long as the writers translanguaged into the other language they knew.

Every society aspires to advance in science and technology in the current world. The world is changing rapidly due to science and technology developments, and including science and technology knowledge into education is crucial for a society to participate in the global development process. Therefore, the opportunity at the hands of the writers to achieve this goal of addressing science and technology knowledge was their bilingual skills and availability of resources in other languages where the writers could translanguange.

As mentioned in excerpt 2 below, students could not use Gamo to describe detailed scientific processes since it lacked the terminologies for detailed scientific thought. English is still playing the central role in addressing science, mathematics and technology knowledge to the society.

(Excerpt 2)

Science education given in the mother tongue (Gamo) is good and understandable if it does not go into specific and detailed concepts. But I think it is difficult to express some scientific processes in Gamo now. For example, if one wants to explain the process from conception to child birth, they need the appropriate technical expressions. So the language should be developed to express this kind of sophisticated scientific scenarios.

There were efforts to modernize the Gamo vocabulary to include science and technology terms, but that was not enough to learn complex scientific concepts (Gelagay 2021). So,

translanguaging into one's multilingual repertoire was the strategy used to address such complex scientific and mathematical contents.

Research works show that translanguaging by borrowing from one's first language when writing in a second language is common. The data in the present research also confirm that translanguaging by borrowing also takes place when bilinguals write in their first language as well. That means, when it comes to translanguaging, the linguistic borders between named languages does not matter (García and Kleifgen 2019, p. 8). Writers use the available repertoire to address a concept effectively and to create a good understanding of it. As García and Kleifgen (2019, p. 9) indicated in their revision of case studies about bilingual literacies, translanguaging strategies help to deepen students' understanding. This is why translanguaging is dynamic, effective and resourceful. Though the principles set to write in certain contexts, such as textbook writing, do not allow for that, bilinguals transcend principles that demand monolingual use by translanguaging.

The data in Tables 4 and 5 also show that the borrowed Amharic and English words went phonological adaptations by taking terminal vowels. Researchers give different names to these kinds of adaptations. For instance, Moore and Stoelting (2021, p. 13) refer to these kinds of adaptations of first language words into target language "foreignization" when writers assimilate their first language words into the target language, English. Taking this backdrop, it is possible to call the adaptation strategies used by bilingual Gamo writers as "contextualization" since Amharic and English words were adapted to adhere to the local context of speaking or writing in Gamo.

3.3. Lexical Inventions

A number of terms are used to explain translanguaging practices that involve bilingual creativity. Dewaele (1998), cited in Moore and Stoelting (2021, p. 10), calls language practices which apply target language rules in non-target language words as lexical inventions. Lexical inventions demonstrate high creativity of bilingual writers or speakers to cope up the communication environment they engage in.

In line with Dewaele's description of lexical inventions, borrowed words which took Gamo terminal vowels, as shown in Tables 4 and 5 above, are lexical inventions. The inventions include phonologically integrating Amharic or English words into Gamo by adding terminal vowels. For instance, words such as *se'ate* 'watch', *mengiste* 'government' and *amale* 'behavior' which were taken from the Amharic *se'at*, *māngist* and *amāl*, respectively, received terminal vowels according to the rule of the Gamo language that requires using terminal vowels for all words (Amha 2017, p. 818; Gashe 2010, p. 69). The same technique was applied to terms of measurement taken from the English language such as *litire* 'litter', *metire* 'meter' and *santimetire* 'centimeter'.

Similar, examples of other lexical inventions from Amharic and English borrowed words are shown in Table 6 below. The words were integrated into Gamo by adapting them morpho-syntactically.

Table 6. Example Gamo words coined from Amharic and Gamo.

Gamo	English
t'ana'-na	will read
aŋagan-au	to pack
astamare-ta	teachers

t'ana'-na 'will read' is a hybrid formed from the Amharic *t'inat* 'study' and the Gamo morpho-syntactic form *-na* which indicates a future time.

The lexical invention *aŋagan-au* 'to pack' is a blend taken from the Amharic *maŋig* 'pack' and *-au*, the Gamo postposition, which is used to express infinitive forms (Hayward and Eshetu 2014).

