

สำนักหอสมุดกลาง พระจอมเกล้าลาดกระบัง

การใช้คลังข้อมูลภาษาวิเคราะห์คำศัพท์ในบทเรียนกีตาร์ร็อค  
และการออกแบบตัวอย่างพจนานุกรม

CORPUS-BASED ANALYSIS OF ENGLISH VOCABULARY IN  
ROCK GUITAR LESSONS AND A DESIGN OF A SAMPLE DICTIONARY



E078175



นันทการ อิมพอง  
NANTAKARN IMPONG

เลขหมู่.....  
เลขทะเบียน. 078175.  
รับเดือนปี 16 มี.ค. 2560



127 ๖๘ ๖, ๖

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาศิลปศาสตรมหาบัณฑิต  
สาขาวิชาภาษาศาสตร์ประยุกต์-ภาษาอังกฤษเพื่อวิทยาศาสตร์และเทคโนโลยี  
คณะครุศาสตร์อุตสาหกรรม  
สถาบันเทคโนโลยีพระจอมเกล้าเจ้าคุณทหารลาดกระบัง

พ.ศ. 2558

KMITL-2018-ED-M-252-035

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

CORPUS-BASED ANALYSIS OF ENGLISH VOCABULARY IN  
ROCK GUITAR LESSONS AND A DESIGN OF A SAMPLE DICTIONARY



A THESIS SUBMITTED IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF ARTS IN APPLIED LINGUISTICS  
(ENGLISH FOR SCIENCE AND TECHNOLOGY)  
FACULTY OF INDUSTRIAL EDUCATION  
KING MONGKUT'S INSTITUTE OF TECHNOLOGY LADKRABANG

2015  
KMUTL-201~~5~~<sup>5</sup>-ED-M-252-035

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.



**COPYRIGHT 2015**

**FACULTY OF INDUSTRIAL EDUCATION**

**KING MONGKUT'S INSTITUTE OF TECHNOLOGY LADKRABANG**

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

# TABLE OF CONTENTS

	Page
THAI ABSTRACT.....	I
ENGLISH ABSTRACT.....	II
ACKNOWLEDGEMENT.....	III
TABLE OF CONTENTS.....	IV
LIST OF TABLES.....	VIII
LIST OF FIGURES.....	VIII
CHAPTER I INTRODUCTION.....	1
1.1 Statement and Significance of the problem.....	1
1.2 Goals and Objectives.....	4
1.3 Research Questions.....	4
1.4 Scope or Limitations of the Study .....	4
1.5 Conceptual Framework .....	5
1.6 Process of the Study .....	6
1.7 Definition of Terms Used .....	7
CHAPTER II LITERATURE REVIEW.....	10
2.1 Music .....	10
2.1.1 Rock Music .....	11
2.1.2 Rock Guitar.....	11
2.2 English for Specific Purposes (ESP).....	12
2.3 Sublanguage of Rock Guitar.....	14
2.4 Word classes.....	14
2.4.1 Lexical Words.....	15
2.4.2 Function Words.....	16
2.4.3 Inserts.....	17
2.5 Compounds and Multiword terms .....	18
2.6 Abbreviation and Symbol.....	19
2.6.1 Clippings.....	18
2.6.2 Aphaeresis.....	19
2.6.3 Initialism.....	19
2.6.4 Acronym.....	20

## TABLE OF CONTENTS (continued)

	Page
2.6.5 Substitutions.....	20
2.6.6 Contractions.....	20
2.6.7 Symbols .....	20
2.7 Vocabulary Level.....	21
2.7.1 The General Service List (GSL).....	21
2.7.2 The Academic Word List (AWL).....	21
2.7.3 Technical Vocabulary.....	22
2.7.4 Low Frequency Vocabulary.....	23
2.8 Background of Linguistic Corpora.....	24
2.8.1 The Definition of Corpus.....	24
2.8.2 Type of Corpora.....	25
2.9 Corpus Compilation.....	26
2.9.1 Representativeness.....	28
2.9.2 Corpus Size.....	29
2.10 Lexicography and Technical Dictionaries.....	33
2.10.1 Lexicography.....	29
2.10.2 Corpus Lexicography.....	29
2.10.2 Technical Dictionary.....	36
2.11 Related Research.....	38
<b>CHAPTER III METHODOLOGY.....</b>	<b>35</b>
3.1 Steps of Data Analysis .....	35
3.2 Data Collection.....	36
3.3 Research tools.....	36
3.3.1 Concordancing Software.....	36
3.3.2 Guitar Dictionary.....	37
3.4 Data Analysis.....	37
3.5 The Corpus Inputs to the Dictionary.....	38
3.6 Headword Selection.....	38
3.7 The Design of the Sample Bilingual (English - Thai) Rock Guitar Dictionary.....	38
3.7.1 An Entry Structure of the Dictionary .....	40

	Page
CHAPTER IV RESULTS.....	43
4.1 Corpus Findings .....	43
4.1.1 Statistical Analysis of the RGL Corpus.....	43
4.1.2 The Word Frequency Lists.....	44
4.1.3 Content Words.....	45
4.2 Technical Vocabularies.....	47
4.2.1 Vocabulary Levels.....	48
4.2.2 Technical Vocabularies in the RGL Corpus.....	49
4.3 Compounds and Multiword Terms.....	50
4.3.1 Compounds.....	57
4.3.2 Multiword terms .....	51
4.4 Abbreviations and Symbols.....	52
4.5 A Sample Dictionary of Rock Guitar Lessons.....	57
4.5.1 The Corpus Inputs to the Dictionary.....	57
CHAPTER V DISCUSSIONS CONCLUSIONS AND SUGGESTIONS.....	62
5.1 Discussions.....	62
5.1.1 To analyze Technical Vocabulary Used in Rock Guitar Lessons.....	63
5.1.2 To identify abbreviations and symbols found in Rock guitar Lessons.....	64
5.1.3 To examine Compounds and Multiword Terms in Rock Guitar Lessons.....	64
5.2 Conclusions.....	65
5.3 Implications.....	67
5.3.1 Implications for Teachers.....	67
5.3.2 Implications for ESP Pedagogy .....	67
5.3.3 Implications for Making a Technical Dictionary.....	68
5.4 Suggestions for Further Studies.....	68
BIBLIOGRAPHY.....	70

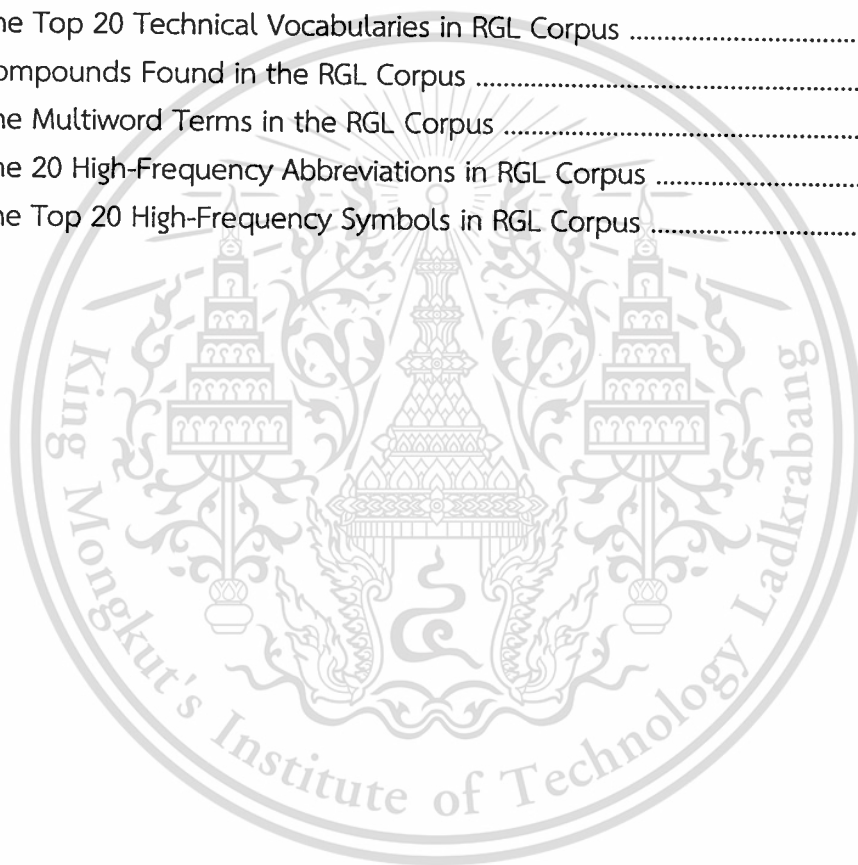
## TABLE OF CONTENTS (continued)

	Page
APPENDICES.....	76
Appendix A: The Guitar Reference in the Top Ten Music Institutions .....	77
Appendix B: Dictionary of Music.....	83
Appendix C: The Example of Guitar Lessons .....	91
Appendix D: The Word Frequency Lists of RGL Corpus.....	94
Appendix E: Compounds and Multiword Terms in the RGL Corpus.....	108
Appendix F: Symbols Found in RGL Corpus.....	111
Appendix G: A Sample Bilingual (English - Thai) Rock Guitar Dictionary.....	116
AUTHOR BIOGRAPHY.....	133



## LIST OF TABLES

TABLE	Page
2.1 Subject Areas in the Academic Corpus .....	22
3.1 The Number of the Collected Guitar Lessons .....	36
4.1 The Tokens and Word Type in the RGL Corpus .....	44
4.2 The Top Fifteen Frequent Words in the RGL Corpus .....	45
4.3 The Top 20 content words in the RGL Corpus .....	46
4.4 The Comparison of Findings between Nation (2012) and the RGL Corpus .....	49
4.5 The Top 20 Technical Vocabularies in RGL Corpus .....	50
4.6 Compounds Found in the RGL Corpus .....	51
4.7 The Multiword Terms in the RGL Corpus .....	53
4.8 The 20 High-Frequency Abbreviations in RGL Corpus .....	54
4.9 The Top 20 High-Frequency Symbols in RGL Corpus .....	56



# LIST OF FIGURES

FIGURE	Page
1.1 Conceptual Framework .....	6
3.1 The Design of Sample Bilingual (English - Thai) Rock Guitar Dictionary Entry .....	45
4.1 Statistical Analysis of RGL Corpus .....	49
4.2 KWIC Concordance Sample of the Word 'Chord' in the RGL Corpus .....	53
4.3 Proportion of General, Academic, and Off-list Vocabularies .....	54
4.4 Proportion of Technical Vocabulary, Symbol, and Abbreviation .....	54
4.5 KWIC Concordance Sample of The Compound 'CHORD PROGRESSION' in the RGL Corpus. ....	58
4.6 KWIC Concordance Sample of The Multiword Term 'MELODIC MINOR SCALE' in the RGL Corpus. ....	59



