



Article

Translation: A local means of addressing climate change challenges in Togo

Akponi Tarno

University of Lomé, Togo

E-mail: tarnoakponi@gmail.com

Abstract

This study explores the necessity to translate international agreements, treaties, pamphlets and readings on climate change from western into Togolese local languages. It notes that the lack of use of local languages while communicating climate change issues is an obstacle to local communities' engagement. From the "Local Climate Change Law" approach by Richardson and the "cultural terminology" by Diki-Kidiri, the paper analysed the qualitative and quantitative data collected from 16 participants randomly chosen in Notsé and Blitta, two big agricultural areas in Togo. Findings indicate that climate change has an incidence not only on ecology, but also on agriculture, economics, education, security and on the whole earthly life. The study shows that the translation of climate change treaties and agreements into Togolese national languages plays an important role in the promotion of different strategies so as to facilitate acceptance of rules and regulations by the local populations and to stimulate grassroots actions through their engagement in the climate change issues. National political authorities are therefore recommended to develop local language education and climate change translational policies in order to promote a local awareness raising.

Keywords: translation, climate change, national languages, address, challenge, communication

1. Introduction

Climate change is a fact of life. It has changed and is still changing. For Angwah (2019, p. 17), "[c]limate change is perhaps the most unanticipated threat of the 21st century, with well-known ramifications for earth's ecosystems at different levels". Various climatic

phenomena that have been observed all over the world are due to climate change. Some of its adverse impacts include extensive periods of drought, floods, and intense heat. These impacts are not only felt by developed countries but more importantly by developing countries including Togo. In order to address the issue of climate change, scientists, pro-environmentalists, governments, and non-governmental organisations call for urgent actions. In this regard, summits and Conferences of the Parties (Katowice 2018, Bonn 2017, Paris 2015, Doha 2012, Johannesburg 2002, Kyoto 1997, Rio 1992) have been held to find solutions. To communicate climate change, both written (newspapers, billboards, pamphlets) and verbal (conversation, radio and television programmes, lectures, advertising on radio and television channels) means are used. Unfortunately, languages often used in the climate change communication are dominated by western languages (English, French, Spanish, German) raising therefore the issue of translating agreements, decisions and other information from these conferences and summits into local languages for an effective and efficient address to climate change challenge.

The term “translation” is generally used to refer to both the process and the product (Shuttleworth & Cowie, 1997). According to the *Dictionary of Translation Studies* by Shuttleworth and Cowie (1997, p. 181), “one may talk of translation as a process or a product, and identify such sub-types as literary translation, technical translation, subtitling and machine translation; moreover, while more typically it just refers to the transfer of written texts, the term sometimes also includes interpreting”. In order to avoid ambiguity, other researchers use “translation” to refer to the product and “translating” to refer to the process (Thomas, 1992). In this study, “translation” is used to refer to both the “process” and the “product”. With regard to “process”, it is the act of transferring a written text from a Source Language (SL) to a Target Language (TL) while the written text which results from the transferring process is the “product”. The study on climate change and translation in my context refers to the transfer of findings on climate change from western languages into Togolese national languages (Ewe and Kabiye).

The present research intends therefore to be a resourceful study encouraging the translation of international agreements and other environmental passages into Togolese national languages in order to implement successfully proposals derived from the different summits and conferences on climate change and global warming. It posits that climate change negotiations and implementations would be more effective if local languages were involved. It therefore discusses the impact of translating international documents on climate change into Togolese national languages.

2. Profile of the Togolese national languages

According to *La Réforme de l'Enseignement au Togo* (1975), two local languages (Ewe and Kabiye) have been promoted as national languages and were to be taught as subjects in schools and later on as languages of instruction. Even though this reform has had hard times in its achievement, the two languages still have a certain power and prestige

nationwide. The following section deals with the profile of the two national languages.

2.1. Profile of Ewe

Ewe is a Kwa language of the Niger-Congo language family spoken in the southern part of Togo and in Ghana. According to *Ethnologue* (Eberhard, Simons, & Fennig, 2019), Ewe is reported to be spoken by more than one million people as their first language (L1) in Togo, while in Ghana more than two millions speak it as their L1. According to Essizewa (2009, p. 54), “three million people (more than 65% of Togo’s population) use Ewe as a second language”. The observation of the percentage of people using Ewe as their second language is remarkable and shows how relevant this language is in the national communication. The number of Ewe speakers as their native or second language has surely increased today and has become a powerful local communication tool.

