Resolving hiatus in Tonga

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Abstract

The study investigates hiatus contexts and hiatus resolution strategies in Zimbabwean Tonga. Data for this research were collected through intuition because one of the researchers is a native speaker of Tonga. The data were verified by other native speakers of Tonga. The analysis is couched within generative CV Phonology model (Clements & Keyser, 1983). The study establishes that Tonga does not allow vowel hiatus and when it occurs it is resolved by vowel deletion, secondary articulation, glide formation, glide epenthesis and vowel coalescence. These strategies do not operate haphazardly but they are motivated by different morphosyntactic and phonological environments. The study also found out that compensatory lengthening accompanies each strategy in well-defined morphosyntactic and phonological contexts. Morphosyntactically, it accompanies other hiatus resolution strategies in the verbal domain and infinitive verbs. Phonologically, compensatory lengthening accompanies other strategies when V_1 is either /u/ or/i/. The major contribution of this research is typological

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because it adds to the Bantu literature as to how Tonga language resolves hiatus. Tonga is unique in the sense that it uses accompanying compensatory lengthening. Compensatory lengthening in Tonga occurs only in the verbal domain when V_1 is either /u/or/i/.

Keywords: hiatus resolution, compensatory lengthening, secondary articulation, glide formation, vowel deletion, vowel coalescence, glide epenthesis, Tonga

Tonga language is a cross border language which is spoken in Zambia, Zimbabwe and Malawi. Wolff (2000, p. 320) defines a cross border language as a language whose territory has been divided by an international border and is spoken on both sides of the border. In Zimbabwe, Tonga is spoken in the Zambezi Valley covering Binga and Hwange districts in Matebeleland province, Gokwe North and Gokwe South in the Midlands province and Nyaminyami district in Mashonaland West province (Mumpande, 2013). During the construction of the Kariba Dam in 1957, the Tonga speaking communities were displaced and this resulted in the cutting of cultural ties with the Tonga people in Zambia. In Zambia, the Tonga language is spoken mainly in the Southern and Western Province of Zambia which includes Leya, Toka, Totela, Chiwe and Plateau Tonga dialects. There are four dialects of Tonga that are spoken in Zimbabwe namely the Chiwe, Chinamweemba, Chinamalundu and Chidoombe. The study focuses on four dialects that are spoken in Zimbabwe in which the researchers have easy access to the data. This study comes as a backdrop to the 2013 Constitution of Zimbabwe which has officialized Tonga as a national language.[5] Section 6 of the constitution now recognizes formerly marginalized languages as part of the official 16 indigenous languages that should be treated equitably.

The study analyses hiatus resolution patterns of Tonga, providing the phonotactic rules of the language in the process. Hiatus refers to a hetero-syllabic sequence of adjacent vowels. Here, it is shown that, apparently, conflicting repair strategies like glide formation, glide epenthesis, secondary articulation, vowel elision and vowel coalescence are well-motivated, phonologically and morpho-syntactically. It is demonstrated that these morphophonemic processes have only one goal: to achieve the typical or preferred phonological structures of Tonga; namely, the consonant-vowel (CV) syllable structure. The study adopts a syllable-based approach to hiatus because it attributes hiatus resolution to the ill-formedness of onset-less syllables in word medial position. We adopt this approach primarily because, as noted by

[5] Tonga just like other minority languages, such as Hachipola like Venda, Kalanga etc., has always been treated on the periphery.

Goldsmith (1995), the syllable is a natural domain for the statement of many phonotactic constraints.

Previous studies on hiatus in other Bantu languages like Ndau (Mutonga, 2017), Zezuru (Mudzingwa, 2010, Kadenge, 2010), Karanga (Mudzingwa, 2010), Nambya (Kadenge, 2008), Chishona (Mabugu, 2009), NciSenga (Simango & Kadenge, 2014) have shown that hiatus occurs in well-defined morphosyntactic and morphophological domains. Given such a situation, this study seeks to find out the pattern in which hiatus occurs and how it is resolved in Tonga morphosyntactic and phonological domains.