หัวข้อวิทยานิพนธ์	การใช้คลังข้อมูลภาษาวิเคราะห์คำศัพท์ในบทเรียนกีตาร์รีค และการออกแบบตัวอย่างพจนานุกรม
นักศึกษา	นายันทการ อิมผ่อง
รหัสประจำตัว	53631514
ปริญญา	ศิลปศาสตรมหาบัณฑิต
สาขาวิชา	ภาษาศาสตร์ประยุกต์ – ภาษาอังกฤษเพื่อวิทยาศาสตร์และเทคโนโลยี
พ.ศ.	2558
อาจารย์ที่ปรึกษาวิทยานิพนธ์	รศ.ดร.จิราภา วิทยาภิรักษ์

### บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อ 1) วิเคราะห์คำศัพท์เทคนิคที่ใช้ในบทเรียนกีตาร์รีค 2) วิเคราะห์คำย่อและสัญลักษณ์ที่พบในบทเรียนกีตาร์รีค 3) วิเคราะห์คำปรากฏรวมที่พบในบทเรียนกีตาร์รีค 4) ออกแบบตัวอย่างพจนานุกรม การวิจัยเริ่มจากการสำรวจกลุ่มตัวอย่างเพื่อใช้ในการสร้างคลังข้อมูลภาษาซึ่งประกอบด้วยบทเรียนในนิตยสารและหนังสือเรียนกีตาร์รีคอย่างละ 150 บทเรียนคิดเป็นจำนวน คำ การวิจัยเริ่มจากการสำรวจตำราที่ใช้ในการเรียนรู้กีตาร์รีค จำนวน 1,356,029 คำ โปรแกรม Wordsmith Tools, RANGE\_GAL\_AWL และ AntConc 3.4.3 ถูกนำมาใช้ในการวิเคราะห์ความถี่และการปรากฏรวมของคำ ผลการวิจัยพบว่าจำนวน type/token ratio เท่ากับ 1:33 คำศัพท์สามารถจำแนกออกเป็นสามหมวดคือ คำศัพท์ทั่วไป (13.7%) คำศัพท์วิชาการ (10.5%) และคำศัพท์อื่น (75.8%) โดยแยกเป็นศัพท์เทคนิค 8.32% คำย่อ 44.6% และสัญลักษณ์ 22.87% ตามลำดับ ผลที่ได้แสดงให้เห็นว่า สัญลักษณ์และตัวย่อมักพบบ่อยในแบบเรียนดนตรีซึ่งคำย่อประกอบด้วย clippings, initials, acronyms, contractions, และ substitutions คำปรากฏรวมเกิดจากคำศัพท์ทั่วไปและคำศัพท์วิชาการซึ่งสามารถให้ความหมายเฉพาะทางเทคนิคได้ ขั้นสุดท้ายของงานวิจัยคือการออกแบบตัวอย่างพจนานุกรมกีตาร์รีคโดยการคัดเลือกคำศัพท์เทคนิคที่มีความถี่สูง ในรูปของ คำนามประสม คำย่อ สัญลักษณ์ ตัวอย่างประโยค มาเป็นคำหลักในพจนานุกรม

Thesis Title	Corpus-Based Analysis of English Vocabulary in Rock Guitar Lessons and a Design of a Sample Dictionary
Student	Mr. Nantakarn Impong
Student ID.	53631514
Degree	Master of Arts
Program	Applied Linguistics (English for Science and Technology)
Year	2015
Thesis Advisor	Assoc. Prof. Dr. Jirapa Vitayapirak

## ABSTRACT

This research aims to analyze (1) the technical vocabulary used in rock guitar lessons, 2) the abbreviations and symbols, 3) collocations and 4) to design a sample bilingual dictionary. The research starts from the survey of texts in the field to compile a corpus. The Rock Guitar Lessons (RGL) Corpus contains 150 magazines and 150 instruction books. The RGL Corpus contains 1,356,029 words. The Wordsmith Tools, RANGE\_GAL\_AWL and AntConc programs were used to analyze the frequency and collocations of words in the corpus. The results showed that the number of type/token ratio was 1: 33. The overall vocabularies can be classified into three categories: general vocabulary (13.7%), academic vocabulary (10.5%), and off-list words (75.8%). They off-list words can be divided into technical terms 8.32%, abbreviations 44.6%, symbols 22.87%. The results showed that the symbols and abbreviations are frequently used in the study rock music texts. The abbreviations consisted of clippings, initials, acronyms, contractions, and substitutions. Compounds were created from general and academic vocabulary which can be used as technical terms in rock guitar. The end of the research is to design sample bilingual dictionary entries. The high frequency rock guitar terms, compounds, abbreviations, symbols and sample sentences were selected from the RGL corpus as the raw materials for designing entries in the dictionary.

## ACKNOWLEDGEMENTS

I would like to use this opportunity to express my gratitude to everyone who supported me throughout the course of this Master's thesis. I am very thankful for their guidance, suggestions, and kindly advice which inspired me to keep doing the thesis. The accomplishment of this Master's thesis has been reached because of the assistance of the following people. Firstly, I express my deepest gratitude to my thesis advisor, Assoc. Prof. Dr. Jirapa Vittayapirak, Department of Applied Arts, King Mongkut's Institute of Technology Ladkrabang for her devotion, generosity, and valuable guidance throughout my study. Secondly, special thanks are for Asst. Prof. Dr. Sirirat Petsangsri, Assoc. Prof. Preeyaporn Jitboon, Dr. Pattama Patpong and Assoc. Prof. Sukumal Nilat for giving me many ideas and recommendations. Thirdly, the extraordinary people I would like to express my thanks are Ms. Piyanuch Charoensri and Ms. Sayoomporn Promsurin. The first one, she gave me a lot of assistance in using a computer program and various suggestions from the beginning of doing the thesis until finished. The second one, gave me ideas and encouragement. Finally, I would also like to give a special thanks to my wife, Mrs. Tunyalak Wadkian for being beside me all the time when there are many troubles and helps me getting rid of them.

Nantakarn Impong

# CHAPTER 1

## INTRODUCTION

### 1.1 Statement and Significance of the Problem

Music has been familiar with human a long time ago. There seem to be a relationship between music and human in many ways such as entertainment, education, medication, religion, and so on. Surely, we listen to music for entertaining because music can make us happy and relaxing. At the same time, music can be used in a medical works to relieve pain of the patients. Therefore, there are two worlds of music which human can perceive; a physical world and abstract world. In a physical world we can hear the sound of music through our ears and whereas, in the abstract world our mental system is affected by the influence of music in the forms of happiness, relaxation, power, and so on.

Music is one form of languages which is used to express ideas and emotions in the form of sound and melody. Dato (2003) mentioned that music is a language used to transfer the feeling meanwhile other languages are not able to do so. Instead of using words or gestures, music gives sounds and rhythms as the transmission media. Music is used to communicate feeling in a way of aural and performing art. It is one of the subjects employed to develop students' behavior in the primary and secondary education. Moreover, it can promote moral, attitude, good value, delicacy and good taste, systematic thinking, good health, and live happily in the society. Therefore, The Thai Ministry of Education put the music in the education curriculum (Dato, 2003: 1).

There are several kinds of music in the world. Rock music is one of those and accepted by many people around the world. Thailand is one of many countries has been influenced by rock music. It started in Thai society in the period of Vietnam War (1964-1972) due to the United State of America sending the soldiers to fight in the war in 1964. Thailand was at the side of the Confederation, USA had the military base at Sattaheep, Tapao gulf, Pattaya, Nakornpanom, and Nakornrachasima (Kitrenu, 2004: 13). Cholviroj (1995: 80) mentioned about the music in the war period that the American soldiers preferred entertainment in the bar and night club which had so many string music bands. These bands were originated for supporting the American style music. Therefore, western popular music was usually played to serve the

American soldiers. Since then it was changed into Thai audiences who also appreciate the new kind of music and it has still been popular in Thai society nowadays.

The electric guitar is the major instrument in rock music from the past to recent generation. It has electromagnetic pickups to be fed into an amplifier. It produces the resultant sound (Wausbean, 1988: 30). Kitrenu (2004: 7) asserted that there are more detailed practices e.g. using pick instead of left hand or rocking handle in some sort of electric guitar. Besides, electric guitar has many features not similar to classical and acoustic guitar. For instance, Floyd Rose Bridge is designed for making a various vibration sound and guitar action is designed in a special low level for easily touching, bending, and tapping. The accessories such as distortion, delay, etc. are used to present a varieties dimension of sound which makes rock music more powerful and attractive. Thus the electric guitar and its accessories have become popular among people who play and are deeply interested in rock music. For this reason, electric guitar therefore was developed continuously both the solid guitar itself as well as the technique of playing.

At present, music is one of subjects added in the primary and a high school. Additionally, in the tertiary education, there are many music institutions in Thailand which provide courses on guitar lessons. The top ten music institutions in Thailand are as follows:

1. College of Music Mahidol University
2. Silpakorn University
3. Rangsit University
4. Srinakarinwirot University
5. Chulalongkorn University
6. Kasetsart University
7. ABAC School of Music
8. Payap University
9. Burapha University
10. Khon Kaen University

(Guitarthai, Online: 2012)

According to the survey from the top ten Thai university library statistics in the year 2012, there are 93 guitar references; 76.34 % written in English and 23.65 % written in Thai (See Appendix A). Besides, there are 77 dictionaries of music such as Chambers Dictionary of Music, the Grove Concise Dictionary of Music, The Concise

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

Oxford Dictionary of Music, etc.; 97.40 % written in English and 2.60 % written in Thai (See Appendix B). It can be seen that there are very few guitar references and dictionary of music written in Thai. Moreover, they do not cover the rock guitar terminologies and guitar techniques frequency used and needed in playing rock guitar. For example, the word "HAMMER ON" which is one of important special terminologies and rock guitar techniques any rock guitar learners must know. It is unfortunately not added in the guitar references and dictionary of music. Therefore, it is difficult for Thai musicians and rock guitar learners to understand the terms clearly. That is to say, there is no rock guitar dictionary written for Thai rock guitar learners in Thailand. Therefore, it is very important and useful to have a bilingual (English-Thai) rock guitar dictionary for Thai students and other people who love playing rock guitar. As a matter of fact, dictionaries have a role to play in the development of students' vocabulary. As Summers (1988) stated that the dictionary is a part of vocabulary learning. For foreign learners of English, they should be encouraged to avail themselves of the substantial information contained in their dictionary.

