# THE CHALLENGES IN DEVELOPING TECHNO-SCIENTIFIC TERMINOLOGY USING THE CURRENT SHONA ORTHOGRAPHY IN ZIMBABWE.

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## Abstract

This study discusses the compatibility of the Shona writing system in handling the terminology of the techno-scientific field in Zimbabwe. The argument avowed in this article is that globalization has led to techno-scientific advancement in African countries like Zimbabwe as Information Communication Technology (ICT) is being incorporated into every facet of human life. As such, most communities have been flooded by foreign concepts and terms in English which they need to also name or translate into their indigenous languages. This has exposed the inadequacies of certain writing systems, such as the current Shona orthography due to its shortcomings in handling certain technical and scientific terms. This study further argues that borrowing is the commonly used term creation technique in Shona, under which rephonologization of terms is done conforming to the target language's writing system. The Shona orthography is failing to recognize these borrowed sounds correctly owing to its liabilities in representing phonological sounds as they are spoken. This creates gross ambiguity as users end up writing differently from their everyday speaking. This study is influenced by Skinner's (1957) habit-related Behaviourist Theory and by Aitchison (1991) who suggests that the two basic causes of language change are socio-linguistic and psycholinguistic factors. In-depth interviews and document analysis of specialized dictionaries are used to collect research data. Furthermore, the Shona Language Database is used to find language usage in the everyday context. Findings are analyzed qualitatively. The study recommends revision of the current Shona orthography to render it usable in the field of techno-science.

KEYWORDS**: ORTHOGRAPHY, GLOBALIZATION, TECHNO-SCIENCE, PHONOLOGY, TERMINOLOGY.**

## 1. Introduction

The quest for techno-scientific development in Africa has been the concern of scholars of diverse origins and disciplines. Most African countries are confronted with massive technological and scientific advancements in the wake of globalization, international trade, and migration (Dlodlo, 2021). This has witnessed new techno-scientific goods and services permeating into societies which are received with boundless jubilation as it eased the means of doing things in all facets of life. However, the influx of techno-scientific concepts, which have names in a 'global language such as English unearthed a language problem that was never imagined. The need to name these concepts in the native language for easy communication among native speakers and to foster Mother-Tongue Based Education (MTBE) compelled African societies to devise different strategies of term creation to name these concepts in indigenous languages. Resultantly, African societies are facing the daunting

task of naming foreign concepts in African languages so that they can fully embrace this advanced technology due to orthographical inadequacies (Chitauro –Mawema, 2000).

Shona is directly in contact with English -a foreign language that came into Zimbabwe owing to colonization and globalization (Nhongo and Tshotsho, 2021). Consequently, Shona received additional 'foreign' linguistic features from outside its traditional domain. In this process of borrowing from outside its main domain, it cooperated alien segmental and suprasegmental features into its linguistic inventory (see Chitauro-Mawema, 2000; Chivhanga, 2008 and Zivenge, 2009). Shona is developing its stock of vocabulary through the borrowing of lexical items to fill in gaps realized in communication. This ultimately results in sound and phonological changes in Shona that need to be captured by orthography. At the segmental level, changes are mediated by phonetic processes to ease articulation.

English is widely recognized as the international language of scientific and technological advancement, and also linguistic evolution. The techno-scientific terminology, therefore, enters African countries engraved in this language which creates a communicative gap that needs to be bridged. Regarding the need for African countries to liberate their languages from a colonial hangover, Mazrui and Mazrui (2000) has this to say,

> "….No country had ascended a first rank technologically and economic power by excessive dependence on foreign languages. Japan rose to dazzling industrial heights by scientificating the Japanese language and making it the medium of its industrialization…Can Africa ever take off technologically if it remains so overwhelmingly dependent on European languages for discourse on advanced learning?"

To meet the demands of this take-off, language experts have placed considerable effort into terminology to furnish this techno-scientific field with indigenous terminologies (Gumbo, 2016 Ndhlovu, 2014). However, despite all these efforts, defective Shona writing systems have been a major drawback as they are not equipped adequately to write borrowed scientific terms. Sager (1991) points out that terms that express scientific and technological concepts must fulfill certain conditions. This implies that the borrowed term is adopted as it is from the source language, it is re-phonologized so that it can adapt to the target language's orthographical conventions (Chimhundu, 2010, Zivenge, 2009, Khumalo, 2009). It is during this re-phonologization process that major challenges are sprouting. The Shona orthography, for example, is not able to capture distinctively certain phonological sounds from English due to its inadequacies. For the avoidance of ambiguity in naming techno-scientific concepts, borrowing or loaning is a widely used term creation strategy in most African societies like Zimbabwe.