As noted in Bantu literature, like Karanga (Mudzingwa, 2010; Mudzingwa, 2013), Zezuru (Mudzingwa, 2010; Mudzingwa & Kadenge, 2014) Ndebele (Sabao, 2012) and ciNsenga (Simango & Kadenge, 2014), in Tonga, hiatus resolution creates an onset for the second onset-less vowel (V_2) because the second syllable lacks onset. Onset-less syllables are generally marked in the world's languages and the resolution of vocalic hiatus is generally attributed to the high ranking markedness constraint ONSET, which requires syllables to have onsets, thus disallowing hetero-syllabic $V_1.V_2$ sequences which would arise where hiatus is maintained.

Tonga is, arguably, one of the least under described languages in Zimbabwe. The extent of its underdevelopment is demonstrated by an apparent paucity of meaningful studies and literature across its linguistic, historical and cultural aspects. Such a void is not consistent with its official and "officially recognized" language[6] status in Zimbabwe as it is expected to function in high-status and controlling domains of language such as education, media, science and technology, politics and economy. There are a handful of studies on Zambian Tonga (Carter, 2002). Apart from Carter who has given a descriptive analysis of Tonga grammar, not much has been done in documenting and researching Zimbabwean Tonga phonology. The only studies (Zivenge, 2005; Zivenge, 2009) were on how loanwords are phonologically and morphologically integrated into Tonga. It must be mentioned that Zivenge (2005; 2009) never attempted a description of native Tonga vowel sequence.

[6] In view of the Constitution of Zimbabwe, Tonga is presented as one of the 16 officially recognized language of Zimbabwe. However, the term 'officially recognized' language remains not only elusive but hotly contested as language scholars believe that it does not translate into an official language, while legal experts insist that it carries the same weight as an official language (Kadenge & Mugari, 2015; Mutonga, 2017; Sithole, 2017).

Given such limited research on Tonga in the Zimbabwe landscape, it can be justifiably argued that there is dire need for linguistic research. As a result, the study adds to the limited literature on Zimbabwean Tonga grammar, particularly its phonology. It is also hoped that the research helps to fill a gap in our knowledge of Zimbabwean Tonga by offering a detailed study of the phonological processes of the language.

The study is expected to provide an impetus for further descriptive and theoretical exploration of other aspects of Tonga grammar. This is important, especially when one considers the fact that Tonga is a marginalised language and the fact that the United Nations (UN) is currently advocating the promotion of marginalised languages for the betterment of their speakers (Mumpande, 2013, p. 4). This recommendation is in line with the Pan African ideals espoused by the African Union (AU) and the Southern African Development Community's (SADC) Language and Cultural Charters (Kadenge, 2009). Consequently, the study intends to contribute to language documentation and research in Bantu languages in general and particularly in Tonga.

The contribution of this research is four-fold; first, it presents novel data on hiatus from Tonga and second, it is typological, as it adds to a list of languages that utilize repair strategies to eliminate hiatus. Thirdly, this helps bring together not only the vowel hiatus repair strategies but also to show that the phonology, morphology and morpho-syntax of Tonga and other Bantu languages, are inextricably linked (see Myers, 1990). Fourthly, it is an original formal analysis of vowel hiatus in Tonga that has not been described in previous studies on this language (Zivenge, 2005, 2009). The overall significance of this study is based on the fact that it is the first study to offer a comprehensive analysis of hiatus in Tonga.

Methodology

The primary source of data in this research is intuition since one of the researchers is a native speaker of Tonga. Intuition is the data gathering method that is used widely in generative grammar studies (Heageman, 1991). This introspective approach where a writer, as in the present case, uses oneself as an informant in the accumulation of data is what Newmeyer (1986, p. 23) commented upon as follows: "the typical practice of generativists has been to use themselves as informants in collecting data about the acceptability and interpretation of grammatical constructions". The linguistic competence of one of the researchers is a language ability that she shares with other speakers of the Tonga language. It cannot be expected that

the researcher's introspective judgments on Tonga constructions will always be accurate. With this view in mind, the researchers, where they deemed necessary, therefore checked on the grammaticality and/or acceptability of utterances against the collective linguistic and/or grammatical competence of other native speakers of Tonga in Binga and Gokwe Districts. In doing so, one of the researchers also intuitively wrote down words and phrases that have undergone some phonological processes and a list of potential phonological processes. After compiling the above-mentioned lists, the researcher asked the native speakers (both males and females) of Tonga to confirm the phonological processes on the prepared list of words. The data were audio recorded and phonemically transcribed.