Corpus-based approach has been used as an appropriate methodology in analyzing specialized terminologies. It has a special feature in finding the authentic terminologies or technical vocabularies. Additionally, using corpus is a systematic procedure and it covers the necessary sublanguage and technical terms in rock guitar lessons. This research, therefore, focuses on compiling corpus for finding out rock guitar terminologies. One example is the work of Mullensiefen, Wiggins, and Lewis (2007). They found the techniques for modelling music cognition by using high-level descriptors and corpus-based musicology. A corpus of 400 popular songs downloaded from [www.ethaimusic.com](http://www.ethaimusic.com) on the Internet was examined. Then the techniques of corpus linguistics were used to analyse this body of music in an effort to better prepare language teachers to use these songs in the classroom (Bofman and Prez, 2008). This study compiled a corpus to analyze rock guitar terminologies can be useful for Thai students and others who love playing rock guitar because the study of rock guitar terminology and dictionary was carried out with particular attention to Thai circumstances, in order to reflect upon the problems and needs of Thai music students, and so to motivate students in language classroom.

## 1.2 Goals and Objectives

The aims of this study are to analyze the English vocabulary based on the rock guitar corpus and to design a sample bilingual (English - Thai) rock guitar dictionary. The study has four main objectives as follows:

- 1.2.1 To analyze technical vocabulary used in rock guitar lessons.
- 1.2.2 To identify abbreviations and symbols found in rock guitar lessons.
- 1.2.3 To examine compounds and multiwords found in rock guitar lessons.
- 1.2.4 To design a sample bilingual (English - Thai) rock guitar dictionary entries based on the technical vocabulary found in the corpus.

## 1.3 Research Questions

The purpose of this research is using a corpus to analyze the rock guitar terminologies and making a sample dictionary. The following research questions serve as a guideline in the study:

- 1.3.1 What are the technical vocabularies used in rock guitar lessons?
- 1.3.2 What are the abbreviations and symbols used in rock guitar lessons?
- 1.3.3 What are the most frequent relevant collocations in rock guitar lessons?

## 1.4 Scope or Limitations of the Study

- 1.4.1 The samples in this study were 150 lessons of guitar magazines and 150 lessons of guitar instruction books published during the year 2009-2011.
- 1.4.2 The Wordsmith Tools (Version 6.0) was used to analyze basic statistics of word analysis in terms of types, tokens, word frequency and concordance.
- 1.4.3 The RANGE\_GAL\_AWL Programs was used to calculate the vocabulary levels: General vocabulary, Academic vocabulary, Off-list words refer to Technical vocabulary, Abbreviation, and Symbols.
- 1.4.4 The AntConc 3.4.3 was used to calculate compounds and multivord terms.

1.4.5 The music dictionaries on [www.dolmetsch.com](http://www.dolmetsch.com) and guitar dictionary on [www. Guitarscholar.co.uk](http://www.Guitarscholar.co.uk) were used as guideline to define the meaning of the entries in a sample bilingual (English - Thai) rock guitar dictionary.

## 1.5 Conceptual Framework

In this research, technical vocabularies were emphasized. In order to find out terminology in rock guitar lessons, Nation's (2001) theory about vocabulary levels was used. He developed the program to analyze vocabulary into three levels: General Service List (GSL), Academic Word List (AWL), and Off-list words (including technical, abbreviations, and symbols).

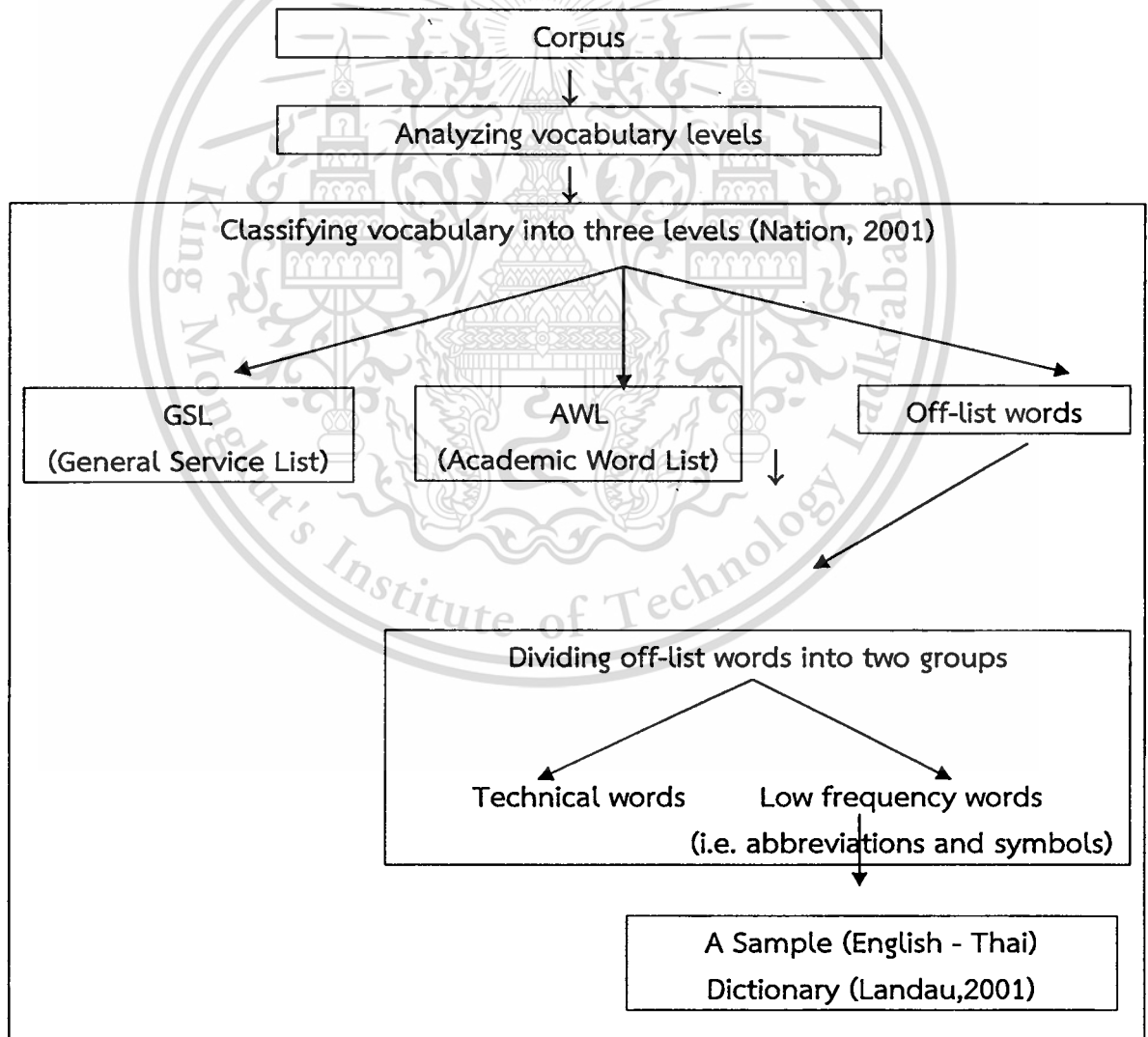


Figure 1.1 Conceptual Framework

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

## 1.6 Process of the Study

The process of the study is as follows:

### 1.6.1 Literature Review

The literature and related research concerning corpus-based approach, vocabulary, and lexicography were studied.

### 1.6.2 Data Collection

1. Three hundred rock guitar lessons from guitar magazines and guitar instruction books were collected.

2. In the corpus compilation, all rock guitar lessons were downloaded and stored as plain-text (\*.txt).

### 1.6.3 Data Analysis

1. The computer software program WordSmith Tools (Version 6) was used to examine tokens and word types, and to calculate type-tokens ratio and word frequency of the whole corpus. All texts were categorized into three groups of vocabulary, namely general, academic, and technical vocabulary by using the RANGE\_GAL\_AWL program. Then they were presented in terms of percentage of word occurrence.

2. From the word list, the general vocabularies based on the General Service List provided by Bauman and Culligan (1995) were identified.

3. From the word list, the academic vocabularies based on The Academic Word List provided by Coxhead (2000) were identified.

4. The technical vocabularies were taken out from off-list words and low frequency word.

5. Based on the study of Barnhart (1995), the abbreviations were explored by using WordSmith program but symbols were manually accounted.

6. The collocations were examined by using KWIC concordance in AntConc 3.4.3 program.

#### 1.6.4 Results and Discussion

The results were presented as follows:

1. The overall results were presented in terms of number of tokens and word types, type/token ratio, and word frequency list.
2. The frequency and percentage of occurrence of the general, academic, and technical vocabularies were presented.
3. Technical vocabularies, abbreviations, symbols, compounds and multiwords were listed.
4. A sample bilingual (English - Thai) rock guitar dictionary entries was designed.
5. Discussion and conclusion were provided.

#### 1.6.5 Conclusions and Recommendations

Conclusions and recommendations for further studies were given.

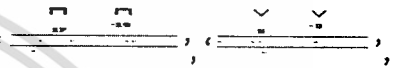
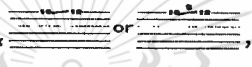
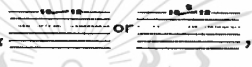
### 1.7 Definition

<b>Compound and Multiword Term</b>	compound is a lexical unit consisting of more than one base and functioning both grammatical and semantically as a single word while multiword term is a word comprises of more than two words (Quirk, 1985).
<b>Concordance</b>	a primary tool in all corpus studies which enables a researcher to find all occurrences of a given word, a part of word, or combinations of words within the context in a corpus of texts (Simon, 1996).
<b>Content words</b>	the words which refer to a thing, quality, state, or action and which have meaning (lexical meaning) when the words are used alone. Content words are mainly nouns, verbs, adverbs, and adjectives, e.g. guitar, pick, fast, major.
<b>Corpus (plural: corpora)</b>	a collection of text, of the written or spoken word, which is stored and processed on computer for the purposes of linguistic research (Renouf, 1987: 1).