In the same manner, *astemare-ta* 'teachers' is an Amharic-Gamo invention with the Gamo grammatical morphology for number marking *-ta* '-s'. Many other borrowed words

that received Gamo grammatical forms were also available. These kinds of lexical inventions are also termed as loan blends. According to Haspelmath (2009, p. 39), loan blends are “hybrid borrowings which consist of partly borrowed material and partly native material”.

One may wonder how a simple addition of forms for morpho-syntactic purpose could be considered a lexical invention. The creativity of the speakers to fill in their language needs by modifying the already existing words from the languages they know is a significant multilingual capacity. The writers were employing their multilingual capacity to accommodate significant concepts to address education in Gamo.

3.4. Bilingual Compounds

Compounding words from Gamo or from a bilingual repertoire was another widely used lexicalization strategy in Gamo (Gelagay 2021, p. 25). Among the compounds created, bilingual compounds demonstrate translanguaging in the Gamo textbooks. Gamo words were combined with Amharic and English words to form new expressions. The following words in Table 7 are examples of this category.

Table 7. Bilingual compounds taken from the Gamo textbooks.

Gamo	English
k’ala-fik’o	dictionary
medeti-t’afide	fiction
mat’afe-ketsa	library
tfoke-saleda	blackboard

The first compound word *k’ala-fik’o* ‘dictionary’ is formed from the Amharic *k’al* ‘word’ and the Gamo word *fik’o* ‘collection’. Similarly, *medeti-t’afide* ‘dictionary’ is created from *medeti* ‘create’, a Gamo word and *t’afide* ‘write’ taken from *s’ihuf*, Amharic. The third *mat’afe-ketsa* is also formed from *mat’afe* ‘book’ a word from Amharic *mäs’ihaf* and *ketsa* ‘house’ a Gamo word. *tfoke-saleda* ‘black board’ is an interesting bilingual compound formed from English and Amharic words. The first part of the compound word, *tfoke*, is taken from the English word ‘chalk’. The second part, *saleda* ‘board’ is adapted from the Amharic *säleda* ‘board’. By doing so, the writers employed bilingual creativity to address education in the Gamo language. A ‘chalk board’ is also called *t’ikur säleda* ‘balk board’ in Amharic. On the other hand, a ‘chalk’ is sometimes referred to as *t’ämüne* in Amharic.

In this way, new words were formed to represent concepts, for which the textbook writers did not have an expression in Gamo. This indicates that both Amharic and English languages played significant roles in writing textbooks in Gamo. These examples are good indicators of high multilingual creativity.

4. Conclusions

The endeavor in this research was to show how multilingual textbook writers used lexical translanguaging to address concepts that do not mostly have words in the target language Gamo. The language of the textbooks was the Gamo language, and Amharic and English words were integrated into the textbooks through translanguaging strategies to create understanding of different concepts. Translanguaging is a strategy that provides speakers and writers the freedom to use their language repertoire in various semiotic spaces. As shown in this research, using Gamo in education is realized by exercising bilingual skills. Both Amharic and English languages were used in Gamo textbooks to address concepts. Some of the practices, such as what were referred to as alternative translanguaging were used even when the Gamo words to express a respective concept were available. This kind of practice opens a space to multilingual students and teachers to draw on their entire linguistic and semiotic repertoire in producing written or spoken texts.

Amharic and English as long-established languages of education, science and technology, and languages of wider societal and official communication in Ethiopia are playing

varied roles in the development process of languages such as Gamo. The use of these languages to enhance science, mathematics and technology education was viewed positively by some informants as shown in excerpt 1.

In other instances, use of these three languages demonstrated creativity of the multilingual writers in addressing significant concepts in education in Gamo. The writers moved from one language to the other to meet their communicative needs. They fully employed their multilingual capacity to express their idea in the textbooks. This in turn indicates two important issues. It shows that multilinguals' translanguaging into their entire linguistic repertoire is unavoidable even in a controlled context such as textbook writing. Such creativity also indicates high societal need for innovation in science, mathematics and technology education.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Conflicts of Interest: The author declares no conflict of interest.