Theoretical framework

The analytical framework adopted in this study is CV Phonology model of syllable structure developed by Clements and Keyser (1983). It is the theory of syllable structure representation which characterizes the syllable as a three-tiered structure having the formal properties of autosegmental system. The model deals with syllable, which is very important in analysis of vowel sequence (Katamba, 1989). Clements and Keyser (1983) show that the syllable structure has three levels that are, the syllabic tier, CV tier and segmental tier. The syllabic tier contains a string of ó nodes, whereas the CV tier contains the C and V that distinguish syllable peak V from syllable margins C and the segmental tier bears a bundle of distinctive feature matrices which represent consonant and vowel segments (Katamba, 1989).

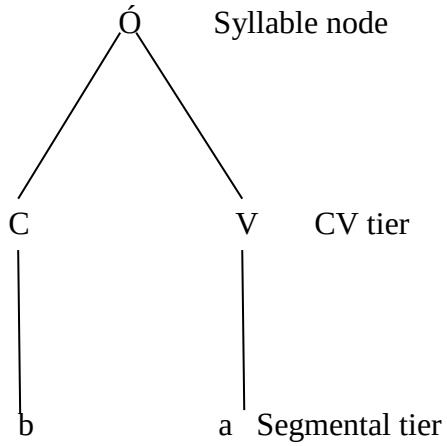

Figure 1: The structure of a syllable

From the model above CV phonology, it is the CV tier that dominates the segments and the syllable node that dominates the CV tier. The purpose of the CV tier is to distinguish between syllable peak and non-peak. From the figure above, it must be emphasized that every syllable has a node which is very important in determining the number of syllables in a word. The segmental tier represents the position of a syllable in a word. The independence of CV tier and segmental tier is evidenced by the fact that phonological rules may apply independently to the members of either tier or may affect the manner in which elements of these two tiers are associated with each other.

Clements and Keyser (1983)'s analysis of syllable structure provides a useful description of the syllable structure of Tonga language which is basically CV. Their treatment of the syllable structure provides an important contribution on the relationship of phonology and morphology in which this study is based. It is the aim of this study to find out whether Tonga language allows or disallows vowel sequence within certain environments. Such sequences are not allowed generally by most of languages of the world, and Tonga speakers employ a variety of strategies for eliminating the hiatus. This study utilizes the tenets of CV Phonology to explain the resyllabification processes that take place when hiatus is resolved by different repair strategies.

Data presentation and analysis

This section outlines the Tonga hiatus contexts and synchronic hiatus resolution strategies employed to resolve it. In this regard, resolutions of hiatal configurations through deletion, glide insertion, glide formation, secondary articulation, vowel lengthening and coalescence are thus employed to destroy vowel sequences when they appear (Mtenje, 1980). The resolution of hiatal configurations in Tonga is thus chiefly necessitated by the need to preserve the canonical syllable structure which is CV.

Vowel Deletion

To break hiatus, the vowel deletion has become the major vehicle in Zimbabwean Tonga to resolve hiatus. The researchers established that vowel deletion as a strategy operates in the nominal domain; that is, between a noun prefix and a noun stem. In Tonga, vowel deletion deletes V_1 of the prefix as exemplified below;

1. (a) /tʃ**i-**/ + /-**a**na /(pejorative) CL7 [tʃana]

(b)	/tʃ**i**-/	+	/-**a**la/ (thumb) CL7	[tʃala]
(c)	/tʃ**i**-/	+	/-**a**ngu/ (mine) CL7	[tʃangu]
(d)	/m**u**-/	+	/-**o**jo/ (heart) CL 3	[mojo]
(e)	/ m**u**-/	+	/-**o**ja/ (wind) CL 3	[moja]