<b>Function words</b>	the words which have a little meaning of their own, but which shows grámmatical relationship in sentences. Conjunctions, prepositions, articles, e.g. 'an', 'to', 'the' are function words (Biber et al., 1999).
<b>Rock guitar</b>	An electric guitar and amplifier used as the major instrument for playing rock music. Its rhythm is bold and heavy (Kamien, 1976). The accessories such as distortion, delay are always used. (Kitrenu, 2004)
<b>Rock guitar lessons</b>	rock guitar lessons appear in world guitar magazines (Guitar World Magazine, Total Guitar Magazine, Guitar Techniques Magazines and etc.) and instruction books which are the transcription of world guitar players (Dimebag Darell's Riffer Madness by Dimebag Darell, John Petrucci's Wild Stringdom by John Petrucci, Heavy Metal Lead Guitar by Troy Stetina and etc.).
<b>Sample bilingual (English - Thai) rock guitar dictionary</b>	a small amount of dictionary entries which consists of rock guitar terminologies. It comprises headword, pronunciation in Thai, abbreviation, Thai synonym, Thai definition, and example of usage.
<b>Sublanguage</b>	A specialized form of natural language used to describe a limited subject matter, generally employed by a group of specialists dealing with this subject (Chevalier et al., 1978)
<b>Word frequency lists</b>	the list of vocabulary items in a corpus of language. This information can be shown in either alphabetical order or frequency order.
<b>The Academic Word list (AWL)</b>	the list of academic words which are selected for tertiary level students who need to read and write academic proses. The AWL contains 570 word families based on a 3,500,000 token corpus of academic English (Coxhead, 2000).
<b>The General Service List (GSL)</b>	the most frequent 2,000 words of English (West, 1953, Bauman and Culligan, 1995).

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

Tokens or running words	the number of all words encountered in the text. Every word form is counted even though the same word form occurs more than once. For example, <i>'This trademark diminished run using sweep picking to map out the repeating five note pattern'</i> . This sentence contains fifteen tokens.
Technical Vocabulary	a word relates to rock guitar or frequency used and needed in playing rock guitar such as 'HAMMER ON', 'PULL OFF', 'HARMONICS', 'A MINOR PENTATONIC SCALE', 'APPEGGIO', and etc. It also includes abbreviations such as 'E (E MAJOR)', 'H (HAMMER ON)', and 'F (F MAJOR)', and symbols such as  , and  , and  .
Word types	a token which occur more than once in different position was counted as one word type. For example, <i>'For this section try using a mini-sweep over the 12<sup>th</sup> fret A and 11<sup>th</sup> fret C# and F# notes (essentially economy picking). This helps avoid a nasty inside picking manoeuvre that results from alternate picking and often makes the notes sounds scuffed or indistinct'</i> . These sentences have forty-five tokens but thirty-eight word types, as <i>'this'</i> <i>'the'</i> <i>'fret'</i> <i>'notes'</i> and <i>'and'</i> occur twice while <i>'picking'</i> occurs three times.

## CHAPTER 2

### LITERATURE REVIEW

In this research, the researcher paid an attention to find out the technical vocabularies, abbreviation, symbols, compounds, and multiword terms found in the rock guitar lessons. Then, the designing of a sample bilingual (English - Thai) rock guitar dictionary was done. This chapter shows the related literatures to support as rational for the thesis. It begins with music, English for Specific Purposes (ESP), sublanguage of rock guitar. Secondly, word classes, compounds and multiword terms, abbreviations and symbols, and vocabulary levels. Thirdly, background of linguistic corpora and corpus compilation. Fourthly, lexicography and technical dictionaries. Lastly, related researches are explained.

#### 2.1 Music

Music is a form of art. Varese (2011) defined it as "organized sound". Music expresses our feelings as well emotions in a melodious and pleasant way. There are varied genres of music as people have different tastes for example, classical music, rock, jazz, metal, rap, folk, etc. But the objective remains the same. The aim of all music is to touch the core of the heart and thus music can be called an expression of our heart's saying. According to Varese (2011) the different genres of music are as follows:

1. Classical Music
2. Rock Music
3. Metal Music
4. Hip-hop Music
5. Wedding Ceremony Music
6. Trance Music
7. Jazz
8. Folk Music
9. Techno Music
10. Opera Music

(Varese, 2011)

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

### 2.1.1 Rock Music

Rock is a modern music and influenced by various music styles. The fundamental music styles of rock are gospel, blues, rhythm & blues, and country. Rock had progression around year 1940, the merge of different music styles. Kamien (1976: 598) quoted the occurrence of rock as “In the middle of 1950, there was a phenomena called “Rock ‘n Roll” called simply “Rock”. Despite being the mixture of various music types, the essence of Rock is, its rhythm is bold and heavy and major elements are electric guitar and amplifier. In the beginning, Rock is developed from Rhythm & Blues, which are the dance music of black Americans, blues, jazz, gospel and also the country of white Americans.

Rock music firstly originated in the early 1950s in America involving the rhythm and blues style—a popular music idiom developed by African-Americans. It combined elements of urban blues, gospel, and country. After rock music emerged by that time, it has been continuously developed. Rock and roll music was mixed with the others and then classified to many musical styles, such as Folk-rock, Psychedelic rock, Hard rock, Heavy metal, Jazz rock or Fusion, Art rock or Progressive rock, Punk rock, Alternative rock and others. Currently, the rock music term is used to cover various patterns of songs, and it can digest each rock style to minor form such as Heavy-metal that including of Trash metal, Speed metal, Black metal and Hardcore (Wiwan, 2004: 1).

### 2.1.2 Rock Guitar

Rock guitar players always use an electric guitar as a major instrument in rock songs because the electric guitar together with the accessories can make strong beat and heavy sound such as distortion and delay. The electric guitar is a type of guitar with a solid or semi-solid body that utilizes electromagnetic pickups to convert the vibration of the steel-cored strings into electrical current. The current may be electrically altered to achieve various tonal effects prior to be fed into an amplifier which produces the resultant sound. The electric guitar does not need to be naturally loud, and its body can be virtually any shape such as “Hollow Body” and “Solid Body” (Wausbean, 1988: 30). It was becoming popular among people who play and feel passionately about the rock music. With this reason, electric guitar therefore was developed continuously both the solid guitar itself and the technique of playing as well. Moreover, the academic institutions are interested in putting the

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

electric guitar into the lessons, and there many multimedia such as videos for teaching guitar, guitar books and also various music notes were launched to whoever were interested in playing rock music. That is why the electric guitar was accepted and popular from the past to recent generation.

In 1980s, it was the most glorious time of the instrument songs of electric guitar. In the middle of that decade, there were so many improvements in the disciplines of the instrument electric guitar. The electric guitar is the one musical instrument using high skill to play, and resulting in so many excellent guitarists at that time. The songs in this time were dominated by many styles such as Jazz, Rock, Blues, Metal, Classic and as well as Punk. From this development, it makes the songs complicated in beats, fast style playing and also the lyrics. At this time, the instrument song became popular again and the well-known guitarist among this group are Yngwie Malmsteen, Vinnie Moore, Joe Satriani and Steve Vai (Larkin, 1992: 24).

## 2.2 English for Specific Purposes (ESP)

Applied linguists gave special attention to describe the 'special' linguistic features of technical text. In the 1960s and early 1970s, the word 'register' was used in association with the 'special language,' such as the language of biology, or the language of medicine. Special languages were analyzed for the frequency of occurrence of words in the texts and the particular syntactic and/or certain lexical items. The aim of the analysis was to identify the grammatical and lexical features of these registers and take them as their syllabus. The teaching materials then were based on descriptions of language use (Swales, 2000).

ESP concentrates on language in context. It covers subjects varying from accounting or computer science to tourism and business management. As a matter of fact, ESP combines subject matter and English language teaching. Students are able to apply what they learn in their English classes to their main field of study, whether it is accounting, medicine or rock guitar. Being able to use the vocabulary and structure that they learn in a meaningful context reinforces what is taught and increases their motivation (Hutchinson and Waters, 1986: 19).

ESP is an approach to language teaching in which all decisions as to content and method are based on the learners' reason for learning (Hutchinson and Waters,

1986: 19). Richard (1999: 124) has defined 'English for Specific Purposes' (ESP) in Dictionary of Language Teaching & Applied Linguistics as follows:

“the role of English in a language course or program of instruction in which the content and aims of the course are fixed by the specific need of particular group or learners. For example course for English for Academic Purposes, English for Science and Technology, teaching, learning or studying English for Specific (e.g. scientific or technical) Purposes.”

*(Richard et al., 1999: 124)*

It is possible to distinguish ESP courses by the nature of the students' specialism. There has always been a purpose behind language teaching, and one of the most valuable aspects of ESP is that it has concentrated the mind on the ends a person wishes to pursue. Teaching English for a special purpose has to be clear about what the purpose is, and to consider the ways to achieve this end (Kerr, 1979:

11). Mackey and Mountford (1987: 6) proposed three kinds of purposes as follows:

1. Occupational requirements, e.g. for international telephone operators, civil airline pilots.
2. Vocational training programmes, e.g. for hostel and catering staff, technical trades.
3. Academic or professional study, e.g. for engineering, medicine, law.

This classification of purposes behind language teaching helps to define ESP varieties. It indicates three main types of ESP, differentiated according to whether the learner requires English for 'Occupational', 'Vocational', or 'Academic' purposes. ESP courses were thus divided according to the purposes of the study, for example English for Tourism, English for Secretaries, English for Economics, or English for Medical Purposes. This study aims to study English in rock guitar lessons to find out the 'special' linguistic features of the text, i.e. specific terms, collocations, abbreviations, and symbols. English for rock guitar is thus a kind of ESP. For terminologist, they call specific terms as "sublanguage".

## 2.3 Sublanguage of Rock Guitar

English for Rock Guitar is a form of sublanguage, i.e. it is a specialized form of natural language used to describe a limited subject matter, generally employed by a group of specialists dealing with this subject. Examples of sublanguages that have been studied are weather reports (Chevalier et al., 1978 ), aircraft maintenance manuals (Lehrberger, 1983), medical reports (Hirschman and Sager, 1983), and equipment failure reports (Marsh, Hamburger and Grishman, 1984). A sublanguage will generally be much more constrained than the “standard language”, but it may also include extension to the standard language, such as sentence fragments found in telegraphic-style message text.

Zellig Harris (1968) is one of the first linguists to study language use in restricted domains, defined sublanguages in terms of one particular constraint on what words can co-occur within a particular syntactic pattern, such as a subject-verb-object structure. Just as speakers of the standard language distinguish between grammatical and ungrammatical sentences, speakers of the sublanguage will distinguish between acceptable and unacceptable (meaningless) sentences, even though the unacceptable sentences may be grammatical sentences of the standard language. For example, in the sublanguage of the medical records, a speaker would accept the sentence *The X-ray revealed a tumor* but not *The tumor revealed an X-ray*.