The lack of scientific terms in African languages has real-world consequences, particularly in education and communication. The current Shona writing system has immense liabilities as certain phonemic sounds from English are not incorporated into the alphabet (Chimhundu, 1992, Magwa, 2007). The orthography is facing great criticisms as ambiguity problems are created resulting from several cases where some of the Roman letters represent more than one contrastive sound or phoneme or fail to recognize certain phonemic sounds. Consequently, representing contrastively certain phonemic sounds from the field of techno-science has proven to be problematic. It is the thrust of this study to interrogate the challenges of the Shona writing system in handling techno-scientific terminology. This research advocates for a comprehensive Shona orthography revision that shall influence future and termino-lexicographic work in Zimbabwe and Africa as a whole.

## 2. Research Methodology

Research for this study was conducted among the Shona-speaking community. It relied heavily on discourse analysis of literature that was published using the current defective orthography and the selection and treatment of headwords in the Shona lexicographic work, specifically *Duramazwi ReChiShona* (Shona Dictionary), *Duramazwi Guru reChiShona* (Advanced Shona Dictionary), *Duramazwi reMimhanzi*(Shona Musical Terms Dictionary), *Duramazwi reUtano neUrapi* (Shona Bio-Medical Terms Dictionary), *Duramazwi reDudziramutauro neUvaranomwe* (Shona Linguistic and Literary Terms Dictionary). The Shona Language Database is also explored to find the everyday Shona usage vis-a-vis the current orthographical conventions. The research also relied on observation of how the Shona-speaking community treats these techno-scientific terminologies in formal and also non-formal ways of communication such as on social media platforms. This enabled the researchers to identify ways in which speakers treat certain phonemic sounds that are not permissible in the current writing system. To be better able to establish whether the current Shonawriting system has some limitations in writing techno-scientific terms, the study sampled three population groups, namely, under 20 years, 20 to 40 years, and over 40 years of age. Data collection involved the use of conducting in-depth interviews with members of the population in the above three categories. The research findings were presented qualitatively.

## 3.Theoretical Framework

Data collection and analysis for this study were influenced by Skinner's (1957) habit-related Behaviourist Theory which argues that language learning is influenced by the environment and enhanced by reinforcement, and by Aitchison (1991:107) who suggests that the two basic causes of language change are socio-linguistic and psycholinguistic factors. According to her, socio-linguistic causes are the following external factors:

(a) Fashion: like fashion in clothes, fashions of language change,
(b) Foreign influence: this mainly involves borrowing 'foreign bits and pieces of vocabulary that are regarded as useful and which become part of the language, and
(c) Social need: This is when language is used to suit the needs of the users as the situation may demand, especially where the other languages do not have lexical items that would express the views and concepts enough.

The psycholinguistic causes are internal, more deep-rooted, and fundamental. They relate to the knowledge of a language and the ability to use it effectively. These factors can be influenced by attitude towards the language so that, where the attitude is negative, there is no desire to learn the language, to use it properly, and to maintain and revitalize it. As a result, the language may die. In line with Aitchison's framework, Shona is going through a lot of contact-induced change as a result of its contact with English. Resultantly, foreign techno-scientific concepts are infiltrating the language at a high rate because of the social need to name the concepts in an indigenous language, a variety of term creation strategies are being employed and the commonest one is borrowing or loaning of lexical items from English to serve a certain communicative function which has exposed the inadequacies of the Shona writing system as it failed to accommodate certain phonemic sounds in the process of borrowing the lexical item.

## 4.Developments In The Shona Orthography

Generally, Shona has a writing history that dates back many centuries from when missionaries came to Zimbabwe. During the 16$^{th}$ Century, Christian missionaries from

different denominations and nationalities established missions in the Shona-speaking areas of Zimbabwe. According to Chimhundu (1992) and Magwa (2007) each missionary group proceeded with its generation of proselytizing literature to carry out its mission. Partly because these missionaries worked in different dialectal areas, but mainly because these missionaries lacked sophistication, they imposed their native linguistic traditions on the Shona language and relied on interpreters who were not fully proficient in Shona and English (Chivhanga 2008). As a result, different written variations of Shona evolved in each of the mission areas suggesting that greater diversity existed within Shona. These missionaries differed in their choice of letters and word choices as argued by Magwa (2007).