Vowel deletion is also operative in infinitive verbs. Consider the following examples;

2.	(a)	/k**u**-/	+	/-**o**na/ (to sleep) CL 15	[ko:na]
	(b)	/k**u**-/	+	/-onga/ (to nurse) CL 15	[ko:nga]
	(c)	/k**u**-/	+	/-oba/ (to pull) CL 15	[ko:ba]
	(d)	/k**u**-/	+	/**o**la/ (to cool down) CL 15	[ko:la]

The above data show that in the infinitive verbs, vowel deletion deletes the vowel of the prefix, that is, V_1.

From the above data, there is no instance of protection of the vowel based on the type of the morpheme to which it belongs. What matters most is the position that is occupied by the vowel, whether the vowel was part of the stem or the prefix is not important. The data show that it is V_1 which is persistently deleted. Based on the data above, this research classifies Tonga as a V_1 deleting language when V_1 and V_2 are in sequence. This is in agreement with Casali (1996) who argues that when V_1 and V_2 are in sequence, V_1 is always deleted either in nominal domain or in the verbal domain.

What is also evident from the above data is that compensatory lengthening accompanies vowel deletion when resolving hiatus in infinitive verbs. The study argues that compensatory lengthening does not operate haphazardly but it occurs in well-defined morphosyntactic contexts, that is, in infinitives because the stem of the infinitive has a verbal structure. However, there is a phonological context where this applies. Compensatory lengthening accompanies vowel deletion when V_1 is a high /u/. In this environment, V_2 which remains after V_1 had been deleted is lengthened to compensate for the lost syllable. The following figure is a CV Phonology analysis of vowel deletion.

Underlying representation **Surface representation**

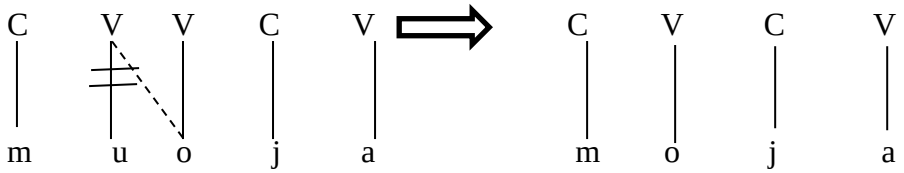

Figure 2: A CV Phonology analysis of /moja/

Figure 2 demonstrates how deletion process results in the delinking of the V_1 from its slot. The V_1which is /u/is delinked and it is not shown on the surface representation because it has been deleted. V_2 becomes the nucleus of word initial of the syllable. The deletion process also resyllabifies the word /mu-oja/ to [moja].

Glide Formation

Mudzingwa and Kadenge (2011) define glide formation as a process whereby high vowel of a class affix or gender concord changes to become a glide when followed by a vowel commencing stem. The glides that are commonly discussed in Bantu languages are palatal /j/ and labio-velar /w/.The glides usually replace /u/ by [w] and /i/ by [j].This is supported by Zivenge (2005, p. 55) who asserts that there are two glides in Tonga, namely, [w] and [j]. Glide formation is the major resolution strategy that is found across nominal and verbal domains in most of the Bantu languages. Mutonga (2017) notes that glide formation operates in well-defined morphosyntatic and phonological contexts, which is across a class prefix and nominal stem. It has been observed that in Tonga glide formation is quite common in verbal and nominal domains. The data below demonstrate how hiatus is resolved by using glide formation as a strategy;

3.	(a)	/**u**-/	+	/-**e**su/ (ours) CL1	[wesu]
	(b)	/**u**-/	+	/-**a**ngu/ (mine) CL1	[wangu]
	(c)	/**u**-/	+	/-**a**kwe/ (his/hers) CL 1	[wakwe]
	(d)	/**i**-/	+	/-**a**bo / (theirs) CL2	[jabo]
	(e)	/**i**-/	+	/-**a**ngu/ (mine) CL1	[jangu]
	(f)	/**i**-/	+	/-**e**su/ (ours) CL 9	[jesu]

