CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents the methodology used to investigate the assimilation of English words into the Burmese language, that is, the borrowing of lexical items from English. It includes a discussion on the source of the data, the procedure in collecting the data and the method of analysis based on Haugen's framework. Haugen's conceptual framework which forms the basis for the method of analysis and the terminology used in the approach is also discussed.

3.1 Source of Data

As it was determined that data would be collected from Burmese written sources, a survey of Burmese written sources was carried out to determine those which would provide valid and reliable data. A newspaper and two contemporary and popular Burmese magazines on fashion and travel were selected for this purpose as they would be indicative of current use of the Burmese language.

During the preliminary data collection, words borrowed from English were picked from articles in the newspaper "*Myanmar Ahlin*" (April 2002 - July 2002) magazines *Yati, Maheti,* and *Ngwe Ta Yi.* Selection of the borrowed words was based on the researcher's knowledge of the English language as well as knowledge of the Burmese language as a native speaker. Hence the selected borrowed words were those that the researcher recognized as clearly not Burmese words and possibly of English language origins. These included words like : $avbmw \hat{D} /\lambda \epsilon /\beta \Box /\tau /$ (liberty), $bef \delta v d k /\beta \delta /\gamma ... /\lambda ... \leftarrow /$ (bungalow), $fe \hat{D} \hat{A} mpw \hat{D} /\phi \upsilon /\gamma /\beta \Box /\sigma ... /\tau /$ (university).

However it was not possible for the researcher to confirm the validity of the selection of these words as authentic borrowings, as checks with a Burmese

monolingual dictionary revealed that many of these words were not included in the dictionary. This suggested that the words were not accepted as Burmese words and could not be considered authentic lexical borrowings integrated into Burmese. Therefore it was acknowledged that these words may have been used to fill a gap in the Burmese language and would be more accurately described as code-mixing and not yet as lexical borrowings.

As it was not possible to validate the selection of English lexical borrowings from such written sources, it was decided that an authoritative source like a dictionary in which the lexicon would have been authenticated should be used instead. According to Mackey (1965b) "dictionaries, which are compilations of the vocabulary of a language, with explanations of the meanings by paraphrase definitions, are the sort of description on which language learners have traditionally most depended" (p. 69). Wheatley (1996) stated that a dictionary is an analysis, not just a description and that compilers make choices about which words to include and how to deal with variation in meaning and usage. Without doing extensive archival research, the user of the dictionary has no way of knowing exactly whose language is represented in it, unless the compilers have included such information. This means that selected data from a dictionary would already have been verified as words borrowed from a specific language.

3.1.1 Myanmar Abidan

A Burmese monolingual dictionary called *Myanmar Abidan* was chosen as the source of data because of a number of factors. [Sources of information below were taken from the preface of *Myanmar Abidan* (Commission, 1978)].

Firstly, it was published by the Burmese Language Commission (the country's highest authority on language development) under the guidance of the Ministry of Education in September 1978. Later, 'the Burmese Language Commission' was renamed 'the Burmese Language Committee'. The Burmese Language Commission set up three boards of academicians, headed by Burmese language experts to study and select words in producing this dictionary.

Secondly, this dictionary is comprehensive as it covers officially accepted words that are used in the daily lives of Burmese people. Altogether 105000 words were collected, however, only 26000 were chosen with much care and emphasis given on the selection and standardization of words. Experts on the language spent years in vetting and correcting the words based on the feedback. Because of the Second World War, the work was abandoned and only after the independence of Burma in 1948, efforts on publishing the dictionary resumed again. Indeed it was not an easy task. Therefore the outcome can be considered as reliable. After constant vetting and correction, the dictionary was finally published in September 1978. It was only in 2006 that a revised edition of this dictionary was published by the Burmese Language Committee.