References

- Ado, Derib, Almaz Wasse Gelagay, and Janne Bondi Johannessen. 2021. The languages of Ethiopia: Aspects of the sociolinguistic profile. In *Grammatical and Sociolinguistic Aspects of Ethiopian Languages*. Edited by Derib Ado, Almaz Wasse Gelagay and Janne Bondi Johannessen. Amsterdam and Philadelphia: John Benjamins Publishing Company, pp. 15–33.
- Amha, Azeb. 2017. The Omotic language family. In *The Cambridge Handbook of Linguistic Typology*. Edited by Aikhenvald Y. Alexandra and Robert M. W. Dixon. Cambridge: Cambridge University Press, pp. 815–53.
- Bender, Marvin Lionel. 1975. The Beginnings of ethnohistory in Western Wellega: The Mao problem. *Patterns in Language, Culture, and Society: Sub-Saharan Africa* 19: 125–41.
- Blackledge, Adrian, and Angela Creese. 2017. Translanguaging and the body. *International Journal of Multilingualism* 14: 250–68. [CrossRef]
- Central Statistical Authority (CSA). 2008. *The Population and Housing Census*. Statistical Report for Country Level. Addis Ababa: CSA.
- Cole, Mikel. 2019. Translanguaging in every classroom. *Language Arts Lessons* 96: 244–49. [CrossRef]
- Cooper, Robert L. 1989. *Language Planning and Social Change*. Cambridge: Cambridge University Press.
- Dires, Getachew. 2019. Language Policy of Ethiopia. *LING* 515. May 7. Available online: https://www.researchgate.net/publication/335868337_Language_Policy_of_Ethiopia (accessed on 16 March 2023).
- Dutton, Janet, and Kathleen Rushton. 2021. Using the translanguaging space to facilitate poetic representation of language and identity. *Language Teaching Research* 25: 105–33. [CrossRef]
- Fang, Fan, Limin Yuan, Hongchen Xu, and Xueyi Wang. 2022. Global Englishes and translanguaging in textbook design and curriculum development for universities in the Greater Bay area of China. *Asian-Pacific Journal of Foreign Language Education* 7: 35. [CrossRef]
- García, Ofelia. 2012. Theorizing translanguaging for educators. In *Translanguaging: A Cuny-Nysieb Guide for Educators*. Edited by Celic Christina and Seltzer Kate. New York: City University of New York.
- García, Ofelia. 2019. Translanguaging: A coda to the code? *Classroom Discourse* 10: 369–73. [CrossRef]
- García, Ofelia, and Angel M. Y. Lin. 2016. Translanguaging in bilingual education. In *Bilingual and Multilingual Education (Encyclopedia of Language and Education)*. Edited by Ofelia García, Angel M. Y. Lin and Stephen May. Cham: Springer, pp. 117–30.
- García, Ofelia, and Jo Anne Kleifgen. 2019. Translanguaging and Literacies. *Reading Research Quarterly* 55: 553–71. [CrossRef]
- García, Ofelia, and Wei Li. 2014. *Translanguaging: Language, Bilingualism and Education*. London: Palgrave Macmillan.
- Gashe, Wondimu Gaga. 2010. *Sociolinguistic Facts about the Gamo Area, Southern Ethiopia*. Addis Ababa: ARCCIKL.
- Gelagay, Almaz Wasse. 2016. Norm Selection and Standardisation in Gamo. *Oslo Studies in Language* 8: 273–93. Available online: <http://www.journals.uio.no/osla> (accessed on 23 November 2022).
- Gelagay, Almaz Wasse. 2021. Term-formation methods in the Gamo language. In *Grammatical and Sociolinguistic Aspects of Ethiopian Languages*. Edited by Derib Ado, Almaz Wasse Gelagay and Janne Bondi Johannessen. Amsterdam and Philadelphia: John Benjamins, pp. 15–33.
- Hallberg, Simon. 2022. *Exploring Translanguaging in English Textbooks: A Content Analysis of Upper and Lower Secondary School English Textbooks*. Kalmar: Linne University, Unpublished Research Report. Available online: <https://www.diva-portal.org/smash/get/diva2:1428216/FULLTEXT01.pdf> (accessed on 13 March 2023).
- Haspelmath, M. 2009. Lexical borrowing: Concepts and issues. In *Loanwords in the World's Languages*. Edited by Martin Haspelmath and Tadmor Uri. Berlin: De Gruyter, pp. 35–54.