According to Lafage (1985), Ewe speakers were the first coastal people to be in contact with Europeans. This contact has made Ewe language the most prestigious and powerful language. Today, it has acquired the status of a *lingua franca*, the main language, which is used by most of the ethnic groups nationwide and in various domains. In this regard, Essizewa (2007, p. 30) notes, “[t]he sociolinguistic role of Ewe in Togolese life has expanded in the post-independence period, and it has become a *lingua franca* among all ethnic groups and people of all backgrounds”. Consequently, the mastery of Ewe has become a must for particularly traders in every market place all over the Togolese country. Even in the Christian religion and in agricultural activities, Ewe is the most likely used language not only in the southern part of Togo but also in the northern part of the country. People in Togo identify themselves through Ewe language and are proud to speak and read it everywhere. The above factors are strong elements that support translation practices in local languages.

2.2. Profile of Kabiye

Kabiye is a Gur language of the Niger-Congo family (Bendor-Samuel, 1996). It is spoken in the northern part of Togo particularly in the Kara, Central and Plateaux regions, though predominantly spoken in the prefectures of Kozah and Binah. Kabiye is also spoken beyond the borders of Togo. It has been declared a national language and been introduced in the educational system in 1975 (*La Réforme de l’Enseignement au Togo*, 1975). According to Gblem-Poidi and Kantchoa (2012), Kabiye is spoken by about 975,000 people in Togo as their first language and by many others as their second language as a result of the migration of some Kabiye native speakers into other areas chiefly for agricultural motives. In fact, though trends are now changing, many Kabiye speakers are still found in farm activities and have been moving from their hometown to the southern part of the country for agricultural lands (Kao, 1999). Today, many Kabiye communities are found all over the country. With regard to the number of local communities, translation of international

agreements and declarations into national languages is very relevant because it is a means of inclusion of their speakers.

3. Literature review on climate change communication and translation

Though many studies have been carried out in the field of climate change communication, little attention is dedicated to translation and climate change. However, this section exposes some few but relevant scholarships on environment and agricultural activities.

Indeed, in Togolese national languages, very few documents, such as Atamon's (2001) *kpangbandiɛ* ("The Moringa tree") and *Pɪsatw haɖaw Togo taa* ("Cotton farming in Togo", Ministère de la Santé Publique et des Affaires Sociales, 1974), exist. According to the authors, Togo is mainly an agricultural country where farmers need to be trained on the varieties of crops to be grown and the methods to be used depending on the soils and seasons. He showed the usefulness of the moringa tree in the medical and food domains. However, there is no reference literature in the local language that shows farmers what they have to do in order to take care of their environment. Moreover, the literature on climate change and how to address it cannot be found either in Ewe or in Kabiye, the two main local languages. There is therefore a need for research on translation into local languages so as to provide farmers and indigenous population with writings in their own language.

In a study on the risk of neglecting emotional responses to climate change information, Moser (2007) argues that neglecting the emotional reception of climate-related news makes communication and outreach efforts more likely to fail. Furthermore, the scholar describes common feelings people may experience and how communication strategies increase the sense of urgency either deliberately or inadvertently. She finally notes that when there is good news, better alternatives will be witnessed. As far as climate change is concerned, Moser finds that better alternatives suppose different and efficient means of communication used in addressing it. Consequently, the translation of environmental documents into Togolese national languages appear as the better alternative that can affect local populations' emotional reception of climate-related news.

Dealing with communicating climate change, Moser and Dilling (2007) argue that while creating a climate for change, it is important to call for better communication to support behaviour and other social changes such as motivation. They find that communication for social change must consist of efforts to increase the motivation to make a change and help to lower the barriers to achieve it. This research intends to show that in local communities, people will be really motivated only if motivators communicate through local languages. In this regard, national languages lexicographers and translators are, and will be, of great help.