Thirdly, this dictionary is inclusive not only in identification of the word form, but also in its identification of the origin of each word. In this particular monolingual dictionary, *Myanmar Abidan*, all original Burmese words along with the words which were transferred into the Burmese language are written in Burmese characters and the source of each and every word is identified. For example, if it is a word taken from Pali, it states [pa] at the end of the word, if it is from Hindi, it is written [hindi], if the word is borrowed from English, it is written [lish] in brackets. A sample of *Myanmar Abidan* dictionary page, showing how words are organized in this dictionary is shown in Appendix B and the words taken from English with [lish] at the end of the words are highlighted for viewer's observation.

The final factor is that, according to the Head of the Burmese Language Department of Yangon University, this is the only monolingual dictionary published so far. There are many English - Burmese dictionaries published in Burma which include the meaning of all the English words (modern and scientific words) that are in use around the world. However, these dictionaries do not state which English words have been loaned to the Burmese language. Therefore it cannot be ascertained which of these words in the bilingual English-Burmese dictionaries have been transferred into the Burmese language and can thus be considered as loans from English.

3.2 Collection of Data

The collection of data involved two specific stages of extraction of borrowed words from the source of data and the transcription of individual words.

3.2.1 Identification of Borrowed Words

As mentioned in subsection 3.1.1 every word in *Myanmar Abidan* (1978, 2006) is presented with an indication of the source language that it had originated from. Hence if the word is borrowed from English, it is indicated with [lish] in brackets immediately after the word. Every word in the dictionary was scrutinized and all words marked with [lish] were extracted to form the corpus of words officially recognized as borrowings from English.

The initial corpus from the first edition of the *Myanmar Abidan* (Commission, 1978) comprised 416 English words. However, a revised edition of the dictionary was published by the Burmese Language Committee (previously known as Commission) in 2006. This required a repetition of the process of extraction of borrowed English words from the revised edition. There was a total of 512 words extracted. Ninety-seven (97) new words made up the difference between the number of identified borrowed items presented in the first and the revised edition. Therefore, the total number of words collected from *Myanmar Abidan* was 512 words.

3.2.2 Transcription of Borrowed Items

As the words were taken from a Burmese monolingual dictionary, they were printed using Burmese script. Hence it was necessary for each word to be transcribed. Using the Simplified IPA transcription system, discussed in Chap 2, section 2.2, each word was phonemically transcribed. To ensure accuracy and reliability of the process, each word was pronounced again to another coder familiar with the IPA for her to transcribe it. The phonemic transcriptions of both researcher and second transcriber were compared for similarity before the transcriptions were accepted. Differences were resolved by checking with a translator for the Burmese service in Radio Television Malaysia, Kuala Lumpur. For each word in the corpus, its dictionary definition as well as phonemic transcriptions were included. (See Appendix C).

3.3 Analysis of Borrowed Lexical Items

All the words in the corpus were analyzed and classified twice. The first classification adopted Haugen's approach (a formal perspective) while the second classification followed a thematic categorization.

The borrowed words under the formal perspective were analyzed according to the assimilation processes the words had undergone in the Burmese language based on their phonemic assimilation as *loanwords, loanblends* and *loanshifts*

(See Appendix C). The words categorized as *loanwords, loanblends* and *loanshifts* were then further sub-categorized according to the manner of borrowing and then analyzed for patterns of phonemic changes. A discussion of Haugen's theoretical framework on loans is presented in section 3.4.

The second classification involved a categorization of all the words in the corpus under thematic fields in order to know which spheres of human activity was instrumental in influencing the transfer of words from English into the Burmese. Sub-classification of borrowings into such thematic domains has been found useful for comparative purposes (Heah, 1989). To establish these domains, Heah's (1989) classification was used as a guide for the creation of the following domains used in this study: Science and Technology, Education, Economy, Law, Nature & Politics, Military, Transport, Food, Recreation, Measures, Time, People, Clothing and Things. A General category was created to accommodate words that could not fit into the other categories. Such a classification enabled the researcher to recognize which domains have lexical borrowings and possibly why English words are adopted in those fields.

