



CAN DIGITIZATION OF ENDANGERED VERNACULAR LANGUAGE TEACHING AND LEARNING BE REMEDY AGAINST LINGUISTIC COMPETITION?

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Abstract

This paper is assessing opportunities and strategies for e-teaching and learning of endangered languages can improve their images and capacities against the other competing languages. It is drawing pointers as to why failure of most vulnerable languages to participate in all e-platforms is a key factor to languages loss in a society that is increasingly becoming e-based. The various functions of endangered languages which underlie our call for conservation are also highlighted. The reasons as to why there has been opposition to teaching and learning of such languages are discussed.

Introduction

A language can be described as endangered language if its use is likely to cease as a result of interference from other languages or because of losing all its speakers. As the atlas of World's endangered languages is showing, many languages in the world are indeed endangered (Moseley, 2010). It is important to note that there is a risk continuum so that, at a particular time, we have languages that are not endangered at all, while others are vulnerable, other are virtually endangered while others are at the brink of extinction. The argument of this paper is that e-development coupled with e-teaching and learning of endangered languages can improve their images and capacities against the other competing languages. We argue in this paper that the failure of most vulnerable languages to participate in all e-platforms is a key factor to languages loss in a society that is increasingly becoming e-based.

Endangered languages are always facing competition from foreign languages such as English or even elitist local languages. This is usually exacerbated by national policies often favour the formal or national languages at the expense of the endangered languages.

Linguistic Functions of Endangered Languages

Various endangered languages such as Elmolo, Ogiek, Njemps and many others play a number of roles in the respective communities. The Elmolo and Njemps are endangered languages of Turkana and Baringo counties of Kenya while Ogiek is spoken by a hunters and gatherers community of Bomet and Nakuru counties of Kenya. Our study has shown that they can be used in informing others about opportunities, new ideas and resources. A survey of the various functions of endangered languages has revealed the following as some of their roles:

Firstly, they are used as **tools of socialization**. This study established that users of various endangered languages often use their languages in their social conversations (Sawe & Ngetich, 2012). For example, they are used to persuade and convince each other concerning issues which include development courtship and marriage. Our study found that most of those who use endangered language like Ogiek and Njemps in their day to day social interaction are the old folks. These endangered languages are not used by youths in socialization through the social media such as twitter and Facebook. Politicians who understand these endangered languages use them to persuade the populace to vote for them or their parties.

Secondly, this study established that endangered languages such as Ogiek are used as **instruments of thought and as tools for exchanging ideas** (Halliday, 1973). We found that, especially the old in the respective communities to generate new ideas and share them. This implies that whereas a language may be endangered, its use in innovation and creativity may be lost if the language is allowed to die without interventions such as is advocated for in this paper. Survival of endangered languages largely rely on teaching/learning and its use in generating and sharing relevant ideas within and even beyond the respective language communities.

Thirdly, various endangered languages function as **agents of cultural education, transmission, conservation and even change**. Culture is an anthropological asset of a community most especially if it is relevant in its social or economic development. Conservation of endangered cultures is the duty of respective languages in a modern day world of extensive linguistic competition. Endangered languages will succeed in the attempt to conserve culture to the extent in which it will be used by both the old and the young generation in songs, narratives and other forms of oral traditions. This element has been deterred by the fact that the young people have opted to the use of foreign languages, lingua franca or their neighbours' languages.



Fourthly, most speakers of endangered languages in the world live in remote areas yet they use them **as contraptions for limited economic interaction**. Such kind of language use is pertinent in their lives. The economic use of these languages often do not exceed the isoglosses relating to the speech communities. In terms of language competition, depending on the extent of language attrition, endangered languages may enjoy even less than 10% usage in economic communication yet this is the back bone required for the survival of every society. In the case of ‘Supa’, a Kenya language which was in the verge of extinction by the year 2000 had most of small scale businessmen and women in the villages using ‘Dholuo’ to interact with their customers instead of their mother tongue. The current major trend cross linguistically is that a number of speakers of endangered languages because they have learnt second languages through subtractive bilingualism often code-switch between the endangered language and other languages while undertaking business communications.