Kent and Preister (2012) describe the process of human geographic issue management of climate. They note that most climate change adaptation initiatives are driven from the top down. From their study, Kent and Preister find that to address climate change, implementation of policies should be based on grassroots movements. For them, it is important to honour the local, cultural and social norms in any initiative. The current

research is to investigate the validity of local norms in climate change communication by examining the importance of translating acts and agreements into Togolese local languages as a means of addressing this anthropogenic phenomenon.

For Péré (2014), each people and its language have their own classical tradition of perceiving the environment. In this connection, they use different words and expressions to express the elements of this environment. For this researcher, the designation of climatic facts in Kabiye, one of the Togolese national languages, is expressive in the descriptive use of climate through lexical, morphological and syntactic materials. Péré found that with the significant mutation undergone by the climate, there is a need for finding lexicons adapted to it. From the creation of an adapted terminology, translations of texts into local languages is a possible means to address successfully climate change challenges.

In her study “From Prometheus to Gaea: A case for Earth-centered language”, Rosenfeld (2019) argues that the adoption of Earth-centered language is a necessary but insufficient cause for Gaean discourse. For this scholar, using language that is respectful of Earth is offered as a starting point for establishing dialogue that is respectful of Earth. Consequently, psychologists as well as theologians, economists, scientists, and political scientists are invited to offer analyses of the role that Promethean discourse has played in their fields and how Gaean discourse would have to be articulated to counterbalance Promethean discourse. Moreover, a multi-lingual and cultural analysis is needed to offer insight as to how Promethean discourse may (or may not) play out in languages other than English and in cultures other than Western capitalistic society. The multi-lingual analysis offers, therefore, an opportunity for the current research that considers Togolese local languages in the address to climate change challenges.

Angwah (2020) studied the life-threatening effects of the current environmental degradation and explored the ecosophical inferences of some Cameroonian proverbs so as to find out the socio-cognitive implications and approaches to solve these problems. The author found that eco-friendly proverbs readily remind Cameroonians of their roles in environmental challenges through the illogical felling of trees and the incivility in the management of waste. Angwah’s findings give room to the present study on the translation of existing texts on environmental degradation into local languages because a proverb cannot succeed in being a reminder if the language is not understood by its audience.

4. Theoretical framework and methodology

Various approaches to theorising climate change, from general to local and from local to general, have been established in literature. However, two approaches have been chosen for the current study. The first theoretical framework considered here is the Local Climate Change Law (LCCL) by Richardson (2012). Richardson in the study of the phenomenon of anthropogenic climate change law shows that global theory on climate change challenges has been unsatisfactory and it is urgent to consider the issue locally. In this regard, according to Richardson (2012, p. 7, quoted in Péré, 2014, pp. 166-167), “as the

international climate consensus is fading, the focus has shifted from the global to local”. My research on translation into Togolese national languages as a means of addressing climate change challenges corroborates Richardson’s Local Climate Change Law approach. The national languages in my context derive from the local communities and are suitable to raise the climate change challenge.

The second approach is supported by Diki-Kidiri (2008) who claims for a “cultural terminology” while accounting for cultural and social phenomena. According to him:

La terminologie culturelle est une théorie spécialement pensée pour les langues en développement. Elle a pour objet principal l’appropriation des nouveaux savoirs et savoir-faire dans une société donnée. Elle permet à cette société de trouver le mot juste pour exprimer chaque concept, même nouveau, en puisant ses ressources linguistiques dans sa propre culture et selon sa propre perception du réel avec les conditions nécessaires à l’appropriation du savoir¹.... (quoted in Péré, 2014, p. 167)

A cultural terminology refers to each local community in the choice of their code while communicating. In the context of developing countries and particularly in Togo, local communities also cause climate change through anthropogenic actions and are also affected by its adverse impacts. This paper corroborates Richardson’s (2012) and Diki-Kidiri’s (2008) local approaches in the investigation on climate change and it argues that translating regulatory texts into Togolese local languages is a powerful means of addressing this phenomenon.