3.4 Haugen's Theoretical Framework

In this study, Haugen's method of defining borrowed words or loans is used as the main basis for classifying the borrowed words in the Burmese language. His definitions are of great importance when dealing with loans. He gives a clearer view on his definitions by explaining as follows:

- 1 Every speaker attempts to reproduce previously learned linguistic patterns in an effort to cope with new linguistic situations.
- 2 Among the new patterns which he may learn are those of a language different from his own, and these too he may attempt to reproduce.
- 3. If he reproduces the new linguistic patterns, **not in the context of the language in which he learned them,** but in the context of another, he may be said to have 'borrowed' from one language to another.

The essence of the definition of borrowing is then "the attempted reproduction in one language of patterns previously found in another" (Haugen, 1972a,

p. 81).

Based on the above definition, it is clear that 'borrowing' is a process that involves reproduction and any attempt to analyze its procedure must involve a comparison between borrowed word (original) with its imitation. Haugen, who among others, offers an exhaustive analysis of linguistic borrowings stated that, "the original pattern shall be called the MODEL and recognized that the loan may be more or less similar to it" (Haugen, 1972a, p. 82). He went on to say that:

the loan may vary all the way from an imitation satisfactory to a native speaker to the one that the native speaker would not recognize at all. If the loan is similar enough to the model so that the speaker would accept as his own, the borrowing speaker may be said to have IMPORTED the model into his language, provided it is an innovation in that language. But if he has reproduced the model inadequately, he has normally SUBSTITUTED a similar pattern from his own language (Haugen, 1972a, p. 82).

It can be assumed that while the importation refers to a borrowing without any deformation, compared to the model, the substitution refers to a borrowing with some kind of modification. Thus Heah's statement which says that "all types of loans may thus be said to fall between the two extreme poles of complete *importation* and complete *substitution*" (Heah, 1989, p. 23) supports Haugen's statement above.

In the analysis of borrowed words in Burmese, the framework offered by Haugen was adopted. According to Haugen, any kind of loans may be analyzed and described in terms of the extent to which they are modified by substitutions of native habits.

According to Haugen, three major types of loans may be distinguished at the word level by a formal comparison of the model in the source language and its replica in the recipient language. The distinction between importation and substitution based primarily on the relationship between morphemic and phonemic substitution makes it possible to set up three classes of loans such as: loanwords, loanblends and loanshifts (Haugen, 1972a). These are defined as:

 Loanwords, that is, borrowings without morphemic substitution (where both the meaning and the morphemes of the original are adopted)

- 2. **Loanblends**, that is, borrowings with partial morphemic substitution and,
- 3. **Loanshifts,** that is, borrowings with full morphemic substitution

Haugen classifies each borrowing solely by the extent to which substitution of individual phonemes has occurred in the transfer of the morpheme and its phonemic form into the recipient language. Haugen explains this as follows:

- (1) Loanwords show morphemic importation without substitution. Any morphemic importation can be further classified according to the degree of its phonemic substitution: none, partial or complete.
- (2) Loanblends show morphemic substitution as well as importation. All substitution involves a certain degree of analysis by the speaker of the model that he is imitating.
- (3) Loanshifts show complete morphemic substitution without importation. These include what are usually called 'loan translations' and 'semantic loans'; the term 'shift' is suggested because they appear in the borrowing language only as functional shifts of native morphemes (Haugen, 1972a, p. 85).

The framework includes a description of the different manner of borrowing. Under the process of importation of words, the manner of lexical items borrowed are:

- 1. Loanwords
 - (i) none substitution

- (ii) partial substitution
- (ii) complete substitution
- 2. Loanblends
 - (i) compound loanblends
 - (ii) tautological loanblends

Under the process of substitution of words, the manner of lexical items borrowed is:

- 3. Loanshifts
 - (i) loan translations
 - (ii) semantic extensions

3.4.1 Loanwords

The loanword imports the phonemic shape of a foreign word, with more or less phonemic substitution (Haugen, 1969, p.391). Haugen suggests that 'loanwords' can be classified further on the basis of the extent of the phonemic substitution which has occurred in the act of transfer into none, partial and complete substitution of loan. (Haugen, 1972a)