In addition, endangered languages are used within speech communities **to promote internal concord**. Even where the number of speakers of endangered languages is dwindling, the study has note that the few use them as ‘we-codes’ [which is useful mainly when speaking about internal matters] while using other languages as the ‘codes-in-between’ and the ‘they codes’ (Kamwangamalu, 1998). It was clear from our study that in some cases, the situation bedevilling endangered languages could be as a result of cultural assimilation, linguistic hegemonies, and linguistic competition whereby a smaller speech community will associate the other language or linguistic group with class, economic power and development. Consequently, they start learning other languages while leaning what ought to have been their native languages. The worst scenario is where the youth substitutes the acquisition of their parents’ languages for others.

Arguments in Favour of Teaching and Learning Endangered Languages

Our study on the Ogiek as one of the endangered languages in Kenya established that whereas the languages is endangered, through its oral traditions or informal education, environmental conservation and sustainability has been achieved through the years. It was reported that norms and values relating environmental conservation were inculcated into the folks from generation to generation through the language which is currently endangered. The language is endangered because the speakers are becoming fewer day by day as a result of assimilation into other languages such as Kipsigis, Maasai and Tugen. Our study found that most young speakers of Ogiek have learnt Kipsigis, Kiswahili and English and none of them are acquiring Ogiek as their first language. This means that the language has turned to be a language of the old who are just but a handful.

Operations meant to rescue endangered or vulnerable languages may vary from one case to another. For example, standardization of the endangered variety may be proposed as a corrective measure. Standardization will involve the choice of a standard writing system (orthography), to expand its vocabulary, to write its grammar books, to translate literature from other languages into it, to write dictionaries and to publish newspapers in the same language and eventually start teaching it in schools. The contention of this paper is that if all these steps are devoid of e-platform in the modern society, optimum correction results may not be attained.

Interlocutors are able to receive and understand the message which is conveyed in a language which they understand well (Sawe, 2015). There is a relationship between the level of advancement achieved by establishments such as Japan, England and Russia with the fact that they used their vernacular or rather their native languages. This paper supports the hypothesis that people can easily comprehend what they do not know if it is communicated in a language which they understand better. Failure of interlocutors to meet the linguistic threshold will hamper communication especially if listeners are ‘semilinguals’ (Mac-Swan, 1997; 2000). In ‘semilingual’ realities, speakers or their recipients’ often have has some little knowledge in the meta-language that has been selected as a language of instruction such as English in the situation facing the Ogiek language in Kenya. Endangered languages can rejuvenated and advanced until they are even used as instruments of sophisticated communication as the case was for Hebrew language after 1967. This signifies the strengths of world’s endangered languages.

Arguments against the Teaching, Learning and Use of Endangered Languages

This study found that the shift from use of endangered languages to globalized languages is related to the fact that endangered languages from the onset have been limiting their speakers to a restricted world view as they are often spoken within the respective communities. Whenever their users migrate, they are often disconnected with other speakers as their languages are not e-linked. Most speakers of the endangered language groups that were studied are unable to give a deeper understanding about new technology, have not accessed or could not utilize the e-platform using their native languages. It is easier for a language that is used as a medium of communication in the electronic media to develop vocabulary that is related to technology than a language which is hardly or never used. This paper is hypothesizing that, the extent to which the almost



3000 vulnerable or endangered languages of the world may survive is correlated with their visibility in the e-platforms. Involving them in this way will enable them to contribute to the cumulative world view.

The findings of this study have revealed that most children (Approximately 95%) who are 10 years and below in the case of endangered languages such as Ogiek have not acquired their parents' first languages as their first languages too. Many in this age bracket speak languages of their neighbours (such as Kipsigis) plus Kiswahili and English which are learnt in school. Majority of these children are thus poor speakers of the endangered languages or have no competence at all. This paper observes that this tendency could be as an upshot of the following **motivations**:

1. Some of the endangered codes are ethnic languages which are often associated in one way or the other as the case is in Kenya with tribalism. The view of this paper is that the problem is not in the relationship between tribe and language. In that vein, negative ethnicity should be discouraged instead of condemning languages.
2. A number of people from the endangered language groups have intermarried with neighbouring language groups and have consequently been linguistically and culturally assimilated. For this reason, they no longer attach value to the endangered languages.
3. Most of the endangered languages are not associated with academic progress, securing of employment opportunities or career promotion. Curriculum developers must see the prospects of turning endangered languages to be relevant and academic even as they look into computer assisted teaching or online teaching.
4. Most of the endangered languages are not given proper attention while preparing the national curricula. Most teachers may not even be having the competence to speak and write or worst still to teach them. Whereas this is true, all languages should be treated as equal.
5. It is costly to start standardizing the endangered languages and then move on to prepare the teaching/learning resources since most of them do not have grammar books, literature books and dictionaries. Book and dictionary writing in other languages must have started somewhere; such can happen in endangered languages too.
6. In capitalistic societies, many learners and even their sponsors (parents) will not entertain learning endangered languages if they cannot attach the final product with direct employment opportunities. Most will thus prefer to learn foreign languages which are often associated with the probability of getting jobs. This is undeniably pertinent in underdeveloped and developing nations. Learning on the other hand is not just about getting jobs. Skills gained may even empower learners to create or attain other jobs.
7. Language teaching and learning require learners' books and teachers' guides for different levels. Since endangered language books may not attract (many) buyers, it will not be cost effective to publish them. As a result, publishers will be reluctant to publish them.
8. Most of the endangered languages have not been developed morphologically so as to handle technical topics. The existing vocabulary are often below the threshold needed for technical communication needs.
9. As stated earlier, bare reliance on endangered languages may limit an individual's or community's world understanding. This is the basis for our emphasis that (some) endangered language views could be relevant to the world and should be made accessible on the same stage as other languages.
10. A good number of endangered languages belong to economically challenged communities. In that sense, research relating to them is often underfunded. This factor aggravates the problem in the globalization equation where other languages such as Chinese, French, English and Arabic can afford to research and teach online and off line across the world. An endangered language like Ogiek [with a population of approximately 100 economically challenged families] is clearly disadvantaged to compete on the same platform in future with a language like Chinese with its one billion plus speakers. More people are seeking to learn Chinese while the number of those who are interested to learn endangered languages is diminishing day by day.
11. Very few universities in world over devoted their attention to the study of endangered language species. Many studies have concentrated on describing the nature of endangered languages and language attrition while action research meant to reverse endangered language situations in the world scarcely exist.

All the reasons highlighted above are crucial in addressing the issue of including e-platform in teaching/learning of endangered languages. They are also relevant in the development policies and practices which are meant to safeguard vulnerable languages.

How can Endangered Languages Exploit E-Opportunities for Globalization?

The authors of this paper in this section are pointing to the existing e-opportunities which could be relevant in teaching and learning endangered languages. These opportunities are essential in the attempts to globalize endangered or susceptible languages in the world of language competition. The following are selected e-opportunities which can be utilized in teaching and learning endangered languages.



a. Developing E-Teaching and Learning Websites

This paper advocates for the development of websites for teaching endangered languages. This means that curriculum developers should consider developing E-classrooms for endangered language with E-teachers targeting E-learners. For this reason, specialists can be used to develop internet and intranet connected endangered language classrooms. This can be accessed beyond the boundaries of the endangered language's speech community. Learners from across the globe may be able to access and learn them when they are accessible online. This means that an endangered language will have entered into a global stage.

E-classrooms meant to teach endangered languages will provide an exclusive prospect to utilize technology to sustain language lives by creating a wider classroom practice. Through this organization, teachers will be able to communicate with their learners electronically. This will enhance exchange of feedback from teachers to learners and vice versa. This will foster understanding in language learning. E-classrooms can be used as alternatives to customary classes or as computer assisted mode.

Websites whereby free endangered language e-books can be accessed need to be created. Such can benefit from other websites such as zondle in helping the developers to handle different language topics integrated with games. Tests can be incorporated into the lessons on the various language topics which learners can answer and receive programmed responses. These websites can foster language attitude change by involving music, art works and animations alongside the games.

b. Teaching Endangered Language Skills

There are four main skills of language learning which must be taken into consideration in the process of introducing an endangered language are speaking, listening, reading, and writing. Each language subject or area has different educational tools that are likely suited with it. The use of several technical tools has a significant effect on the learning process of each area of the language (Salabery, 1999). E-programs which can teach endangered language phonology (pronunciation), morphology (vocabulary), syntax (sentence construction) and semantics (comprehension of meaning) can be developed. Such programs can be put in CD/VCD or DVD formats which can be accessed offline. They can also be posted online so as to be accessed by e-learners. This is because some learners may want to learn the endangered languages as their second languages.