In the verbal domain, glide formation applies exclusively within the Inflectional Stem, across the subject prefix and tense-aspect-mood (TAM) boundary. Consider the following data;

4.	(a) /**u**-/	+	/-**o**n –a/	(has slept)	[wo:na]

(b) /**u**-/ +	/-**e**nd -a/	(has gone)	[we:nda]
(c) /**u**-/ +	/-**a**li –a/	(has eaten it)	[wa:lja]
(d) /**u**-/	+ /-**a**l -a/	(throw)	[wa:la]

The data presented above illustrate that high vowels /i/ and /u/ are glided when there is no consonant immediately preceding either vowel. The high vowels which occupy V_1 are changed to be glides. The above data show that the glide formation process results in the formation of labio-velar [w] and palatal [j]. In the nominal domain, glide formation occurs between a noun prefix and a noun stem. In the verbal domain, glide formation occurs between the subject marker and tense –aspect-mood marker. Glide formation usually wants to get rid of the onset syllable; therefore, it destroys VV structure. The changing of /u/ to a glide [w] or /i/ [j] automatically breaks the hiatus caused by morpheme concatenation in the nominal domains because the glides occupy the onset of the syllable. The effect of glide formation is that hiatus is resolved by syllable reduction without segments being deleted because the second syllable merges with the first one (Mutonga, 2017). V_1 turns into a syllable and this results in a difference of identity in between the input and output because the glide is [-syllabic] and the vowel is [+ syllable].

It is also prudent to note that in the verbal domain, after glide formation, the second vowel is compensatory lengthened to compensate for the lost syllable. This means that compensatory lengthening domain is specific because it only operates in the verbal domain. Phonologically, vowel lengthening only applies when the first is a high vowel /i/ or /u/. The following figure is CV Phonology analysis of the effects of glide formation in Tonga.

Underlying representation **Surface representation**

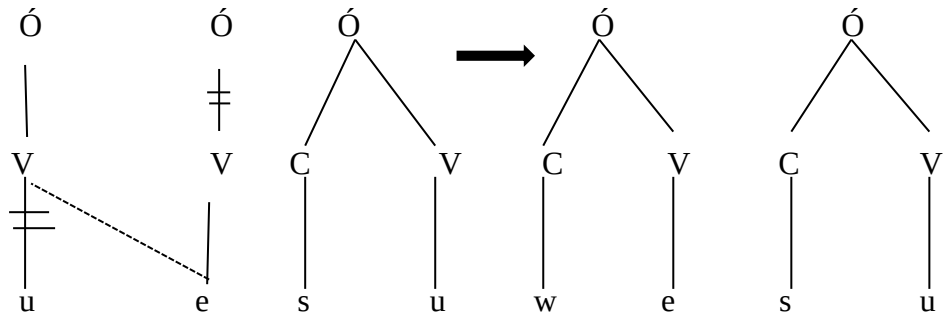

Figure 3: Resyllabification of [wesu]

Figure 3 describes how glide formation process delinks /u/ from the V slot of the CV tier to occupy C slot of the CV slot and it occupies the onset position on the CV tier after delinking /u/. The /u/ is changed from [+syllabic] to [-syllabic]. Also glide formation process involve the delinking of V_2 to V_1 slot on the CV tier. Figure 3 demonstrates the resyllabification of /u-esu/ to [wesu].