3.4.1.1 None Substitution

None substituted loanwords are words directly taken into one language from another with no morphemic changes and whose overall morphemic shape is recognizable. These words are recognized as none substituted loans because of the similarities between the model and the phonemic replica of the model in the recipient language. For example:

English Model	Burmese Model
a. kiwi /∩κι:ωι:/	$u ilde{\mathcal{D}} o ilde{\mathcal{D}} \ /\kappa \Box /\omega \Box /$
b. may day /∩με⊟δε⊟/	<i>ara';</i> /με□/δει:/
c. BC /βισι/	Б $ ilde{D}_p ilde{D} / eta \Box / \sigma \Box /$
d. TB /τιβι/	<i>₩ĎБĎ/</i> τ□/β□/

Here all abbreviations can be counted as none substituted loans.

3.4.1.2 Partial Substitution

Partial substitution of loans are words which show evidence of English origins with some degree of phonemic substitutions. Substitution means that the imitation of the foreign model is less than perfect, but it also means that it has become more familiar to those who speak the native language (Haugen, 1969, p.388). Most of the English words transferred have to go through some kind of phonemic modification because of the way the Burmese pronounce them. For example:

English Model	Burmese Model
a. counter $\kappa \rightarrow \nu \tau \therefore (\rho)/$	aumifwm / $\kappa\Box$ uv/ $\tau\Box$ /
b. cartel $/\kappa\Box: \cap \tau \epsilon \lambda/$	umw, f / $\kappa\Box/\tau\epsilon/$

3.4.1.3 Complete Substitution

These are words which have gone through a lot of modifications in terms of phonological and morphological adaptations. In other words, these loans refer to words which could have been in the Burmese language for such a long time that these items have been phonologically adapted into the language. Also these words have become so completely assimilated into the sound system of Burmese that few are aware of their English origin. They have become a regular part of the vocabulary of Burmese. For example:

- a. $a \overline{bmfv} \overline{\mathcal{D}} / \beta \downarrow : / \lambda \Box /$ complete change of sound from (bodice) $/\beta \Box \delta \Box \sigma /$ to $/\beta \downarrow / \lambda \Box /$
- b. $yfwif; /\pi\upsilon/\tau\Box: \downarrow$ complete change of sound from (putty) $/ \cap \pi \wp \tau\iota/$ to $/\pi\upsilon/\tau\Box: \downarrow/$

For a word to become a completely substituted item, it may take years or generations to be fully incorporated into the system. To identify this type of words, using the synchronic approach alone is not enough. A diachronic approach must be utilized in order to understand the historical perspective of English - Burmese contact. Loanwords which have existed in the language for quite a long time and established their place in the system are recognized as having undergone complete substitution.

3.4.2 Loanblends

A loanblend (or hybrid loanword) can be defined as an item in which part of or all of a native morpheme is substituted for some part of the foreign item. When a complex or compound item is borrowed from English, one component of it is transferred and the other is substituted for by a Burmese item. In other words, "a loanblend is the result of a process that combines morphemic importation and substitution in the same item" (Heah, 1989, p. 107). In reproducing the forms of another language, speakers will frequently go farther in their adaptation than merely to substitute native sounds and inflections for the foreign ones. They may slip in part of a native phoneme for some part of the foreign. In Burmese, there are three types of loanblends as shown below:

3.4.2.1 Marginal Loanblends

In this type of loanblends, the stem is indigenous while the affix is borrowed from English. For example:

a. (battery-box)
$$bufx \tau \hat{D}tdk$$
: $\beta - \tau/\tau | \therefore / \varphi \Box / / \therefore \leftarrow : / \beta$

Here, the stem $td\mathcal{K}$: /.:. (which means (box) is indigenous while the affix $/\beta$ -- τ/τ (.:. / ϕ D/ (battery) is a borrowed word.

b. (oxygen tube) $atmufg \mathcal{D}ssifjy Gef/o \leftarrow \sqrt{\sigma} / \sigma / \delta |v| / \pi \varphi v / \delta$

Here also the stem $jy \text{Gef}/\pi\varphi v/\psi$ which means (tube) is indigenous while $/o \leftarrow \sqrt{\sigma}/\delta |v|$ (oxygen) is a loan.

c. (plastic bag) $yvwfpwpftdwf/\pi:./\lambda \wp \sqrt{\sigma:./\tau} \sqrt{//\varepsilon} \sqrt{/}$

Here the stem $tdwf/\epsilon d$ which means (bag) is indigenous while $/\pi dwf/\epsilon d/\sigma d/\sigma d/\sigma d/\sigma$ (plastic) is a loan.