Harris hypothesized that for any particular sublanguage we can define **sublanguage word class** – set of words that are acceptable in the same contexts (Harris, 1968). For example, in the context, *reveal a tumor*, we might find words such as *X-ray*, *film*, and *scan*. Such classes, even though defined on purely distributional grounds, correspond closely to the natural semantic classes that might be identified by an expert in the domain.

## 2.4 Word Classes

Vocabulary can be classified into word classes: Lexical words and Function words. Biber et al. (1999) categorized word classes into three classes according to their main functions and their grammatical behavior, i.e. lexical words, function words, and inserts.

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

### 2.4.1 Lexical words

The lexical words are the main carries of meaning in the text. There are four main classes of lexical words: nouns, verbs, adjectives, and adverbs.

#### 2.4.1.1 Nouns

Noun typically refers to people, animals, places, things, or abstractions which can occur as the subject or object of a verb or object (complement) of a preposition. Nouns can be modified by an adjective and can be used with determiners e.g. *major*, *arpeggio*, *harmonic*.

#### 2.4.1.2 Pronouns

Pronouns stand in for nouns or noun phrases; can be subjects, objects, and complements. Pronouns are nouns representing unique entities e.g. *Paris*, *Earth* or *John*, as separated from common nouns that focus on a class of entities e.g. *city*, *planet* or *person*. They can be subject, object, and complements. Proper nouns are classified as closed classes. There are actually five categories of pronouns as follows:

Personal pronouns like *he*, *she*, *they*, or *we*.

Indefinite pronouns like *anyone*, *someone*, *everyone*, *no one*, *something*, *neither*, *either*, *another*, *both*, *all*, *most*, *some*, *whoever*, *whomever*, or *whatever*.

Interrogative pronouns like *who*, *whom*, *whose*, *what*, and *which*.

Demonstrative pronouns like *this*, *that*, *these*, and *those*.

Relative pronouns like *who*, *whom*, *whose*, *that*, *which*, *whoever*, *whomever*, or *whichever*.

#### 2.4.1.3 Verbs

Verbs can have one of two major roles in verb phrases: main verb or auxiliary verb. Main verbs, such as the verb *picked* in the following example, can stand alone as the entire verb phrase:

I continually picked the E string as a rhythm.

In contrast, auxiliary verbs, such as the verbs *can* and *be* in the following example, occur together with some main verbs (in this case *cited*):

Arpeggio can be called sweep picking when it is played fast..

There are three major classes of verbs : lexical verbs (also called full verbs, e.g. run, eat), primary verbs (be, have, and do), and modal verbs (e.g. can, will, might). These classes are distinguished by their roles as main verbs and auxiliary verbs.

#### 2.4.1.4 Adjectives

Adjective is a word describing the thing, quality, state, or action which a noun refers to. For Example, *side* in *the side effects* is an adjective. In English, adjectives usually have the following properties:

- a. they can be used before a noun, e.g. *a heavy bag*
- b. they can be used after *be, become, seem,* etc. as *the bag is heavy.*
- c. they can be used after a noun as a complement, e.g. *these books make the bag heavy.*
- d. they can be modified by an adverb, e.g. *a very heavy bag.*
- e. they can be used in a comparative or superlative form, e.g. *the bag seems heavier now.*

#### 2.4.1.5 Adverbs

Adverb is a word describing or adding to the meaning of a verb, an adjective, another adverb, or a sentence which answers such questions as how. where? or when? In English many adverbs have an -ly ending. For example, **adverbs of manner** e.g. carefully, slowly, **adverbs of place** e.g. here, there, locally , and **adverbs of time** e.g. now, hourly, yesterday.

### 2.4.2 Function words

While lexical words are the main building blocks of texts, **function words** provide the mortar which binds the texts together. The function words in this study are conjunctions, prepositions, and articles.

#### 2.4.2.1 Conjunctions

A conjunction is a word that connects individual words or groups of words. In fact, the word conjunction literally means “the act of joining” or “combination.” There are three kinds of conjunctions: ***Coordinating, correlative, and subordinating conjunctions.***

1. **Coordinating conjunctions** connect words or groups of words that perform the same function in a sentence. The coordinating conjunctions are in the following list:

And but for nor or yet

2. **Correlative conjunctions** consist of two or more words that work together as a set. Correlative conjunctions function like coordinating conjunctions because they connect words that perform equal functions in a sentence. The correlative conjunctions are in the following list:

either...or                      whether...or                      neither...nor  
not only...but (also)      both...and

3. **Subordinating conjunctions** connect subordinate clauses to independent clauses, which can stand by themselves as complete sentences. Subordinating conjunctions usually express relationships of time, manner, cause, comparison, or purpose.

Time	<i>after, as, as long as, as soon as, before, since, until, when, whenever, while</i>
Manner	<i>as, as if, as though</i>
Cause	<i>because</i>
Condition	<i>as long as, even if, if, provided that, unless</i>

#### 2.4.2.2 Prepositions

Preposition is a word used with nouns, pronouns and gerunds to link them grammatically to other words. Most common prepositions are short, invariable forms: *as, at, by, down, for, from, in, into, on.*

#### 2.4.3 Inserts

Inserts are a relatively newly recognized category of word. They do not form an integral part of syntactic structure, but they are inserted rather freely in the text. They are often marked off by intonation, pause, or by punctuation marks in writing. Inserts are carried emotional and interactional meanings and are especially frequent in spoken texts. These are sounds such as *hm, uhhuh, ugh, yeah*

## 2.5 Compounds and Multiword Terms

Quirk (1985) mentioned that compound is a lexical unit consisting of more than one base and functioning both grammatically and semantically as a single word. In principle, any number of bases may be involved, but in English, except for a relative minor class of items (normally abbreviated), compounds usually comprise of two bases only, and however internally complex each may be. However, these compounds can be written:

1. in solid form: *Screwdriver, aircraft,*
2. with a hyphen between the part: *record-player, baby-sister,* and
3. in open form: *flying machine, power plant.*

Noticeably, compounds comprise of two words while multiword is called when the words comprise of more than two words. According to Zgusta (1971: 144-148), he uses the term '*multiword lexical unit*' and takes into consideration the following basic criteria:

1. *Substitution* is impossible in an MLU.
2. It is impossible to *add* something to the set of combination. For instance, the MLU *black market* can be considered the set counterpart of the free combination *illegal market*. Now it is also possible to say *illegal steel market*, the only way to express this with the combination would be *black market in steel*.
3. The MLU may have a synonym or a close near-synonym which consists of one word only.
4. A *one-word equivalent* in a foreign language can suggest that we might have an MLU before us.
5. Zgusta also speaks of the *semantic criterion*; 'the meaning of the whole is not derivable from the meaning of single constituent parts'. However, he considers it is important to stress that 'this semantic phenomenon is not the basic criterion of an MLU'.

Nagao (1994: 406) asserted that compounds express the new concepts that continually emerge as any field develops. Many of these are built on existing concept, as it would be impossible to create completely new names for each one. These ideas also parallel to the examples of compounds and multiword terms of computer science corpus found by Vitayapirak (2001: 121):

Operating system	local area network	abstract data type mechanism
Instruction set	file transfer protocol	LAN data link subnetwork technology
Program counter	memory address register	real-time desktop video conference system

Vitayapirak (2001: 121)

Compounds and multiword terms are important features in the rock guitar lessons corpus because they comprise of two words and or more but they function as a single word and provide only one meaning. Thus, the musical students and Thai guitar learners will easily understand and translate the rock guitar lessons by noticing the compounds and multiword terms used in sentences.

## 2.6 Abbreviation and Symbol

Abbreviation is a short way of writing a word or phrase made by leaving out some of letters or by using only the first letter of each word and so on. Abbreviations are composed of clippings, aphaeresis, initialism, acronyms, substitutions, contractions, and symbols (Barnhart, 1995).

### 2.6.1 Clippings

The mechanism for clipping operates by omitting some part or parts at the end of a word, i.e. *strep* (for streptococcus), *auto* (for automobile), *dorm* (for dormitory), *condo* (for condominium), and *demo* (for demonstration). Some clippings retain only the initial syllable of a word such as *pop* (for popular).

### 2.6.2 Aphaeresis

The mechanism for aphaeresis, which is sometimes considered a special type of clipping, omits some parts of the beginning of a word. As in clippings, many words formed by aphaeresis are originally considered to be nonstandard usage i.e. *bus* (for omnibus), *phone* (for telephone). The endings of ordinal numbers, e.g. *1<sup>st</sup>* (for first), *2<sup>nd</sup>* (for second), *3<sup>rd</sup>* (for third), *4<sup>th</sup>* (for fourth) are included in aphaeresis.

### 2.6.3 Initialism

The process of grouping initial letters is the most familiar to the written abbreviation, i.e. *LA* (for Los Angeles), *VCR* (for videocassette recorder), *CD* (for compact disk), and *EC* (for European Community).

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

#### 2.6.4 Acronym

Acronyms are specially contrived to be used as spoken forms or read as words and clearly demonstrate their dependence on the spelling patterns of writing, e.g. *AIDS* (for acquired immune deficiency syndrome), *OPEC* (for Organization of Petroleum Exporting Countries, with omission of *of*).

#### 2.6.5 Substitutions

Another process of abbreviation rooted in written forms is substitution, which often involves abbreviated forms of foreign words and expressions that are adopted in English contexts. Latin abbreviations are included in substitution, such as *tid*, *qid*, *cf*, e.g., *i.e.*

#### 2.6.6 Contractions

Contraction is a shortened form of a word or words. The mechanism of contractions are largely rooted in written English and produced only occasional forms in spoken English, e.g. *Dr.* (for Doctor)

#### 2.6.7 Symbols

According to Barnhart (1995), the symbols are classified as letter symbols, phonetics, and chemical symbols. Symbols are used more in scientific and technical literature than in any other area. The letters are abbreviations for particular words, but they stand as symbols in relation to one another for a concept and for quantities once the formula is applied in a specific instance (Barnhart, 1995: xviii). In formula  $E = mc^2$  (where *E* stands for energy, *m* for mass, and *c* for constant speed of light) and *SOS* (for distress), phonetic symbols in the pronunciation systems of dictionaries e.g. *ð* (for *th*), and chemical symbols in every periodic table of the elements e.g. *Au* (for gold) and *Ag* (for silver).