Glide Epenthesis/Insertion

Mangoya (2012) defines glide epenthesis as a process whereby both vowels that precede each other are retained but a semi-vowel is inserted between them to resolve hiatus. Zygis (2010) claims that glide insertion are of the phonological rule that involves consonant insertion. Glide epenthesis arises for a variety of reasons. The phonotactics of a given language may discourage vowel in hiatus. A semi-vowel may be added to make pronunciation easier. Mudzingwa (2010) is of the idea that glide epenthesis is influenced by phonological environment. Glide epenthesis typically affects clusters that occur in syllable initial positions. Mabaso (2009) asserts that Glide epenthesis is a systematic phonological process which depends on the phonological environments. Hall (2009, p. 77) argues that vowels are inserted to create words with more than one syllable, thus glide insertion has a function of resolving vowel hiatus and militating against onsetless syllables. She also notes that epenthesis is triggered by insertion of sound that was not present. Vowel epenthesis operates in the nominal and verbal domain. Consider the following data:

5.	(a)	/m**a**-/	+	/-**i**/ (eggs) CL6	[maji]
	(b)	/b**a**-/	+	/-**i**na/ (her/his mother) CL2	[bajina]
	(c)	/b**a**-/	+	/-**i**mbi/ (singers) CL2	[bajimbi]
	(d)	/m**a**-/	+	/-**u**lu/ (legs) CL6	[mawulu]
	(e)	/m**a**-/	+	/-**u**ngu/ (mopane worms)	[mawungu]

In infinitive verbs, this strategy resolves hiatus between the noun prefix and the verbal stem. Consider the following examples,

	(f)	/k**u**-/	+	/-**i**la/ (to sweep)	[kuji:la]
	(g)	/ku-/	+	/-owa/ (to be afraid)	[kujo:wa]
	(h)	/k**u**-/	+	/-**a**ma/ (to lean)	[kuja:ma]

In the verbal domain, glide epenthesis is used to break hiatus between the subject marker and the tense marker. Consider the following data,

6.	(a)	/b**a**-/	+	/-**i**ma/ (did not give)	[bajima]
	(b)	/j**a**-/	+	/**u**ma/ (it has dried)	[jajuma]
	(c)	/w**a**-/	+	/-**u**ma/ (has beaten)	[wawuma]
	(e)	/w**a**-/	+	/-**u**la/ (has bought)	[wawula]
	(f)	/wa-/	+	/-sja/ (has dropped)	[wawusja]

The above data shows that glide epenthesis resolve hiatus in the phonological environments /a+i/, /u+a/and/a+e/. The glide /j/ is inserted between the vowel when /a+i/ or /a+e/ are in sequence and when/a+u/are in sequence, /w/ is inserted to break hiatus. The examples given above demonstrate that glide epenthesis is usually inserted between the vowel of the prefix and the vowel of the commencing stem of the nouns and verbs in Tonga. In verbal domain, glide epenthesis is not accompanied by compensatory lengthening because V_1 is not a high vowel /u/ or /i/. The following is a CV Phonology analysis of the glide epenthesis:

Underlying representation **Surface representation**

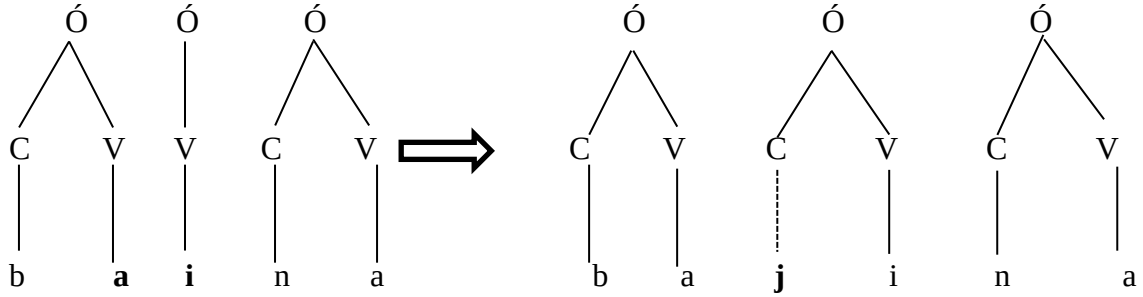

Figure 4: Resyllabification of [bajina]

Figure 4 above shows that in Tonga nominal /j/ is inserted between onset syllable and V slot of the initial stem. The occurrence of onsetless syllable allows the insertion /j/ between the first syllable and V slot of the initial stem. The V_1 and V_2 are not delinked from their positions.