So as to develop options for learning listening skills in endangered languages, programs which can produce speech and interpret phonemes will be required. Such program are essential in improving learners' listening and speaking skills in any language that may be involved (Gupta, 2010). These programs are good substitutes for usual classroom drills which are intended to help learners in the mastery of words, grammar and correct pronunciation.

Program developers may develop e-programs with recorded speech since listening is a key language skill which can easily be learnt by listening to others (Hoven, 1999). It is difficult to imagine how language teaching can be successful online or offline without listening and speaking drills (Barrett and Sharma, 2007). Computer based exercises will be significant in buttressing what the endangered language learners are learning in ordinary classes.

Computers can be utilized in raising the learner's attitude towards reading especially through the use of animated and simplified texts which are enticing to the targets. These can be utilized concurrently with e-dictionaries with phonological transcriptions which can guide the learners on how to correctly pronounce written sounds in the respective endangered languages. An endangered language teacher can develop a reading-based computer program which will enable the learners to receive the native speakers' fluency. This will also assist online learners to learn how to read texts in places where they cannot access teachers face to face (Sawe, 2015).

c. Developing E-Dictionaries for Endangered Languages

One reason why globalized languages are pushing others towards extinction is that user can access electronic books, journals and dictionaries while the endangered languages are missing in such a platform. This means that learners of endangered languages are often not motivated to learn about or using their languages since they cannot get learning resources on the E-platform at all or to some extent. Use of E-Dictionaries assist the learners of an endangered language in improving their vocabulary (Gupta, 2010). Producers of E-Dictionaries for the endangered languages will need to include a variety of built-in functions and tools that are not provided in book dictionaries.

Compact discs (CDs) and DVDs are digital storage devices which can be utilised in developing electronic dictionaries for endangered languages or even languages that are in the continuum of extinction. This is because they have to capacity to store up large information and are easy to use and also cheap.



d. Developing Endangered Languages' E-Vernacular Newspapers

The authors of this article are of the view that newspapers are important practical learning tools. In order to correct the trends, E-newspapers written in the endangered languages can be written or referred to learners as supplementary reading texts. In addition, teachers can out-source soft copies of the past newspapers which were written in the endangered languages (Seedhouse, 1994). These can be stored in hard disks or other storage systems which can be used as class reference materials. Different people may also be approached so as to participate in contributing to online news and learning sites developed for specific endangered languages.

e. Motivating the Use of Endangered Languages in Text-Chatting and E-mails

Campaigns meant to reverse the situation concerning the endangered can be driven by motivating text chatting while sending short message services or through the internet. This will serve in modernizing an endangered language and in the long run it will assist in changing attitudes towards it. Text chatting is a cheap, simple and quick tool for sharing ideas and thus it is a preferable mode of modern communication. It is an effective method of communication where prompt responses are required in language teaching and learning especially if the learning is not in a constrained system.

Speakers of the vulnerable or endangered languages can also be motivated to use such languages in electronic mail communication. This is one way in which the modernization of endangered languages can begin. An attitudinal campaign will be half won if many users of an endangered language will be convinced to write and respond to each other using their endangered language via short messages or electronic mails.

Conclusion

Use of technology can simplify endangered language teaching and learning and can promote positive attitudes amongst users and language learners. Failure of a language to embrace the use of modern technology will put it in an awkward position in the stage language competition across the world. There is need to improve on ways of teaching languages and thus teachers can no longer turn a blind eye on the impact of technology. Endangered languages need not to be left out in this otherwise they will remain to be languages the old which are just awaiting extinction. Proper understanding of e-opportunities is therefore relevant in fixing endangered language propensities. This paper concludes that there is need to put extra resolve in ensuring that the vulnerable or endangered languages are involved in the e-platform and that their functions elaborated so as to handle current issues and development topics such as new farming methods, industrial investment and management, environmental conservation, family planning and so on. These languages have treasures of varied kind which should not be lost gratuitously.

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