In this study, abbreviations and symbols were the main focus because they were frequently and surprisingly found in the rock guitar lessons corpus. The theory of abbreviations and symbols offered by Barnhart (1995) is very useful for students because it will allow them to conceive the meaning fast when they read the rock guitar lessons which include a huge amount of guitar music score.

## 2.7 Vocabulary Levels

In order to find the technical terms in the Rock Guitar Lessons, we need to classify vocabulary in 4 levels. According to Nation (2001), the English vocabulary can be divided into four categories: General Service List (GSL) or high frequency words, academic vocabulary, technical vocabulary and low frequency vocabulary. Besides, Nation also developed an online program to examine the vocabulary levels, called “VocabProfile” that was used for analyze vocabulary levels by grouping them into three groups, i.e., General Service List (GSL), Academic Word List and Off-list words (including technical and low frequency words).

### 2.7.1 The General Service List (GSL)

In 1953, Michael West (West, 1953) published his well-known General Service List of English words. This was a list of the 2000 most useful word families of English. The GSL is based on a 5 million word written corpus, excluding months, days of the week and numbers. Each word in the list is accompanied by its inflected forms together with a list of common derivatives and compounds with the frequency and percentage of each major meaning of each word indicated.

An updated version of the GSL was published by John Bauman and Brent Culligan in 1995. The list contains 2,284 words and presents in frequency order based on the Brown Corpus. Although the list has been criticized for many reasons, research into academic texts by Averil Coxhead (Coxhead, 2000) has shown that the GSL covers almost 80% of the academic texts she studied. It would seem essential for any students to know these word families.

### 2.7.2 The Academic Word List (AWL)

Coxhead (2000) studied over 3.5 million words of academic text from 28 subject-areas and identified another 570 word families that were commonly used in academic texts from all subjects. The Academic Word List (AWL) of Coxhead was developed from a corpus of written academic texts by examining the range, frequency and uniformity of occurrence of words outside the first 2,000 words of English (West, 1953). This corpus contains four disciplines (arts, commerce, law and science) and each discipline is made up of seven subject areas.

**Table 2.1** Subject Areas in the Academic Corpus

Arts	Commerce	Law	Science
Education	Accounting	Constitutional Law	Biology
History	Economics	Criminal Law	Chemistry
Linguistics	Finance	Family law and medico- Legal	Computer Science
Philosophy	Industrial Relations	International Law	Geography
Politics	Management	Pure Commercial Law	Geology
Psychology	Marketing	Quasi-Commercial Law	Mathematics
Sociology	Public Policy	Rights and Remedies	Physics

(Source: Coxhead, 2000)

The AWL contains 570 words which have both high frequency and high coverage in academic texts, irrespective of subject area and discipline and accounts for approximately 10% of the total words (tokens) in the corpus described above. The words in AWL are ones which university students of English must be thoroughly familiar with for both reading and writing academic prose. It contains 570 words which have both high frequency and high coverage in academic texts, irrespective of subject area and discipline. These 570 words are not just word-forms, but consist of headwords plus their inflected and derived forms. The words cover 10% of the academic texts she studied. She called these words the Academic Word List (AWL). It would also be necessary for any English for Academic Purposes students to know these words.

Therefore, the General Service List plus the Academic Word List cover nearly 90% of the academic texts. English for Specific Purposes students would also need to know the specific word related to their subject-around 5% of the words in an academic text and some of the less frequent words used in English about 5% (Nation, 2001: 12).

### 2.7.3 Technical Vocabulary

The technical vocabulary is a word closely relates to a specific area or field of study, such as medicine, engineering, geology, physics and etc. and it is sometimes called specialized vocabulary, terminology or specific vocabulary. Nation (2001) This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

defines the technical vocabularies as the words in specialized texts, and is made up of words that occurred frequently in a specialized text or subject area but did not occur or were of very low frequency in other fields. Besides, there are two other types of words students need to know, i.e. general words and the academic words they also need to know the specific words or technical vocabularies for subject of learning. The subject specific words make up about 5% of the words of most academic texts. These words are very important to know and are usually learned in subject classes. They are used by specialists and are not generally known by non-specialist. In applied linguistics, ESP also focuses on the specialist vocabulary found in specific texts because one of the distinguishing features of ESP is the high concentration of terms.

Applied linguists such as Trimble and Trimble (1978), Robinson (1991), Dudley-Evans and St John (1998) classify vocabularies into three categories : '*subject specific vocabulary*', '*non subject-specific specialized vocabulary*,' and '*general vocabulary*'. The first group or subject specific vocabulary is used in one domain. They are monosemous with restricted, protected, and standardized meaning because one-to-one correspondence reduces ambiguity and improves communication such as *pharmacology*, *pediatric*, *geriatric*, and so on (Pearson, 1998: 15). The second group or non-subject-specific specialized vocabulary that has been identified is called '*semi-technical*'. It comprises of words which occur in a number of scientific or technical areas such as, *absolute*, *accuracy*, *factor* and etc. The third group is '*general vocabulary*'.

Furthermore, Wasuntarasophit (2008: 30) mentioned that the technical vocabulary can be a common word which provides a specialized meaning different from its vernacular meaning when used in specific field. He also asserted that researchers in the technical field have provided similar definitions for technical vocabulary regarding; Groups of specialists, Fields of use, Special meaning, Distinct forms or morphology, and High frequency of occurrence in the specific field.

#### 2.7.4 Low frequency vocabulary

The low frequency vocabulary comprises all words that are not the high frequency words, not academic words, and not technical words in one corpus. They do not require the reading of academic text, or for reading novels and popular magazines and they are required for students who intend to use English for social  
This material is reserved for educational use only, not allowed for commercial use.

purposes or for occupations (Nation and Newton, 1997: 239). These words may occur only once or twice in readings during a long period of time, e.g., proper name, abbreviation, and numbers (Coxhead and Nation, 2001). Learners usually can guess their meanings from the context (Nation and Newton, 1997). It is not worthwhile for English teachers as well as college students to spend too much time on them (Li and Zhang, 2009:2). According to Nation (2001), the low frequency words cover around 5% of the running words in an academic text.

Vocabulary levels are very important to linguists who deal with teaching. The linguists can choose the vocabularies from each level which is fit to the level of the students. The linguists or teachers should let the students the words in GSL and AWL, which in total cover around 90% of the academic texts. Then, the students should study the technical vocabulary only occur in their own subject. Finally, they could pay attention to the low frequency words for expanding their vocabulary recognition. Nevertheless, Nation (2001) recommended that learners of English as a second language in primary and secondary school system may be better off using materials based on a replacement for GSL and the AWL. Both are useful for senior high school and university students. In terms of terminology and lexicography, the terminologists and lexicographers can learn the vocabulary levels to extract the specific or technical terms for their expectations such as professional translation, specific studies translation, making a dictionary and so on.

## 2.8 Background of Linguistic Corpora

A corpus – based approach to language study or lexicography is not a new idea. Scholars counted word frequencies from single texts or from collections of texts and produced lists of the most frequent words. Areas where corpora were used include language acquisition, syntax, semantics, and comparative linguistics, among others (University of Essex, Online: 2004).

### 2.8.1 The Definition of Corpus

Corpus linguistics deals with the principles and practice of using corpora in language study. A corpus is a large body of machine – readable texts and a collection of linguistic data, either compiled as written texts or as a transcription of recorded speech (Crystal, 1992). The main purpose of a corpus is to verify a

hypothesis about language for example, to determine how the usage of a particular sound, word, or syntactic construction varies. Currently, computer corpora may store many millions of running words, whose features can be analyzed by means of tagging (the addition of identifying and classifying tags to words and other formations) and the use of concordancing programs (McArthur, 1992).

## 2.8.2 Types of Corpora

A corpus is compiled for a particular purpose, and the types of corpus will depend on its objective. Corpus linguistics attempting to describe particular types of corpora has used a number of different terms to refer to them. In order to study features of the language in general, independently of the styles of particular types of text, it is necessary to use a *general corpus* or a collection of texts of as many different types as possible. In order to investigate the linguistic features that characterize a particular type of text, such as modern short stories in general, or newspaper, reports, or advertisement, it is necessary to use a corpus consisting of several examples of the appropriate type which is called a *specialized corpus* (Tribble and Jones, 1990: 15). Hunston (2002: 14) stated that a corpus is always designed for a particular purpose, and the type of corpus will depend on its purpose.

### 2.8.2.1 General corpus

A general corpus is a collection of texts of as many types as possible. It may include written or spoken language, or both and unlikely to be representative of any particular 'whole', but will include as wide a spread of text as possible. A general corpus is usually much larger than a specialized corpus. It may be used to produce reference materials for language learning or translation, and it is often used as a base-line in comparison with more specialized corpora. Because of this second function, it is also called a *reference corpus*. Some well-known general corpora are such as the Brown corpus, the LOB corpus, and COBUILD.

#### 2.8.2.1.1 The Brown Corpus

The first modern, electronically readable, corpus was the Brown Corpus of Standard American English. The corpus consists of one million words of American English texts printed in 1961. To make the corpus a good standard reference, the texts were sampled in different proportions from 15 different text categories: Press (reportage, editorial, reviews), Skills and Hobbies, Religious, Fiction (various subcategories), etc.

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

### 2.8.2.1.2 The LOB Corpus

The Lancaster-Oslo/Bergen Corpus (LOB) was compiled by researchers in Lancaster, Oslo and Bergen. The LOB corpus (British English) consists of 1 million words of written language, (500 texts of 2,000 words each) sampled in the same 15 categories as the Brown Corpus. For a long time, the Brown and LOB corpora were the only easily available computer readable corpora. Much research within the field of corpus linguistics has therefore been based on these corpora.

### 2.8.2.1.3 The COBUILD

In 1980, the compilers of the Collins COBUILD English Language Dictionary started to collect a corpus of texts on computer for dictionary making and language study. They had daily access to a corpus of approximately 20 million words. New texts were added to the corpus, and in 1991 it was launched as the Bank of English (BoE). More and more data have been added to the BoE, and the latest release (1996) contained some 320 million words.

### 2.8.2.2 Specialized corpus

A specialized corpus is a collection of texts of a particular type, such as newspaper editorials, geography textbooks, academic articles in a particular subject, lectures, a matter in medical leaflets, and so on. It is used to investigate a particular type of language. Researchers collect their own specialized corpora to reflect the kind of language they want to investigate. In the study of rock guitar lessons to find out the rock guitar terms using a corpus-based approach, the researcher studied the history of the linguistic corpora which entail the background and evolution of linguistic corpora to make the researcher clearly see the holistic picture and process. This helped the researcher a lot to get good ideas such as using manual technique, using available computer readable corpora, choosing the text, and estimating the size of corpus to apply in this thesis.