The overall aim of the study was to find out how translation into local languages can be encouraged in developing pro-environmental behaviours in order to locally address successfully climate change challenges. The data for the research came from two carefully selected Togolese agricultural zones (Notsé and Blitta) and Lomé, the capital city of Togo. The two agricultural areas were chosen because of their agricultural position in the country. Blitta and Notsé are the two most important granaries of the country where a large quantity of crops is produced to supply the need of the Togolese population. Lomé as the capital city was also concerned in the collection of written literature on climate change and its translation. In fact, as a developing country, most of the writings on every topic can only be found in the capital city. Therefore, the choice of Lomé was to make sure of the availability of documents. From the agricultural zones, 16 participants were randomly selected for the survey and interview data collection. Eight Ewe native speakers in the area of Notsé and eight Kabiye speakers in Blitta were chosen. The 16 participants were all male farmers and their age was above thirty years. The choice for only male participants is

¹ Cultural terminology theory is especially designed for developing languages. Its main purpose is the appropriation of new knowledge and know-how in a given society. It allows the community to find the right word to express each concept, even new, by drawing its linguistic resources from one’s own culture and according to one’s own perception of what is real with the necessary conditions for the appropriation of knowledge. (My own translation)

explained by the fact that in many communities of Togo, men are more likely involved in farm activities and they know better agricultural practices as well as the weather system. From the participants' status, it was quite certain that the data will be natural. The participants answered a four-question survey and also four open-ended interview questions. The following are the survey and interview questions that were considered for analyses.

Survey questions

1) Are you aware that the climate is changing? (Please tick the most appropriate answer.)

Yes No

2a) Have you ever been sensitised on bush fires or climate change? (Please tick the most appropriate answer.)

Yes No

2b) If yes, which language was used for the sensitisation? (Choose the most suitable answer.)

French English Ewe Kabyie

3a) How often do sensitisers come to you with some readings?

Often		Sometimes		Rarely		Never	
-------	--	-----------	--	--------	--	-------	--

3b) In which language were these readings? (Choose the most suitable answer.)

French English Ewe Kabyie

4) Do you have a good understanding of these sensitisation messages? (Please tick the most appropriate answer.)

Yes No

Interview questions

5) What shows in your area that climate is changing?

6) Have you ever heard about climate change readings in local languages?

7) Why didn't you understand very well the message?

8) What is your opinion about the use of French during sensitisation?

Both the data from the survey and the interview were analysed in order to propose new alternatives to address climate change challenges in local areas in Togo.

5. Results and discussion

Strategies on climate change generally favour top-down (from global or policy makers, scientists and environmentalists to communities or grassroots) regulatory approaches. My research favours the bottom-up approach which lays emphasis on the local communities

or the ordinary population because I believe that when actions start locally (Eckert & McConnell-Ginet, 1992), they are more likely to affect global climate decisions and therefore a bottom-up solution is the most appropriate. The research was to make sure that the grassroots is conscious of the climate change phenomenon.

To the first question of the survey “Are you aware that the climate is changing?” the 16 (100%) respondents reported that they acknowledged the change of the climate nowadays in their different areas. Consequently, the results of the data collected in Notsé and Blitta show that the local population is aware of the climate change phenomenon. The interviewees’ answers to question (5) tell us the reason why they believed that the climate is changing. According to them, the climate change is observed through the time and regularity of rains. They said that twenty years ago, on a yearly basis, there were two dry seasons and two rainy seasons in the southern part of the Togolese country where some specific crops were grown during each rainy season. The first rainy season was longer than the second and it was possible to produce long-lasting crops. But during the second rainy season which was much shorter, for nearly one or two months crops were cultivated. Unfortunately, today, these periods are no more respected and crop productions do not follow this rhythm. The same thing is happening in the northern part of Togo where the dry season has become longer than before. So, climate change has become a reality in Togo and addressing this phenomenon needs locally elaborated measures.

As far as the second survey question is concerned, 13 (81.2%) respondents answered that they had ever been sensitised about bush fires and climate change phenomenon in their local areas. Sensitisation about bush fires or climate change is a good step towards a change of mind if the audience get the message right. Respondents were now to talk about the time during which these sensitisations generally take place and the languages used in such communication. The 16 (100%) respondents reported that they were sensitised about the dangers of bush fires only at the end of the rainy season. During that period, some officials tell farmers the time during which they have to burn their fields in order to avoid ruining the land. To the question “In which language are these sensitisations carried out?” they answered that the most favoured medium of communication is the official language (French). As far as question (3) is concerned, while six (37.5%) respondents reported that climate change communicators sometimes came to them with pamphlets on the phenomenon, eight (50%) persons said that they rarely got access to these readings. For the remaining two (12.5%) respondents, they had never seen pamphlets on farm activities or on the environment or on the climate change. Despite the low frequency of pamphlets, their availability is already a good starting point. The answers to the same question show that the 16 (100%) respondents found that the existing documents are all written in French. This result corroborates the one on the language used during sensitisations. Accordingly, either in pamphlets or during sensitisations, French is the only language that is used with Togolese local communities. Concerning their understanding of the message in survey question (4), 14 (87.5%) participants reported that they do not get very well some French words and expressions. This situation raises the issue of using the foreign language

