7.0 Introduction

This chapter provides the major findings and conclusion of the thesis presented in the preceding chapters. In the following sections, the discussion on the main findings is provided and suggestions are also made for further research.

7.1 Discussion of main findings

In Chapter I, a brief introduction of Khasi and its dialects, the areas where it is spoken, and the genetic affiliation of the language is presented. Khasi, like any other languages has a good deal of dialect variation. Grierson (1904) and Bareh (1977) have identified some of the major dialects of Khasi. These dialects of Khasi can mainly be attributed to regional differences. Genetically, Khasi has been classified by different scholars like Sebeok (1942), Zide and Diffloth (1992), Peiros (2004), Diffloth (2005), Sidwell and Blench (2011), as a language belonging to Monkhmer group, a branch of Austro-Asiatic language family.

Chapter II, Section.1 provides a discussion on the notion of dialect, language and dialect, and dialectology. This chapter also provides a discussion on variation within languages which occur at the level of the lexicon (vocabulary), phonology (pronunciation), grammar (morphology and syntax) and usage. The discussion on variation within languages shows that differences in vocabulary and phonological variants are the two major aspects of dialect diversity which people notice readily and comment on quite frequently. They are certainly common enough as markers of the differences between geographical areas or regions. Section II of this Chapter attempted to review some of the works done on the phonology of Khasi. Some of the works done in Khasi relating to the sound systems are Pryse (1855), Roberts (1891), Rabel (1961), Henderson (1967, 1976), Abbi (1979, 1987), Nagaraja (1985, 1989), Sten(1996) and War (2004). In this section, a discussion is also provided as to why and how the present analysis differs from earlier works. A review on the earlier works done in Khasi phonology reveals that the analysis of sounds presented in the present study is similar to
some extent with earlier scholars. The main difference in the analysis presented in the present study is in the treatment of vowel sounds which include monophthongs, diphthongs and triphthongs. Scholars like Nagaraja (1985, 1989), and War (2004) mention that short and long vowels are distinguished both at the phonetic and phonological levels. But in the present study, it has been found that with the exception of Open vowel /a/, other vowels with length are treated as allophonic variants of the short counterparts. For example, it has been found that all short vowels occurring before [-r] are long. Earlier scholars mentioned that Khasi has 13 phonemic diphthongs - /-ia, -eu, εu, -au, -a:u, -ei, -ai, -oi, -ui, -ui/. However, in the present study, it has been found that Khasi has only one diphthong, that is, /ia/. The analysis of Khasi diphthongs in this present study has been dealt with from historical perspective, phonological and acoustic analysis. The analysis for consonantal sounds presented in the present study is similar, with earlier scholars, with the exception of voiced aspirated stops. Though scholars/linguists have mentioned about the asymmetrical patterning of stops in Khasi, no one has ever taken up this unresolved issue. In this present research, the absence of [g] and the phonemic status of [c] in (Standard Khasi) have been carefully dealt from a historical perspective. In all of the earlier works, the study of stress which is an important phonological in Khasi, has been studied in detail. This phonological feature of Khasi has been discussed in detail in this present research.