## 2.9 Corpus Compilation

The corpus compilation is the procedure of collecting the representative language data for analysis. Representativeness of corpus makes the research more valid and reliable. Sinclair (1991) introduces some instructions, which later he

expands into ten fundamental principles to follow in the design of a general corpus and in the compilation of language samples (Wynne, 2005):

1. The contents of a corpus should be selected without regard for the language they contain, but according to their communicative function in the community in which they arise.
2. Corpus builders should strive to make their corpus as representative as possible of the language from which it is chosen.
3. Only those components of corpora which have been designed to be independently contrastive should be contrasted.
4. Criteria for determining the structure of a corpus should be small in number, clearly separate from each other, and efficient as a group in delineating a corpus that is representative of the language or variety under examination.
5. Any information about a text other than the alphanumeric string of its words and punctuation should be stored separately from the plain text and merged when required in applications.
6. Samples of language for a corpus should wherever possible consist of entire documents or transcriptions of complete speech events, or should get as close to this target as possible. This means that samples will differ substantially in size.
7. The design and composition of a corpus should be documented fully with information about the contents and arguments in justification of the decisions taken.
8. The corpus builder should retain, as target notions, representativeness and balance. While these are not precisely definable and attainable goals, they must be used to guide the design of a corpus and the selection of its components.
9. Any control of subject matter in a corpus should be imposed by the use of external, and not internal, criteria.
10. A corpus should aim for homogeneity in its components while maintaining adequate coverage, and rogue texts should be avoided.

Even though, the principles Sinclair mentioned above are focused on general corpus. However, they can be applied for specific corpus like RGL corpus as well. As

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

Pearson (1998) claims that the principles stated can be used to the creation of specific corpus.

### 2.9.1 Representativeness

Representativeness is the most important material for being managed or operated by all researchers' aspect. Biber (1998) defines representativeness as "*the extent to which a sample includes the full range of variability in a population*". A corpus is intended to typify a specialized language whose constituents must be identified and captured. Therefore, the corpus design must be extremely careful and the fixed criteria faithfully followed, so that the compiled data stand for the characteristics of the language under study (Camino, 2010). Besides, Leech (1991) suggests that a corpus may be considered representative when the findings obtained from its analysis could be generalized to the rest of the language that it typifies.

### 2.9.2 Corpus Size

Corpus size or the amount of words in the corpus is an important feature to show the reliability of the corpus. Sinclair (1991) states that in design a huge general, it must be as large as possible and keep growing in order to enable the study of word behavior in texts, as words distribute unevenly and most of them occur only once. According to Pearson (1998), a million words is the size usually recommended for a specialized corpus. The reasons range from just intuition to solid conclusions reached in major projects, where a million words has been found to represent a reasonably high proportion of a specialized register. However, Pearson (1998) also has an argument that there is no justification for setting a limit on corpus size. The limit is imposed by the amount of texts available or convertible into digital format and that, at the same time, fulfill the selection criteria established. Moreover, the statement of McEnery and Wilson (1996: 171) 'big is not always beautiful' supported that a small corpus might be sufficient. If the observations to be made concern features with relative high frequency of occurrence, then relatively small samples of can yield interesting results.

## 2.10 Lexicography and Technical Dictionaries

As a matter of fact, dictionaries have a role to play in the acquisition and development of the students' vocabulary. It is becoming obvious that there is a strong relationship between lexicography and English language teaching. It is a well-known fact that EFL learners' dictionaries do contain much information useful to language learners. As Summers (1988) stated:

“Dictionary use is a valid activity for foreign learners of English, both as an aid to comprehension and production. It is simply an addition to other learning strategies, such as making guesses about new words encountered in reading texts, asking help from teacher or classmates, students can and should be encouraged to avail themselves of the substantial information contained in their dictionary.”

(Summers, 1988: 111)

In this study, students and readers themselves can learn the specific terminologies always used in rock guitar lessons. The sample bilingual (English - Thai) rock guitar dictionary not only has the meaning of the words, but also illustrations and pictures are added to help the users understand the words more clearly.

### 2.10.1 Lexicography

The term lexicography means compiling dictionaries (Pongnan, 2006: 20). In other words, the dictionary is defined as reference book or list of words (usually in alphabetical order) together with a guide to their meanings, pronunciation, spelling, or equivalents in other languages. The purpose of lexicography is the production of dictionaries, and dictionaries deal among other things with the ever-changing meanings of words. Lexicography is thus concerned with the job of describing all or some of the words of one or more languages in terms of their characteristic features, notably of their meaning.

There are two main types of lexicography, namely *general lexicography* and *specialized lexicography*. *General lexicography* focuses on the design, compilation, use and evaluation of general dictionaries, i.e. dictionaries that provide a description of the language in general use. Such a dictionary is usually called a general dictionary or English for general purposes. *Specialized lexicography* is a part of general

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

lexicographical theory and practice (Bergenholtz and Trap, 1995: 11). In recent decades, the further development of lexicographical theory is primarily due to linguists, with experts within the individual subject areas participating in the actual compilation of technical dictionaries. Specialized lexicography focuses on the design, compilation, use and evaluation of specialized dictionaries, i.e. dictionaries that are devoted to a (relatively restricted) set of linguistic and factual elements of one or more specialist subject fields, e.g. legal lexicography. Such a dictionary is usually called a specialized dictionary or technical dictionary. In short, a specialized dictionary is a dictionary that covers a relatively restricted set of phenomena and often referred to as a technical dictionary.

### 2.10.2 Corpus Lexicography

Morgan and Rinvoluceri (2004) mentioned about the tendency of corpus lexicography that corpus lexicography is a rapidly developing field, new methods and application are appearing all the time. The corpus lexicography has continually been developed by the Collins COBUILD Language Dictionary which was the first significant completed example of corpus lexicography in English (Collins COBUILD, 1987). Krishnamurthy (1987: 637 quoted in Hockey, 2002) is one of lexicographers who worked mostly with a concordance of about 7.3 million words. Therefore, corpus-based lexicography is an effective task for building a dictionary for languages, which exhibit explicit word boundaries (Potipiti et al., 2000).

In terms of making a dictionary which deals with a large amount of words, the electronic and computer application were used by lexicographers. It is found that at the beginning in the late 1960s, a number of electronic corpora were compiled for specialized purposes, especially, for lexicographical projects of various kinds (Kennedy 1998: 33). It is accepted that the first computer corpora has started at the early 1960s there was, then, the computer boom during the 1980s to 1999s. This made the computer as a necessary tool for lexicography. One of the greatest advantages of using a corpus in lexicography asserted by Leech et al. (2001: x) that it is possible to extract illustrative examples of the meaning and usage of lemma. Importantly, Meyer (2002: 11) also supported that many lexicographers can create dictionaries more effectively by studying word usage in very large linguistic corpora.

### 2.10.3 Technical dictionaries

Technical dictionaries are devoted to the description of the technical language of a specialized subject or discipline. They are compiled on the basis of criteria provided by particular target groups and their professional or special-interest needs. They deal with the language of a technical area such as engineering or a trade. The technical dictionary maybe professional in serving legal, medical, clerical and scientific personnel in their work and it may also be aimed at specific academic fields of study: musicology, geology, philosophy, or even literature (Opitz, 1983: 163).

The demand for all kinds of technical dictionaries goes hand in hand with the development of technology. Any mention of the technical dictionary will rise in the minds of most people associations of modern sophisticated engineering and industrial processes. This need continues in the twentieth century. Fields as diverse as medical, law, or engineering have been covered by technical dictionaries. It is governed by some specificity of purpose and represents a variety based on a classification of a subject matter.

#### 2.10.2.1 The Ordinary Technical Dictionaries

There are many types of ordinary technical dictionaries designed to cover one segment of the whole lexicon of language. They diverge also on whether they are monolingual, bilingual or multilingual. Like their general dictionary, the greatest number of bilingual technical dictionaries published today has been designed to provide information primarily in the form of lexical equivalents or synonyms, with a view to translation into and from the native language. The headword of the entry generally consists of a single word and multi word variants of the term. It provides definitions as well as synonyms. It is assumed that the users are consulting the dictionary to find the equivalent in their mother tongue. Unfortunately, most of the existing ordinary technical dictionaries focus on providing definitions, but ignore other information useful for EFL students, for instance, the grammatical category, the phonetic description, examples usage, and illustrations (Opitz, 1983: 106).

#### 2.10.2.2 The Corpus-based Technical Dictionaries

Oxford University Press was the first to develop *Technical Learners' dictionaries* of 1990s. The first dictionary was *The Oxford Dictionary of Business English for Learners of English* (1993) edited by Allene Tuck. The intended learners are intermediate to advanced level who need to use English for both decoding and

encoding in business. It was compiled with the combined expertise of EFL lexicographers and business. Firstly, it provides a range of linguistic information apart from definition, which existing monolingual technical dictionaries do only very infrequently. The grammar of words is explained, along with pronunciation and authentic examples showing how words are really used. Secondly, the dictionary was compiled with the help of the British National Corpus (BNC) a collection of 100,000,000 words of both written and spoken English using sub-disciplines of business for technical dictionaries. The publication of the *'The Oxford Dictionary of Business English for Learners of English'* represented linguistic advances in technical dictionary-making. In terms of the other features, the dictionary provides clear and useful information so that the EFL/ESP students can use the terms successfully for both decoding and encoding activities.

In this study, the RGL Corpus was the technical compiled, and the technical terms were analyzed by using the advantages of computer facilities to attest the words in authentic texts. In this dictionary, the information about word class, syntax and word formation should be added. The pronunciation should also be put either phonetic transcription and stress patterns. Besides, a certain amount of linguistic and encyclopedic information such as example of usages, illustrations, pictures, and so on should be presented to the students and users. It is because of ESP dictionaries with illustrations can make them more attractive and informative. The aforementioned ideas were adopted to this thesis in designing the sample bilingual (English - Thai) rock guitar dictionary. Therefore, the rock guitar lesson dictionary was theoretically composed of many parts. It consists of the eight components: Headwords, Example of usages, Grammatical information, Thai definitions, Pronunciation, Thai synonym, Abbreviations and Symbols, and Illustrations.