while communicating with indigenous people on topics that are relevant for their development. Indeed, knowing that the majority of Togolese population understand better their native languages, the best way of transmitting messages can be done through the use of national languages. Only local or national languages use can succeed in delivering clearly the message and convincing local populations.

In order to achieve this goal, while raising local communities and especially farmers' awareness of climate change and its adverse impact, campaigns through the sharing of international agreements pamphlets translated into local languages, agricultural radio and television programmes, theatre and music, conferences, environment day celebrations, celebration of traditional festivals intended to thank the divinities for abundant rains and hence successful harvest within and outside local communities have to be carried out in local languages or interpreted in local languages if the speaker uses the official one. As Fought (2006, p. 28) puts it, "not knowing (or using) the code that is most closely tied to the ethnic identity in the community can be a source of shame, embarrassment, or criticism". So, the use of French even if it were a formal celebration in a local setting, would be seen as inappropriate, and leaving the speaker open to accusations. But if he or she (the speaker) delivers the message in the local language and uses the technical jargon to express concepts he or she is talking about, it creates a certain tie or bound between him or her and his or her audience. In this regard, Fishman (1965, p. 90) opines that when somebody speaks the language of a particular community, the person "identifies himself with a different group to which he belongs, wants to belong, and from which he seeks acceptance". As a consequence, the local population will be ready to accept the message and available for change in their actions that contribute to the climate change.

Additionally, according to the data collected from interviewees, the use of local examples is more likely to overcome problems associated with technical terminology. Indeed, if climate change can be explained through practical examples in either Ewe or Kabiye (the national languages) and impacts (rather than as an abstract concept full of scientific terminology), more people will understand and engage themselves. The terminology in national languages therefore helps frame climate change information differently. This process can also influence the audience's response to climate change. The translation into national languages helps also promote each of the actions and strategies on climate change and facilitates farmers' acceptance of regulations and stimulates grassroots actions through their engagement with climate change.

The interviewees showed that they had a negative attitude towards the use of French as the medium of communication. As a result, the use of the foreign language has become the most important barrier to the communication of climate change in local communities. The translation of climate change and related technical terms and concepts relating to climate issues affecting people into local languages and their use appears therefore a relevant issue. The advantage of this approach is that climate change will be explained through notions and concepts that are familiar to local populations. In this respect, the standardisation of translated climate change notions and concepts could break

communication barriers and enable local populations to engage themselves in the fight against this phenomenon.

Today, many climate-related actions are included in global political and regulatory texts. These texts contain concepts and notions designing new climate phenomena which had not previously been known in the world and particularly in local communities. Very often, these climatic notions and terminologies exist only in western languages, especially in English and French. The establishment of a database in Togolese national languages becomes compulsory. The database in Ewe and Kabiye will not only be a very good bank of terminology/vocabulary on climate change but will also help in translating successfully these regulatory texts into Togolese national languages and then provide useful guidance for citizens who simply want to have a better understanding of what they hear and sometimes can read in their mother tongue. In this respect, Péré (2014, p. 179) thinks:

On ne comprend mieux les concepts que dans sa propre langue maternelle, surtout quand on sait que les premiers acteurs de l'agriculture traditionnelle sont les paysans. Cette connaissance et ces savoirs climatologiques linguistiques endogènes ne doivent donc pas être négligés, mais doivent être pris en compte par les décideurs dans l'élaboration des projets de développement, notamment agricoles, pour leurs meilleurs succès dans les pays surtout en développement d'Afrique.²

Therefore, words and expressions such as atmosphere, fertilisers, fallow, leave a field/land lying fallow, bush fires, greenhouse gas, carbon leakage, carbon market, carbon offset, climate change, and adaptation to climate change, climate change mitigation, low-carbon society, global warming, etc., need to be translated into Ewe and Kabiye languages for specific purposes.