Chapter III provides a description of Khasi phonology, which includes segmental phonology, consonant clusters, syllable structure and stress. It has been found that Khasi has twenty one consonant phonemes. The analysis presented in this study slightly differs from the study of consonants given by earlier scholars. For example, scholars and linguists like Nagaraja, War and others mention that there is the presence of voiced aspirated sounds like /bh/, /dh/, and /jh/ in Khasi native words. But in this analysis, the voiced aspirated stops are not treated as one single unit, but rather as a combination of two sounds: [b+h], [d+h] and [j+h]. This analysis conformed with the view given by linguists like Rabel (1961), Henderson (1976), Diffloth, (2008) who preferred to treat them as clusters. The analysis of the above mentioned sounds is provided on the basis that the occurrences of these sounds are limited in Khasi, most of the sounds are found in borrowed words, there is an intervention of a vowel [ɔ] in between these two sounds and
lastly, taking into consideration of the typological feature of Monkhmer languages. Earlier scholars (Pryse, Roberts, Nagaraja, Sten and War) listed a number of diphthongs in Khasi ranging from 11 to 13 of them. The reason for the occurrence of many diphthongs in Khasi as listed by earlier scholars is because \textit{–w} and \textit{–y} endings are interpreted by them as \textit{–i} and \textit{–u} endings. However, in this research, the analysis of \textit{–w and –y endings} in the language is accounted taken into consideration the historical factor, phonological features of Monkhmer languages and acoustic analysis. It has been observed that Khasi consonants do not have a symmetrical system. This is clearly noted in stop sounds. Stops in Khasi have five points of articulation i.e, bilabial, alveolar, palatal, velar and glottal. Phonemically, bilabial and alveolar stops have both voiceless and voiced counterparts but there is a gap in palatal and velar stops. There is absence of voiceless palatal and voiced velar stop in the consonantal system. In this present research, an attempt has been made to trace the loss of voiceless palatal stop /c/ and voiced velar stop /g/ in Khasi. This has been made based on Shorto’s(2006) reconstruction of \textit{Proto Monkhmer Phonemes} and Sidwell (2006) proposal of shifts in Khasi stops. With reference to distribution of consonants in syllable initial and final positions, it has been found that nearly all the consonants can occur in the syllable initial position, whereas in syllable final, not all consonants can occur: [p], [ph], [b], [t],[th],[d], [j], [k], [kh],[ʔ], [r], [l], [s], [ʃ], [m], [n], [ŋ], [w], and[j] occur in syllable initial whereas in the final only \textit{[–p], [–t], [–k], [–ʔ], [–r], [–m], [–n], [–ŋ], [–ŋ], [–w]} and \textit{[–j]} can occur. The description and distributional pattern of the phonetic monophthongs show that Khasi exhibits the presence of the great variety of vowel qualities. The vowel qualities differ from each other so slightly that it is difficult even for native speakers of the language to distinguish one vowel from the other. It is difficult to posit a general rule for the distribution of vowels, for every rule will have an exception. Another important observation of the vowels is in the non-systematic variations in the length of vowels and their distribution. A careful analysis of the vowels in Khasi shows that short and long vowels having the same quality cannot occur in the same environment, that is, they are not contrastive. The exception to this rule is, the only Open vowel in the language, that is, [a]. Though vowel length is found in Khasi, yet, its occurrence is commonly found in the environment of \textit{[–r]} and \textit{[–m,n,ŋ]}, and \textit{[–p,t,ʔ]} to some extent. Almost all vowels
occurring before [-r] are long. The exception is the short vowel [u], which can occur before [-r]. Another important feature of Khasi vowels found is that, if a short vowel, for example, [u] occurs before [-r], then a long [u] (having the same quality) cannot occur before [-r]. This is true to all the vowels occurring before [-r], including [a] (Examples are shown in Chapter 3.2.2). It has also been observed that, with the exception of Open vowel [a], no vowel sharing the same quality can be both long and short, in a particular environment. This feature occurring in Khasi vowels poses a problem in finding contrastive pairs between long and short vowels having the same quality. Thus, it can be suggested that vowel length in Khasi is not phonemic, with the exception of Open vowel [a]. Analyses of diphthongs reveals that Khasi has only one diphthong /ial/. This analysis differs from earlier works on Khasi. With reference to Consonant clusters, it is found that Khasi is enormously rich in consonant clusters. Khasi permits only initial consonant cluster and in the final position, no cluster of consonant is permitted. The treatment of Khasi syllable in this study includes both, the phonetic and phonological approaches. Phonetically, Khasi exhibits the presence of sesquisyllabic roots, which is commonly found in other Monkhmer languages. Phonologically, as shown by this study, the canonical shape of the Khasi syllable structure is CCVC. Stress, an important phonological feature of Khasi, which is not studied by many earlier scholars, is included in this research. According to the findings, the primary stress in Khasi syllable is always fixed in the ultimate syllable (more than one syllable). Further, the analysis of stress in Khasi shows that Khasi is a stress-timed language.

Chapter IV focuses on the description of the phonological aspects of Khasi dialects. As mentioned in Chapter 4.0, besides Standard Khasi and Pnar, the other dialects of Khasi have not been studied. Hence, the description of some phonological aspects of the Khasi dialects is taken up in this research. The comparative phonological study of the dialects presented in Chapter V is based on the discussion provided in this chapter. Some of the phonological aspects of the dialects which have been studied includes the study of sound segments-consonants and vowels, consonant clusters and syllable structure.