Vowel Coalescence

Harford (1997) refers to vowel coalescence as a phonological process in which adjacent vowel cause each other to change or merges two speech segments to form one. Unlike other

Bantu languages where coalescence is operative in the cliticisation domain (Kadenge, 2010, 2013, 2014; Mabaso, 2013; Mangoya, 2012; Mutonga, 2017; Mudzingwa, 2010, 2013), Tonga allows vowel coalescence in the nominal domain. Consider the following data,

7.	(a)	/m**a**-/	+	/-**i**so/ (eyes)	[meso]
	(b)	/m**a**-/	+	/-**i**ɲo/ (teeth)	[meɲo]
	(c)	/m**a**-/	+	/-**i**ja/ (nakedness)	[meja]

Vowel coalescence in Tonga resolves hiatus between a noun prefix and a noun stem. Phonologically for vowel coalescence to take place, there must be phonological environment that must be satisfied. That is vowel V_1 must be a low vowel and the V_2 must be a high vowel and coalesced must be a mid –vowel. In this case, /a+i/ becomes [e]. In other words, if the low-front vowel /a/ is fused with high front vowel/i/ it results into a mid-front vowel/e/. This is also observed by Mkanganwi (1973) who notes that vowel coalescence occurs when Shona /a+i/ and /a+u/ become [e] and [o] respectively.

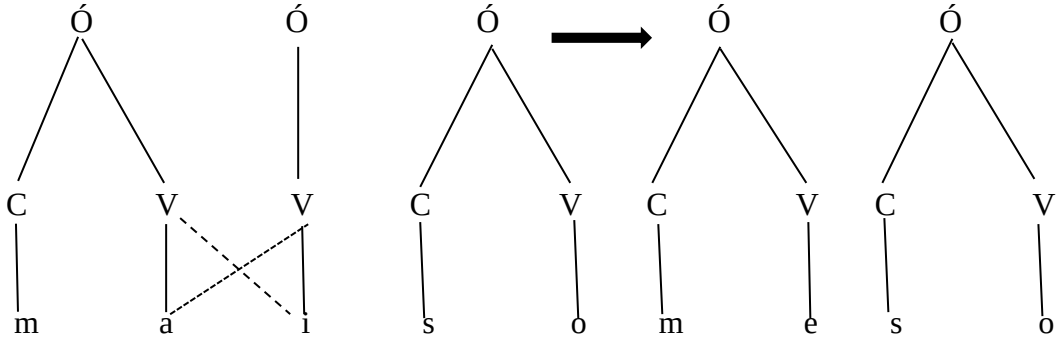

Figure 5: Resyllabification of [maiso]

Figure 5 above shows that coalescence is associated with the V slot of the immediate preceding syllable nucleus /a/. After the linking of the V slot of V_2 to that of V_1**,** the V slot of the first vowel is linked to two vowel qualities**.** The segmental tier is realized as two vocalic qualities**.** The two vocalic sounds fuse into a single vowel, that is, V_3.

Secondary Articulation

Katamba (1989) defines secondary articulation as a process whereby a high vowel leaves the slot to become part of the consonant onset. It is widely used to resolve hiatus in

nominal and verbal domains. Secondary articulation according to Sabao (2012) is a process whereby the two different sounds are articulated at the same time as a single segment. Mutonga (2017) is of the view that secondary articulation is used when V_1 is preceded by a consonant as shown in the examples below;

8.	(a)	/b**u**-/+/-**i**zu/ (thatching grass) CL 14			[b^{w}izu]
	(b)	/m**u**-/	+	/-**a**na/ (child) CL1	[m^{w}ana]
	(c)	/ b**u**-/	+	/-**a**na/ (childishness) CL 14	[b^{w}ana]
	(d)	/m**u**-/	+	/-**i**da /(in the stomach) CL18	[m^{w}ida]
	(e)	/m**u**-/	+	/-**a**mi/ (chief) CL1	[m^{w}ami]

In the nominal domain, secondary articulation breaks hiatus between the prefix and the vowel of the commencing stem as shown by the data provided above. Secondary articulation also resolves hiatus in the infinitive verbs that is the prefix and the stem.