However, serious efforts to design a Shona orthography began in 1903 when missionaries started addressing the orthography question jointly after several divergent systems has already emerged in places they were ministering to (Chivhanga, 2008). Professor C.M Doke, a linguist from the Department of Bantu languages at the University of Witwatersrand in South Africa was requested to intervene and settle the contentious issue of a common Shona orthography, which early missionaries had been addressing seriously during the previous twenty-five years but had failed to resolve (Chimhundu, 1992). Doke did manage to come up with a common writing system for all Shona dialects of Zimbabwe that are spoken outside the administrative provinces of Matabeleland. The major principles on which he based his unified Shona orthography have been maintained to the present, that is, the principle of the distinctiveness of symbols used in the alphabet and the choice of a conjunctive system of word division as being appropriate for an inflecting or agglutinative language (Doke, 1931).

This standard orthography and the other recommendations that Doke made on the writing up of the grammar, the pooling of vocabulary and compiling of dictionaries, and the development of written literature and the creation of a standing committee to advise on language and the promotion of the writing and literacy, having made it possible for Shona to develop into one major literary language of the region. There were some misgivings about the new orthography right from the onset and debate on aspects of it continued on and off. By 1946, it had become clear there was mounting criticism. While almost everyone else had welcomed the 1931 orthography, its main opponents were government officers who criticized the special symbols and presented the fact that it had been designed by someone who had been brought in from outside (Chimhundu, 1992)

The criticism of special symbols and what was considered to be excessive conjunctivism from 1946 eventually led to the changes that were made in 1955 by the Shona Language Committee mainly to remove special phonetic symbols (Magwa, 2007). Influential people won the argument that the special symbols should be discarded and that revisions should be made to the Roman alphabet. So in 1954, an Orthography Committee was established by the government to specifically make provisions for a system of spelling in which only the letters of the Roman alphabet would be used. The outcome was a pamphlet by the Orthography Committee in 1955, setting out the new rules. According to Chimhundu (2005), Doke's principle of one sound one symbol, or one symbol one sound was abandoned in the committee's bid to discard the special symbols. The following were the letters and diagraphs that were to be used:

<a, b, ch, d, e, f, g, h, l, j, k, m, n, o, p, r, s, sh, sv, t, u, v, w, y, z, zh, zv >

From the Roman alphabet, only the letters <l, q, x> were not taken. This means <x> was dropped, while <c> was replaced by<ch>. The six special symbols were replaced as follows :< ɓ> with <b>, <ɗ> with d>, <ʂ> with <sv>, <ʐ> with <zv>, <ŋ> with <ng> and <ʋ> with <v>.

In the case of the diagraphs <sv, zv> which now represented the whistling fricatives /ʂ, ʐ/, the committee had managed to find a solution that did not create new problems. However, the other four cases resulted in ambiguity because distinctions could no longer be made between the implosives /ɓ, ɗ/, and between bilabial approximant /ʋ/ the labiodental fricative /v/, and the velar nasal /ŋ/ and prenasalized velar stop /ŋg/. However, while some problems were solved, more were created because ambiguity was the result of several cases where some of the Roman letters represent more than one contrastive sound or phoneme.

The second revision of the Shona orthography was undertaken in 1967 by the Shona Language Committee of the Ministry of Education, with the responsibility 'to guide the evolving written language…towards a consistent and uniform system, common to all the speakers of the language (Fortune, 1972: v). The total effect of the changes that were made to the alphabet in 1967 was to bring the 1955 orthography in line with the 1931 orthography by restoring the principle of distinctiveness, but the ambiguities of the 1955 orthography were removed without resorting to the special symbols of 1931.

To date, written Shona uses the following alphabet, which was approved by the Minister of Education in 1967:

> < a, b, bh, ch, d, dh, e, f, g, h, i, j, k, m, mh, n, nh, ny, n', o, p, r, s, t, u, v, vh, w, y, z, zh, zv >