3.4.2.2 Compound Loanblends

In this type of loanblends, there is independent morpheme substitution. One of the two morphemes making up the compound form is replaced by a native morpheme. For example:

a. $ssufwdkuf, mOf/\delta | \varepsilon \sqrt{\tau} | \sqrt{\phi} v/ \text{ (fighter jet)} \qquad ssuf/\delta | \varepsilon \sqrt{f} \text{ (jet) is a loan}$ $wdkuf, mOf/\tau | \sqrt{\phi} v/ \text{ is a native}$ morpheme

b. csdefudkufAhk:/τ*ειν/κα √/β∴ ← ν/ (time bomb) Ahk: /β∴ ← ν/ is a loan csdefudkuf /τ*ειν/κα √/ is a native morpheme
c. gdkvmtiftm; /σ∴ ←/λ□//)v/□:/ (solar energy) gdkvm/σ∴ ←/λ□/ is a loan

f(x) = f(x) + f(x) +

d. zdwfpmuwf $/\pi | \wp \rangle \sqrt{\sigma} / \kappa \wp \sqrt{}$

 $uwf/\kappa \bigotimes \sqrt{}$ is a loan $zdwfpm/\pi \bigotimes \sqrt{}/\sigma\Box/$ is a native morpheme

3.4.2.3 Tautological Loanblends

This type of loanblends are made up of pairs of words – one a loan word, the other a native word – denoting a similar referent. Therefore, the two words in one loanblend denote the same meaning. For example:

a. $bGwfzdoyf/\beta \leftarrow \sqrt{1/\pi} \therefore \sqrt{1/\pi} \sqrt{1/\pi}$ (boot)

The word $\beta \leftarrow \sqrt{2}$ means (boot) and $\pi \therefore \sqrt{2} \sqrt{2}$ means (shoes/boot)

b. $\delta J = \delta F / \delta | \iota / (\text{shirt})$

The word /* $\wp \sqrt{\prime}$ refers to (shirt) and $\epsilon |\delta| \sqrt{\epsilon}$ (blouse/shirt)

3.4.3 Loanshifts

These can be created by using native words to designate new concepts expressed in English on the basis of models of the English items. Loanshifts in general occur most readily when there is both phonetic and semantic resemblance between foreign and native terms. In loanshifts, there is 'morphemic substitution without importation', that is, the morphemes involved are all native. Importation does not play a part in the creation of loanshifts. The English morphemes are substituted with the morphemes of the native language. For example:

English Model

Burmese Model

a. ultraviolet rays $c\gamma rf; \sqrt{Gefa\gamma mifjcnf} \kappa \left| \therefore /\varphi \wp : \nu/\lambda \leftarrow \nu //\varphi \square \upsilon \nu/\delta \right| \iota:/\psi$

 $c_{Trf;\nu}G_{ef}/\kappa | :.. / \varphi_{\wp} : \nu/\lambda \leftarrow \nu/ \text{ means (ultraviolet) and } a_{Tmifjenf} / \varphi_{\upsilon} v/\delta | u:/ \text{ means (rays)}$

Under loanshifts, the various categories are:

3.4.3.1 Loan Translations

In loan translations, only the meaning of the English word is transferred to the recipient language. Native morphemes are substituted for the English morphemes whereas the meaning is unchanged. Loan translations are also known as calques. Under loan translations, the categories are:

3.4.3.1.1 Literal Loan Translations

These are loans where the model is reproduced element by element in the recipient language. The process can be clearly seen when it involves derivatives as shown in the examples below.

a. test-tube	<u>/σ ℘:ν/τ ℘√//πφ←∴ν</u> / (prf;cyfjyGef)
1 2	1 2
b. air-to-ground	<u>/ωε□/ηε //μβ</u> //μ□.:. /βφ□ / (a0]ifrSajrjyif)
123	1 2 3

Weinreich (1963) refers to these as 'loan translations proper'.