9.	(a)	/k**u**-/	+	/-**i**ya/ to learn)	[k^{w}i:ja]
	(b)	/k**u**-/	+	/-**e**nd -a/to walk)	[k^{w}e:nda]
	(c)	/k**u**-/	+	/-**e**ng-a/ (to draw)	[k^{w}e:nga]
	(d)	/k**u**-/	+	/-**a**ng-a/ (to tie)	[k^{w}a:nga]
	(e)	/k**u**-/	+	/-**a**mb-a/ (to say)	[k ^{w}a:mba]

The data above show that secondary articulation occurs when a V_1 is a high vowel /u/ and is immediately preceded by a consonant that allows secondary articulation. The above examples show secondary articulation in which V_1 is /u/ and is immediately preceded by a consonant that can be labialized.

Just like other repair strategies, secondary articulation does not invoke compensatory lengthening in the nominal domain but requires compensatory lengthening when resolving hiatus in infinitive verbs. V_2 which remain after the first vowel is secondary articulated is lengthened to compensate for the lost vowel onsetless syllable. This means that the use of compensatory lengthening is conditioned by both the morphosyntactic environment in which the strategy is found as well as the phonological condition where it is found. Morphosyntactically, compensatory lengthening is found in the verbal domain as well in infinitive verbs. Phonologically, it is found when V_1 is a high vowel /i/ and /u/. If those

condition are not met then compensatory lengthening is not invoked. The following rule captures the phonological environment where compensatory lengthening is allowed.

Rule1

/Cu/i+V2 ⟶ [CV2:]

The rule is capturing the fact that when V_1 is a high vowel /u/ or /i/ is following V_2, the second vowel which remains after hiatus resolution is compensatory lengthened. The following figure below is CV Phonology analysis of secondary articulation:

Underlying representation **Surface representation**

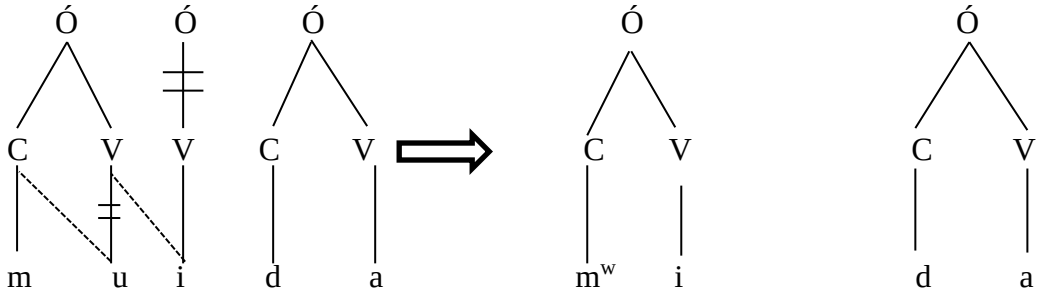

Figure 6: A resyllbification of [m ^{w}ida]

Figure 6 shows that /u/ is glided to /w/ on the VV sequence on the CV slot resulting in a post velarized syllable to allow secondary articulation. The /u/ which occupies the V slot on the CV tier is glided to /w/ which is secondary articulated by a preceding consonant.

Summary

The study has discussed and established that there are six resolution strategies that can be employed to resolve hiatus in Tonga. The data was analyzed using CV Phonology. This study found out that Tonga employs six resolution strategies which are glide formation, vowel deletion, secondary articulation, glide epenthesis, vowel lengthening and vowel coalescence. The study also established that compensatory lengthening accompanies each repair strategy in well-defined morphosyntactic and phonological contexts. Compensatory lengthening accompanies all the strategies in the verbal domain and in the infinitive verbs. Phonologically, compensatory lengthening accompanies all the strategies when V_1 is a high vowel /u/ or /i/.

The study recommends further studies to be done on the Tonga morphosyntax so as to give a comprehensive picture of Tonga linguistic structure.

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