These 34 letters and diagraphs are based on the Roman alphabet and they represent all the phonemic distinctions that were recognized by Doke in 1931, but without the addition of any new or special symbols (Chimhundu, 1992 and Magwa, 2007). It is this 'new' orthography of 1967 that we in fact, now refer to as the current orthography, which is being used to write standard Shona today because there has not been another revision since then. In reality, this current orthography is a compromise between the two previous ones in that it restored the principle of distinctiveness or one sound, one symbol (Doke 1931). While using the Roman letters in their combination to represent the thirty-two phonemes that Doke had identified in Shona and had represented in the alphabet using a mixture of Roman letters and phonetic symbols. There has been no further revision of the alphabet or rules for word division since then. The actual provisions that were made in that orthography have been maintained to the present despite two revisions of the orthography in 1955 and 1967, the total effect of which was to replace six of Doke's original eight phonetic symbols /ɓ, ɗ, ʂ, ʐ, ʃ, ʒ, ŋ, ʋ/ with Roman letters and to make a few minor changes in word division. Therefore, when we talk about the current orthography, we are referring to the 1967 orthography.

## 5. Analysis of Findings

### 5.1. Challenges Of The Orthography In Handling Techno-Scientific Terminology

Data collected from Duramazwi *reMimhanzi* (Shona Musical Terms Dictionary), *Duramazwi reUtano neUrapi* (Bio-Medical Terms Dictionary), *Duramazwi reDudziramutauro neUvaranomwe* (Shona Linguistic and Literary Terms Dictionary) demonstrate that the current Shona orthography possesses great liabilities in the handling of

techno-scientific terminology. Magwa (2002) posits that from 1967 onwards, speakers of different dialects were experiencing certain difficulties arising from defective orthography and misspelling and the word division system. So if the current Shona orthography is constricting in several ways to dialects of the same language that have a high degree of intelligibility, adverse results are expected when expressing techno-scientific terms borrowed from English.

Considering evidence from *Duramazwi reUtano neUrapi*, the current Shona orthography is unable to realize numerous borrowed lexical sounds and morphemes which are used by Shona speakers every day. The absence of certain letters or diagraphs, like <th, kh, rh, ph, gh, l> in the current Shona orthography has brought so many challenges in day-to-day writing. The digraph <th> is not permissible in the Shona alphabet but it is being noticed in many Shona terms that are borrowed from English, for instance, *thiyori* (theory), *thiyeta* (theatre), and *themomita* (thermometer). The lexical item *themometa* (thermometer) has been rephonologized and can now be recognized in the Shona phonemic inventory. The word-initial */thi-/* is borrowed from English since it is an alien sound to Shona. The vowel /e/ in English has been changed to /i/ in Shona to be in line with the English pronunciation whereas /*-yori*/ is Shona. Our position, therefore, is that while the standard orthography needs to be respected, the corpus needs to be respected as well as it should not happen that community norms prevent one from hearing about *themomita* (thermometer) because its spelling has [th] in it.

The same is noted in the absence of the digraph <rh> in the Shona writing system. Several techno-scientific terms in Shona are using /rh/ when being rephonologized although this sound is not orthographically permissible in Shona, for instance, *rheza* (razor), *rhin'iwemu* (ringworm), *rhetina* (retina) and *rhediyasi* (radius). Therefore, the use of <r> which is in the current orthography instead of <rh> (with aspiration) results in ambiguity and loss of meaning which ultimately leads to miscommunication and vagueness. Linguists, especially Ferdinand deSaussure (Atchison 2001) have shown that change is inevitable in any language. Languages change in various ways, the commonest being adopting and assimilating segmental and suprasegmental features from languages with which they are in contact. This entails the necessity of constant upgrading of writing systems to suit the ever-changing phonemic directories. Speakers of such languages mingle and may exchange linguistic items, which interfere with their mother tongue, thereby altering them hence the need to consistently revise the orthography so that it can be compatible with the field of techno-science. The Shona orthography is failing to recognize some phonemic sounds that come along with this contact-induced change.

Another example of English consonant sounds that have been assimilated in Shona but are not represented in Shona orthography is the English lateral approximant [l] which is predominantly used in the language database. Shona used to signify objects that are peculiar to themselves in the precolonial period, but, because of constant interaction with other languages like English through colonialism, the natural transfer occurs as speakers mingle, resulting in what Chimhundu (1992) refers to as adoption. This means that change is, among other reasons, the result of borrowing linguistic features from one language into another to fill in communication gaps in the receiving language. In doing so, usually languages borrow segments from foreign languages with which they are in contact. As such, the letter <l> which is used in English has permeated the Shona linguistic landscape, and its significance to ease communication cannot be ignored. Consider the following illustrations in the *Denhe neduramazwi zveUtano neUrapi* (Shona Medical Encyclopedia), these terms are written as *miririta* instead of *mililita* (millilitre), *rita* instead of *lita* (litre),*reza* instead of*leza* (laser),

*renzi* instead of *lenzi* (lens). All this is attributed to the shortcomings of the current 1967 orthography which fails to write sounds the way they are spoken. Using the letter <r> instead of <l> is problematic as people should write the same way they speak. This creates ambiguity and miscommunication as phonemic sounds are not orthographically represented the way they are articulated. Contact with English necessitates cross-linguistic influence as a result of politics, cultural, and economic developments and the proliferation of technological and scientific fields across the world hence the need for orthography revisions in most African societies.