The above views corroborate the Rio Declaration on Environment and Development (1992, pp. 2-3) in its Principle 10 which states:

Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.

² One understands better concepts in their own native language, especially when it is known that the first people involved in traditional agriculture are farmers. This knowledge and endogenous climatic linguistic know-how should not therefore be neglected but must be taken into account by decision-makers in the formulation of development projects, more particularly agriculture, for their best success in the developing countries of Africa. (My own translation)

Overall, due to the complexity and difficulty of climate change, national languages should be empowered by politics and granted an important place in every field of the country's environmental life. In this regard, Moser (2010, p. 36) observes that communicators should “find clearer, simpler metaphors, imagery, and mental models as well as compelling framing to lay the foundation for more appropriate cognitive processing”. These clearer, simpler metaphors, imagery, and mental models can only be found in one's local language. In Togo, the two national languages (Ewe and Kabiye) can play successfully that role since they are widely used all over the country and people feel at home when reading and speaking one of the two languages. It is important to remind that these local communities form cultural identities. Cultural communities generally identify themselves with others through their nearest local languages. As Hameso (2001, p. 23) notes, language “has wider repercussions other than linguistic and it affects everyday social interactions and behaviour of individuals”. In this respect, in the climate change communication, the state of one's local language reflects and affects the whole community. Local language has become the most effective tool of climate change communication. Thus, in order to efficiently address climate change challenges, climate scientists and translators should work hand in hand in order to improve the way of conveying findings to remote populations who, in their communities, are generally farmers (Somerville & Hassol, 2011, p. 48). In this regard, linguists and climate change communicators and particularly translators have to familiarise themselves with climate notions and concepts. Hence, a conjoint strategy between local communities and scientists/decision-makers/pro-environmentalists can bring about changes in local public's behaviour (Nerlich, Koteyko & Brown, 2010). Researchers on local languages and translators are now pressed to work on these languages so that they can translate climate change documents.

6. Conclusion

This study has investigated the importance of translating conferences and summits agreements from western languages into Togolese national languages in the process of addressing climate change challenges. It has shown that climate change is a complex and difficult phenomenon to understand and affects both global and local communities. Climate change has an incidence not only on the environment or the ecology but also on economics, education, security and the whole society. The research posits that communication plays an important role in the promotion of different strategies so as to facilitate acceptance of rules and regulations by the general public and to stimulate grassroots actions through their engagement in the climate change issues. Therefore, it has suggested the translation of international treaties, agreements and acts from western languages into Togolese national languages since the latter are powerful tools in communicating local matters. Backed with Diki-Kidiri (2008), Péré (2014) and Richardson (2012), this study has indicated that the use of translated local terminologies helps promote actions and strategies on climate change and facilitates local communities' acceptance of

regulations and their engagement to address efficiently the climate change. Emergent actions need therefore to be taken in order to promote the translation of key climate notions, concepts, and regulatory texts into national languages that will be used to speak to local communities.