Chapter V provides a comparative phonological study of the dialects of Khasi. The phonological comparative study of the Khasi dialects is divided under the following
parameters: 1. Vowel inventory- Monophongs and Diphthongs, 2. Consonant inventory, 3. Permissible Initial and Final Consonants, 4. Consonant Cluster, and 5. Syllable structure. This comparative study of the Khasi dialects shows that the dialects vary with one another with reference to the sound segments- consonants and vowels. For example Bhoi dialect represented by Tyrso and Nongpoh has less number of vowel phonemes, whereas Standard Khasi has more number of vowel phonemes. Both the Bhoi dialects have five monopthongs / i, ɛ, a, ɔ, u/, whereas Standard Khasi has eight monopthongs / i, e, ɛ, a, a:, ɔ, o, u/. There is a wide variation in the presence of diphthongs. This is seen from the discussion of Bhoi dialect and Nongtrai. Bhoi dialect has no diphthongs whereas Nongtrai has three diphthongs [ia, oʊ, ɪə]. War Jaintia phonemically has two diphthongs /ia,ua/ , whereas Standard Khasi and Pnar have only one diphthong [ia]. The study of diphthongs in Khasi dialects needs to be further investigated, as this is one area in phonology, which shows a wide variation between the dialects. Hence, this area can be taken up for further research. With reference to consonantal sounds, all the dialects share some similarities. The exception is Lyngngam, which is the only dialect, which shows the presence of voiced velar stop [g]. An interesting observation on consonantal sounds of the Khasi dialects is that, dialects which show the presence of alveolar palatal fricative[f] do not have voiceless palatal stops [c, ch ]. This is seen in Standard Khasi and War-Khasi (Shala). Other dialects, which show the presence of [c] and [ch ] do not have [f]. This is seen in Lyngngam and Bhoi dialects. In Pnar and Nongtrai, there is absence of voiceless unaspirated palatal stop [c] in the initial and medial position of a word, while the voiceless aspirated palatal stop [ch ] is present, and is found to occur in word initial and medial positions. This makes it difficult to establish whether [c] is an allophone of [ch] or whether [ch] is an allophone of [c]. In this present analysis, /ch/ is posited as a phoneme, based on frequency of occurrences, but this is not conclusive. Thus, this can be said to be an area for further investigation. It has also been observed that War-Jaintia is the only dialect which shows the presence of alveolar palatal fricative[f] and voiceless palatal stops [c, ch ]. It is important to note here that the proposed sound shifts of Khasi (presented in Chapter 3) do not fully apply in
War-Jaintia. However, it can be proposed here that the presence of \[ j \] in this dialect can be due to borrowing. This observation is not conclusive, hence, further research is needed in this particular area.

The comparative analysis presented on the phonology of the dialects show that though, there are variations at the segmental level, yet, regarding the distribution of sounds, that is, the permissible initial and final consonants, consonant clusters and syllable structures, all the dialects have similar phonological patterns.

In Chapter VI, an attempt has been made to compare the lexical items of the dialects undertaken for the study. This comparative study is made only on some important lexical items within the basic vocabulary list such as body parts, flora and fauna, natural elements, numerals, kinship, color terms, and grammatical categories-verbs, adjectives, pronouns, prepositions and interrogatives are considered for comparative study. The analysis of the eight dialects presented in Chapter VI gives an idea of the amount of divergence between the dialects. Lyngngam and War-Jaintia dialect show more divergences when compared with other dialects. Interestingly, what has been noted is that, whenever any different/unrelated forms are identified in the data, in most cases, it is either Lyngngam or War-Jaintia (in some instances both the dialects), which show the presence of unrelated forms. However, the Bhoi dialects (represented by Nongpoh and Tyrso), War-Khasi dialect (represented by War-Khasi), Standard Khasi, and to some extent Nongtrai (represented by Nongstoin), seem to have close resemblance between them. This observation is made on the basis that many lexical items (as shown in data nos. 1-150) are phonetically similar in these dialects. A comparative lexical study of the eight Khasi dialects shows that six of the dialects (War-Khasi, Bhoi-Nongpoh and Tyrso, Pnar, Nongtrai and Standard Khasi) are more closely related to each other. This is based on the fact that these dialects share more related forms (phonetically), when compared with the other two dialects- Lyngngam and War-Jaintia. However, based on the analysis, it can be said that all the dialects are related to a certain degree.
7.2 Conclusion

The present work is an attempt to provide a detailed analysis of some aspects of phonology and lexicology. It does not claim to be a complete analysis of the selected Khasi dialects. Much research work is needed to be done in phonology and lexicology and in the fields of morphology and syntax. It is my hope, however, that this thesis has helped to provide a readily available starting point for future work on Khasi dialectology.