The problem comes where there are no direct equivalents or where there are no sounds near the Shona one when borrowing is being used as a term creation strategy. In complex situations where there is no direct correspondence, alien sounds from the loaner language are adopted as they are into Shona. However, the words go through a rephonologization process to enable alien sounds to be recognized by the Shona alphabet (Zivenge, Mheta, and Kadenge, 2010). This is where limitations of the current Shona writing systems are exposed as it fails to accommodate these alien phonemic sounds like /ph/or to rephonologize it properly in the manner it is articulated. For instance, the Shona writing system permits *perimita* instead of *pherimita* (perimeter), *paunzi* instead of *phaunzi* (pounds), *pegi* instead of *phegi* (peg) and *purotozowa* instead of *phurotozowa* (protozoa). The orthographically permissible sounds /p/ in the above examples fail to differentiate aspirated and unaspirated sounds in writing which are vital in deducing the meaning of terms. Using the current orthography is creating 'funny' terms which are heavily laden with ambiguity and distort meaning especially when one is familiar with the English terms. The existence of these sound combinations in general writing of borrowed terminology in the language database and their use in day-to-day informal writing is an indicator that they have been adopted from English and are constantly in use although the current 1967 Shona orthography does not recognize them.

Haugen (1976) reports that Scandinavian grammarians battled with the same questions back in the 17th Century. In the Zimbabwean case, lexicographers ended up devising a variety of ways in dealing with this correspondence failure existence in Shona. For example. During the compilation of *Duramazwi Guru reChiShona*, discussed this in general planning and training meetings and workshops and recommended that they should avoid headwords containing these letters and/ or diagraphs. Also, they agreed to systematically replace [l] with [r] in headwords as is customary with adopted words, this worked well for ball – *bhora*, film – *firimu*. Their recommendation to continue to ignore words with [th] and [rh] and also to replace the [th] with [t] and [rh] with [r] provided them with a short-term solution to the orthographic crisis of the Shona language (Chitauro-Mawema, 2000 and Madzimbamuto, 2021). Moreover, this solution resulted in ambiguity as the phonological sounds within Shona are not captured correctly in writing. The following adoptive deserve to be written the way they appear in the corpus and also, they are spoken on an everyday basis by the Shona speakers. *kukhala* (to colour), *yelo* (yellow), *bhuluu* (blue), *khalenda* (calendar), *bhethi* (birth certificate), *rhumba*(type of music), *ndombolo* (a Zairean dance).

A close look at the occurrence of these items in the Shona language database leads to the realization that these words are now part of the everyday Shona and that it will be unwise to continue ignoring their existence. Although conservativism advocates for coinages through and through, there is a limit to which 'foreign' letters can be replaced with local ones, as there is an aesthetic side to both written and spoken languages that cannot be ignored. For example, the digraph <kh> is absent in the current Shona orthography but there are a lot of phonemic sounds that use this consonant cluster. The words *khochi* (coach), *khoti* (court),

*kheji* (cage), *khenza* (cancer) and *khemo* (chemo – the clipping of chemotherapy) are terms borrowed from English but cannot be written as such in Shona due to orthography deficiency. They end up being realized as *kochi*, *koti*, *keji*, *kenza* and *kemo* respectively. Chitauro-Mawema (2000) observes that this orthography deficiency ...where good indigenous words exist for the technical/scientific concept that needs naming, it would be best to promote those words over adapted forms. Shona already has a good tradition of naming in which it observes the behavior of a thing/concept and then gives it a name that qualifies that observation. The feeling is that this tradition should continue through new coinages, which would include new Shona words as well as semantic extensions of already existing ones. However, with coinages, writers, lexicographers, and terminologists are faced with the possibility that speakers might not use them and would opt to stick to adapted forms with which they are more familiar (also see Gumbo, 2016; Ndhlovu, 2014 and Khumalo, 2009).