In replacing some of the compound words, the word order of the English item is revised to fit the normal pattern in Burmese. Example:

English Model	Burmese Model
a. <u>cold wa</u> r	$\underline{\sigma} \underline{\sigma} \underline{\varepsilon} $ (ppfat;)
1 2	2 1
b. <u>tele vision</u> 1 2	<u>/φ←√/μφ□v/τ&p:</u> / (7kyfjrifohjum;) 2 1
c. <u>short wave</u>	/ηλε_v://τ/ (vSdkif;wdk)
1 2	2 1

3.4.3.1.2 Loan Renditions

In loan renditions, the model compound only offers a general hint for the reproduction. For example:

English Model	Burmese Loan Renditions
a. black market	/ <u> μα←v/κ ∴←</u> //ζε□/ arSmifedkaps;
(<u>smuggle_market</u>)	
b. foot and mouth disease	/♣□/ν□/ /κ ω□/ν□/ <i>vs</i> SmemcGmem
	(tongue and hoof disease)

3.4.3.1.3 Syntactic Calques

Syntactic calques are loans which consists of phrases that are direct translations of fixed expressions in English. Syntactic calques are prevalent in writings of an academic or journalistic nature. Examples:

a. $txufuazmfjycnfHtwdkif; /:./\tau \vdash \sqrt{\kappa :./\pi} \vdash (\pi \phi \Box / \delta \Box / :./\tau \Box \Box)$ in Burmese from 'as mentioned above' in English

b. $tr \Im_{efwu}, fw \operatorname{Gif} / ... / |\mu \Box v / \tau ... / \gamma \varepsilon / \delta \omega \Box v /$ in Burmese from 'the truth is' in English

C. one jzpfpymry Sd / $\tau \otimes \nu/\delta \therefore /\phi \therefore /\pi | \Box \tau/\sigma \therefore /\phi \Box /\mu \therefore / \bullet \Box /$ in Burmese from '

there is no doubt' in English

3.4.3.2 Semantic Extensions

In this type of loan shifts, the 'shift of context' refers to a shift in the semantic field of the native morpheme. An existing native word is used to cover the semantic aspect of an item of the model. In doing so, the semantic dimension of the Burmese term is extended to include a new meaning. For example: before borrowing, the Burmese word $\mathcal{J}^p \mathcal{D}_{;ajumif;} /\sigma\iota:/\delta | = \leftarrow: \nu /$ which means 'current' in English, refers to the flow of water. After the contact, a shift in the designative function of the Burmese word occurred to include a new designative function, that is, reference to a movement of electricity, meaning 'electric current': $vs \mathcal{S}_{yfppfp} \mathcal{D}_{;ajumif;} /\eta \lambda \square \wp /\sigma \square \sqrt{\sigma \square /\sigma \square /\sigma \square} \wedge \square \langle \varphi \rangle$

Another example is:

ur·*BmvSnfHcjD*; *cGm*; *jmoD* /γ.../β□/ηκλε/κ |.../ψι:/τω□:/ψ□/□□/ meaning 'tourists' season'. Here the meaning of the word *jmoD* /ψ□/□□/ which means 'season' has been extended from one denoting atmospheric and weather conditions to a designative function, that is reference to a period suitable for something.

3.5 Conclusion

Because of the difficulty in establishing the origin of a Burmese word, an authoritative source was selected for its comprehensive and inclusive information. This ensured valid and reliable data for this study. A total of 512 English lexical items were collected. Because of the different writing systems of Burmese and English as well as the need for accuracy in representing the sounds of a word in both languages, transcription was necessary. For the needs of this study, the simplified IPA was used. Analysis of the data required a discussion on Haugen's theoretical framework on classification of borrowings which was presented in detail.