References

- Angwah, J. (2019). Media discourses and communal stances on climate change in Cameroon. *Research on Humanities and Social Sciences*, 9(14), 17-22.
- Angwah, J. (2020). Ecosophical affability of some Cameroonian proverbs. *Language & Ecology*, 1-14. Available at <http://ecolinguistics-association.org/journal>
- Arctic Climate Impact Assessment (2004). *Impacts of a warming Arctic*. Cambridge: Cambridge University Press.
- Atamon, E. (2001). *Kpangbandiɛ [The Moringa tree]*. Kara: AFASA.
- Bendor-Samuel, J. (Ed.) (1996). *The Niger-Congo languages*. New York: University Press of America.
- Diki-Kidiri, M. (2008). La diversité dans l'observation de la réalité. In T. Henry (Dir/éd.), *Langues, cultures et développement en Afrique* (pp. 116-133). Paris: Karthala.
- Earth Negotiations Bulletin Tuesday (15 December 2015). A reporting service for environment and development negotiations, Vol. 12 No. 663.
- Eberhard, D. M., Simons, G. F., & Fennig, C. D. (Eds.) (2019). *Ethnologue: Languages of the World* (22nd ed.). Dallas, Texas: SIL International. Online version: <http://www.ethnologue.com>
- Eckert, P., & McConnell-Ginet, S. (1992). Think practically and look locally: Language and gender as community-based practice. *Annual Review of Anthropology*, 21(1), 461-488.
- Erbach, G. (2018). *COP 24 climate change conference in Katowice*. European Parliamentary Research Service.
- Essizewa, K. E. (2007). *Sociolinguistic aspects of Kabiye-Ewe bilingualism in Togo*. PhD dissertation, New York University.
- Essizewa, K. E. (2009). The vitality of Kabiye in Togo. *Africa Spectrum*, 44(2), 53-76.
- Fishman, J. A. (1965). Who speaks what language to whom and when? In L. Wei (Ed.), *The bilingualism reader*, (pp. 88-106). London: Routledge.
- Fought, C. (2006). *Language and ethnicity*. Cambridge: Cambridge University Press.
- Gblem-Poidi, H. M., & Kantchoa, L. (2012). *Les langues du Togo: Etat de la recherche et perspectives*. Paris: L'Harmattan.
- Hameso, S. Y. (2001). *Ethnicity in Africa: Towards a positive approach*. London: TSC.
- Kao, W. B. (1999). *Histoire generale des Kabiye: Origine et peuplement*. Lomé: Afric-Imprim.
- Kent, J. A., & Preister, K. (2012). Climate change and the language of geographic place. In H. A. Karl et al. (Eds.), *Restoring lands - Coordinating science, politics and action: Complexities of climate and governance* (pp. 421-442). Dordrecht: Springer.
- La Réforme de l'Enseignement au Togo* (Forme abrégée) (1975). Ministère de l'Éducation

Nationale.

- Lafage, S. (1985). *Français écrit et parlé en pays Ewe (Sud-Togo)*. Paris: SELAF.
- Ministère de la santé publique et des affaires sociales (1974). *Pisatv haɖav Togo taa [Cotton farming in Togo]*. Lomé.
- Moser, S. C. (2007). More bad news: The risk of neglecting emotional responses to climate change information. In S. C. Moser & L. Dilling (Eds.), *Creating a climate for change: Communicating climate change and facilitating social change* (pp. 64-77). Cambridge: Cambridge University Press.
- Moser, S. C. (2010). Communicating climate change: History, challenges, process and future directions. *WIREs Climate Change*, 1, 31-53.
- Moser, S. C., & Dilling, L. (2007). *Creating a climate for change: Communicating climate change and facilitating social change*. Cambridge: Cambridge University Press.
- Nerlich, B., Koteyko, N., & Brown, B. (2010). Theory and language of climate change communication. *WIREs Climate Change*, 1, 97-110.
- Péré-Kèwèzima, E. K. (2014). L'ethnoclimatologie linguistique en Kabiyè (Togo), une approche terminologique au service du développement agricole en milieu kabiyèphone. *Littératures et Civilisations*, 1, 165-180.
- Richardson, B. J. (2012). Local climate change law. In B. J. Richardson (Ed.), *Local climate change law: Environmental regulation in cities and other localities* (pp. 3-28). (IUCN academy of environmental law). Cheltenham: Edward Elgar Publishing. <https://research-management.mq.edu.au/ws/files/38194227/5753443.pdf>
- Rosenfeld, C. (2019). From Prometheus to Gaea: A case for Earth-centered language. *Language & Ecology*, 1-16. Available at <http://ecolinguistics-association.org/journal>
- Shuttleworth, M., & Cowie, M. (1997). *Dictionary of translation studies*. London: Routledge.
- Somerville, R. C. J., & Hassol, S. J. (2011). Communicating the science of climate change. *Physics Today*, 64(10), 48-53.
- Thomas, S. F. (1992). *The implications of translation theories for language teaching pedagogy*. PhD dissertation, The Institute of Education, University of London.
- United Nations (1992). The Rio Declaration on Environment and Development.
- United Nations (2010). Report of the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December 2009.
- United Nations Human Right (2015). Understanding human rights and climate change.