## 6. The Way Forward

Having seen the liabilities of the current Shona orthography in handling terminology from the techno-scientific field, specifically from English (which is the main donor), the following recommendations are made by the researcher.

### 6.1.Revising the current orthography

There is an urgent need for the revision of the current Shona orthography. Evidence portrayed above showed that techno-scientific terminology borrowed from English is not being captured convincingly in Shona. It is undoubtedly that most of the techno-scientific terms being used in Shona are coming from English. Inversely, the Shona orthography possesses certain limitations which make it impossible to write them after the rephonologization process. The researcher recommends the following diagraphs to be included in the Shona alphabet <th, ph, kh, gh, rh> and also the letter <l>. There is a need to carefully study the phonemic sound systems of the language so that we can have a thorough phonological description that will inspire these orthography revisions. This will enable the Shona speaker to write the same way they speak, even regarding terminology from techno-science.

### 6.2.Acceptance of International scientific vocabulary

In Shona, the use of internationally recognized vocabulary and symbols should be embraced. This comprises scientific and specialized words whose language of origin may or may not be certain or have been embraced in a variety of other languages to ease techno-scientific communication for example, % (for percentage), $(for dollars), £ (for pounds) ℃ (for degrees Celcius). According to Chitauro-Mawema (2000), inclusivity of international vocabulary was done in the selection of headwords for the Advanced Shona dictionary. IV refers to technical words which carry specific, unchanging, and unambiguous senses in the context in which they occur and are used internationally. Most of these words, she added are encountered in scientific and technical subjects taught in schools, where part of the mastery of each discipline entails the mastery of the concepts in it. This encourages the translinguality of certain techno-scientific words across the globe. Translingual phenomena are words and other aspects of language that are relevant in more than one language. Thus "translingual" may mean "existing in multiple languages."

### 6.3 Establish a Terminology Board

To mitigate the challenges being faced regarding techno-scientific terminology vis-à-vis the current Shona orthography, there is a need to establish a Terminology Board in Zimbabwe. The main mandate of this should be to facilitate the creation of Shona terminology under various disciplines. The board will collaborate with other relevant stakeholders in language Research and Development, the National Language Institute and local universities to fulfill this function. It will also be the responsibility of this board and its terminologists to inform the Shona-speaking community to enhance the usage and acceptance of new terms.

### 6.4 Creation of Scientific and Technical dictionaries

Compilation of scientific and technical dictionaries and corpora is necessary for the development of the Shona language, especially the treatment of scientific and technical terms even in general monolingual dictionaries. They will be used as reference books in matters regarding terms that can be used in the language. Currently, there are limited techno-scientific dictionaries in Shona, with *Duramazwi reUtano neUrapi*, (Bio-Medical Term dictionary, *Duramazwi reMimhanzi* (Musical Terms dictionary- 2006), and *Duramazwi reUvaranomwe neDzudziramutauro* (Shona Linguistic and Literary Term Dictionary - 2007) as the major techno-scientific dictionaries in Shona.

## 7. Conclusion

The discussion has been undertaken to show the linguistic deficiencies of the current Shona orthography in handling techno-scientific terminology. It has been revealed that Shona is developing by adopting lexical items from other languages with which it is in contact. This results in the incorporation of some phonemic sounds alien to Shona. These are English phonemic sounds that cannot be realized by the current Shona alphabet due to its deficiency. The article has indicated the writing problems and also headword selection when doing lexicography as a result of the inadequacies of the current orthography. The article concentrates mainly on problems emanating from English loanwords since most techno-scientific terms have English as the donor language. This is an important aspect to consider for monolingual lexicography because the technical evolution of the twenty-first century, with the advent of globalization, is causing both linguistic and orthographic evolution, a shift that is evidenced by the inadequacies of the Shona orthography. What is important, however, is that monolingual lexicographers, together with both speakers and planners of the language, should constantly revise and broaden the alphabet and orthography of their language, to cater for language development. This will help to overcome the problem of the inadequacies of orthography. There is a need to revise the current Shona orthography so that it can capture English (the most donor language) phonemic sounds to enable speaker-writers to write the way they speak. Continued use of the 1967 defective orthography is a hindrance to the terminology development of Shona and also retard the Mother-Tongue Based education (MTBE) in the country and the full implementation of Science Technical Engineering and Mathematics (STEM) projects in Zimbabwe.

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