- Hayward, Richard, and Chabo Eshetu. 2014. *Gamo-English-Amharic Dictionary with an Introductory Grammar of Gamo*. Wiesbaden: HarrassowitzVerlag.
- Khan, Muhammad, and Tahseen Muhammad. 2019. Translingual repertoires of multilinguals in academic writing practices. *European Online Journal of Natural and Social Sciences* 8: 610–23.
- Lewis, M. Paul, ed. 2009. *Ethnologue: Languages of the World*. Dallas: SIL International. Available online: <http://www.ethnologue.com/> (accessed on 12 December 2018).
- Li, Wei. 2022. Translanguaging, multimodality, southern theory, and pedagogical possibilities. *Pedagogies: An International Journal* 17: 408–12.
- Ministry of Education (MOE). 1994. *Education and Training Policy of Ethiopia*. Addis Ababa: Ministry of Education.
- Ministry of Education (MOE). 2021. *Education and Training Policy of Ethiopia*. Addis Ababa: Ministry of Education.
- Moore, Pat, and Sara Stoelting. 2021. My favorite subject is Lengua because the teacher es un crack: Translanguaging in CLIL student writing. *CLIL Journal of Innovation and Research in Plurilingual and Pluricultural Education* 4: 7–18. [CrossRef]
- Sato, Eriko. 2017. Translanguaging in translation: Evidence from Japanese mimetics. *International Journal of Linguistics and Communication* 5: 11–26. [CrossRef]
- Schwarzl, Lena, and Eva Vetter. 2019. Translanguaging and multilingual texts as a resource in superdiverse classrooms. *OLBI Journal* 10: 229–48. [CrossRef]
- Sime, Dereje Assefa. 2019. Code switching in Ethiopian primary and secondary EFL classrooms: A comparison of its extent and type. *The Internet Journal Language, Culture and Society* 48: 1–10. Available online: <http://aaref.com.au/en/publications/journal/> (accessed on 18 March 2023).
- Tai, Kevin W. H., and Chiu-Yin (Cathy) Wong. 2022. Empowering students through the construction of a translanguaging space in an English as a first language classroom. *Applied Linguistics* 31: amac069. [CrossRef]
- Tedla, Gebreyohannis. 2000. *Gamo Goofatho-Amaraththon Sima Qaala-Birshe. Gamo Gofa to Amharic Dictionary*. Arbaminch: Bole Printing Enterprize.
- Temesgen, Arega, and Eyasu Hailu. 2022. Teachers' attitude towards codeswitching in Ethiopia EFL classrooms. *LLT Journal: A Journal on Language and Language Learning* 25: 555–71.
- Velasco, Patricia, and Ofelia García. 2014. Translanguaging and the Writing of Bilingual Learners. *Bilingual Research Journal: The Journal of the National Association for Bilingual Education* 37: 6–23. [CrossRef]
- Vogel, Sara, and Ofelia García. 2017. Translanguaging. In *Oxford Research Encyclopedia of Education*. Oxford: Oxford University Press, pp. 1–21. [CrossRef]
- Woldemariam, Hirut. 2005. GAMO: A Dialect Variant or a Group with its Own Dialects. In *Cushitic—Omotic Studies*. Edited by Yoichi Tsuge. Kanazawa: Kanazawa University, pp. 67–78.
- Woldemariam, Hirut. 2013. Determining the Genetic Classification of Ganta within the Omoto Group. *International Journal of Sociology and Anthropology* 5: 409. [CrossRef]
- Zhou, Xiaodi. 2021. On the road to translanguaging in a dual language classroom: Teaching math and science in Mandarin and English. *Journal of Multilingual Education Research* 11: 12. [CrossRef]
- Zhu, Hua, Wei Li, and Daria Jankowicz-Pytel. 2020. Translanguaging and embodied teaching and learning: Lessons from a multilingual karate club in London. *International Journal of Bilingual Education and Bilingualism* 23: 65–80. [CrossRef]

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