## 2.11 Related research

There are very rare to find research related to this study. One important research was done by Trevor de Clercq and David Temperley (2011). They reported a corpus analysis of rock harmony. In order to compile a corpus, they used Rolling Stone magazine's list of the '500 greatest Songs of All Time'; they took the 20 top-ranked songs from each decade (the 1950s through the 1990s), creating a set of 100 songs. Both authors analyzed all 100 songs manually, using conventional Roman

numeral symbols. Agreement between the two sets of analyses was over 90 per cent. The analyses were encoded using a recursive notation, similar to a context-free grammar, allowing repeating sections to be encoded succinctly. The aggregate data was then subjected to a variety of statistical analyses. They examined the frequency of different chords and chord transitions. The results showed that “IV” is the most common chord after “I” and is especially common preceding the tonic. Other results concern the frequency of different root motions, patterns of co-occurrence between chords, and changes in harmonic practice across time.

Camino Rea Rizzo (2010) studied the theory of corpus and used it as a guideline to get the characteristics of Telecommunication Engineering Corpus. The aim of this research is first to present some theoretical guidelines on the design and compilation of a specialized corpus in compliance with Corpus Linguistics standards; second, to provide a comprehensive description of the stages followed in the creation of the Telecommunication Engineering Corpus and its characteristics; and finally, to report the immediate results obtained from the basic analysis of the corpus: statistical information and frequency list. This paper is particularly addressed to those ESP practitioners who have to deal with the compilation of a specialized corpus for the first time, without a working knowledge of the specific subject domain they are involved in.

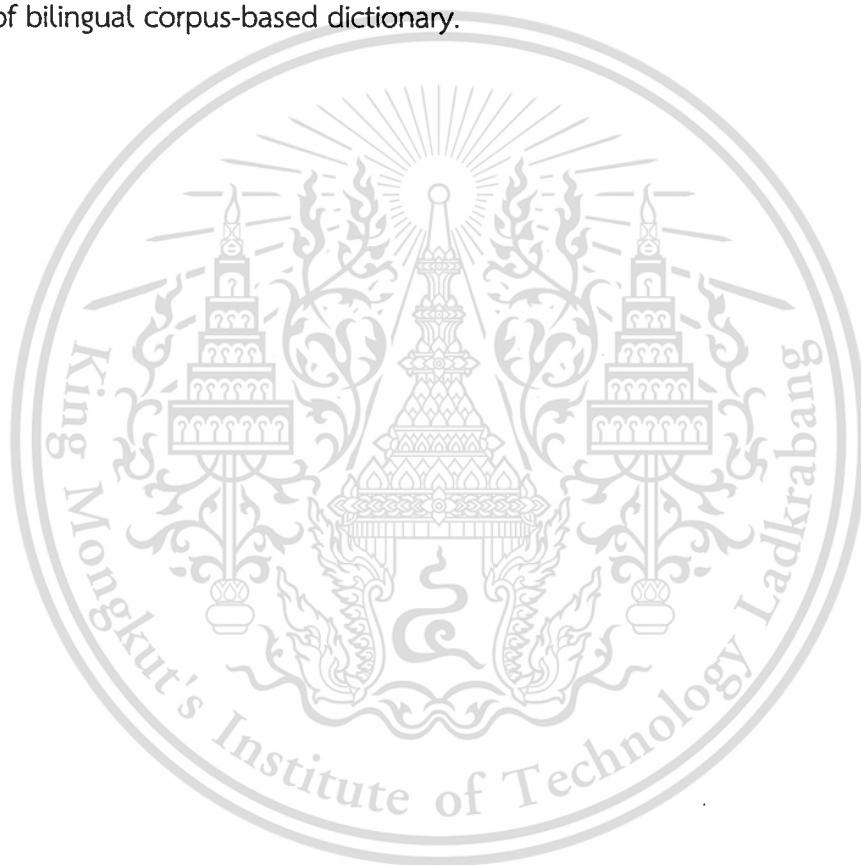
Dee Garner (2006) surveyed several fields of study in order to discuss the dilemma, with a particular focus on problematic areas relating to computer-processed corpora. He found that corpus-based vocabulary research has had a profound impact on English language education, and there is abundant evidence that this will remain the case for the foreseeable future. Perhaps the greatest challenge of such research is the determination of what constitutes a *Word* for counting and analysis purposes. Decisions in this regard have important ramifications not only for the lexical findings themselves, but also for the pedagogical theories and practices that derive from them. This article also surveys several fields of study in order to discuss this dilemma, with a particular focus on three problematic areas relating to computer-processed corpora: (a) morphological relationships between words, (b) homonymy and polysemy, and (c) multiword items. He concluded the recommendations for assessing the validity of the *Word* construct in applied corpus-based vocabulary research.

Pornpimon Palingoon and et al. (2002) used translation process and corpus-based information for bilingual dictionary-making. In lexicography, it is currently evident that corpora data still provide lexical information as objective criteria of

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

language descriptions in dictionary making, especially in assigning meanings to lexical items and describing actual use. At this point, it means that the quantitative approach can add up our understanding of linguistic behavior and give a basic representation of language, together with qualitative approach systemically. The aim of this paper is to analyze the principles of compiling bilingual English-Thai dictionary in two main issues: (1) defining lexical items in bilingual dictionary-making by employing translation process and corpus-based information, and also proposing bottom-up definition model for bilingual dictionary-making. (2) considering correlation between qualitative and quantitative approaches in assigning meanings to lexical items of bilingual corpus-based dictionary.



## CHAPTER 3

# METHODOLOGY

Research methodology in this chapter is divided into five sections. The first section includes the framework for the analysis. In the second section, data collection is presented. Research tools are described in the third section. The fourth section explains how to analyze the data. The fifth section presents the corpus inputs to the dictionary. The headword selection is presented in the sixth section. In the final section, the design of a sample bilingual (English - Thai) rock guitar dictionary was provided.

### 3.1 Steps of Data Analysis

In order to reach the goals and objectives of the study, the following stages were carried out (Landau, 2001).

1. The rock guitar lessons from guitar magazines and guitar instruction books were selected as the primary input for the corpus because both of them are equally used by guitar learners.
2. The content of the rock guitar lessons from the guitar magazines and guitar instruction books were downloaded into the computer readable forms.
3. The procedure of RGL Corpus compilation was done to find the representiveness.
4. The concordancing software 'Wordsmith Tools' was utilized to create word frequency lists, count the number of tokens and types, and calculate the types/tokens ratio.
5. The word frequency lists were divided into three groups, namely general vocabulary, academic vocabulary, and technical vocabulary by using RANGE\_GAL\_AWL Program.
6. The abbreviations, symbols, and collocations were identified.
7. The sample of rock guitar dictionary entries was designed.
8. The headwords of a sample of rock guitar dictionary entries were selected from the lists of technical vocabulary, abbreviations, symbols, and collocations.

## 3.2 Data Collection

The survey of rock guitar lessons in the top ten leading Universities in music education were used to elicit information about English guitar lessons that they encountered and these selected lessons were used to compile the RGL Corpus. In the procedure of RGL corpus compilation, three hundred rock guitar lessons from guitar magazines and guitar instruction books were collected as a sample in this study. The rock guitar lessons which were from guitar magazines and guitar instruction books during the year 2009-2013 were used as the data collection in this study. The 150 rock guitar lessons from guitar magazines and 150 rock guitar lessons from guitar instruction books were drawn. The weight of two samples is equal because both of them are equally used among Thai guitar learners and general people who love playing rock guitar. The 300 rock guitar lessons derived from the guitar magazines and guitar instruction books are shown in Table 3.1 below:

Table 3.1 The Number of the Collected Guitar Lessons

Categories	Number of Guitar lessons	Percent (%)
1. Rock guitar lessons from guitar magazines	150	50
2. Rock guitar lessons from guitar instruction books	150	50
Total	300	100

## 3.3 Research Tools

### 3.3.1 Concordancing software

Concordancing software is a primary tool in all corpus study, and enables the researcher to find all occurrence of a given word, a part of word, or combinations of words within the context in a corpus of texts (Simon, 1996: 190).

According to Boswood (1997: 225), a concordance should be easy to use and should be able to (1) produce numerically and alphabetically sorted word lists; (2) produce concordances in which the contexts can be sorted to the right or the left of the key word; (3) handle significant quantities of text; (4) work quickly; and (5) produce results directly to the screen where reviewing and editing can be carried out.

There are many well-known concordancing programs. Examples include:

- *Longman Mini Concordances* is a program which works with words on plain ASCII text.
- *Micro concord* is concordance for the PC and appropriate for pedagogic applications.
- *Wconcord* is a freeware concordancing program for Windows.
- *WordCruncher* is a program that can produce frequency lists of corpora and key word in context displays, word combinations and parts of words.
- *Wordsmith Tools* assists in the text analysis of either a single or a large text.

In this study selected three instruments: The first, Wordsmith Tools Version 6.0 (Scott, 2012) was used to analyze basic statistics of word analysis in terms of types, tokens, word frequency and concordance. The second, RANGE\_GAL\_AWL Programs (Nation, 2012) was used to calculate the vocabulary levels: General vocabulary, Academic vocabulary, Off-list words which refer to Technical vocabulary, Abbreviation, and Symbols. And the third, AntConc 3.4.3 (Anthony, 2014) was used to calculate compounds and multiword terms.

### 3.3.2 Guitar Dictionary

The guidelines on the technical vocabulary analysis were mainly based on the music dictionary on [www.dolmetsch.com](http://www.dolmetsch.com) and the guitar dictionary on [www.Guitarscholar.co.uk](http://www.Guitarscholar.co.uk). These two websites are developed to provide a single source of authoritative, up-to-date information concerning rock guitar terminology. They were also used as tools for word selection and identification of technical vocabulary. Moreover, they were used as a reference to define the technical vocabulary. The reference of rock guitar terminologies was then translated into Thai. Furthermore, Thai guitar website, [Guitarthai.com](http://Guitarthai.com) and [Folkpeople.com](http://Folkpeople.com) were used to define the meaning in Thai.

## 3.4 Data Analysis

Three hundred text files in the RGL Corpus; guitar magazines and guitar instruction books were downloaded into jpg. form. Then, the optical character recognition (OCR) software was used to recognize downloaded letters and represent the text electronically. Next, they were stored as plain-text files (\*.txt.). After that,

each text file was exported into Microsoft Word 2003 as a word document (\*.doc) and the spelling of all words in the text were checked by using the spell-checker. Finally, the Wordlist Tool was used to calculate the frequency of occurrence of running word or tokens and word types, including type/token ratio.

In this study, the Wordlist, cluster and concordance tools were used to generate lists in frequency order for lexical comparison of texts. In data processing, the frequency and distribution of word types and tokens in the RGL Corpus were first determined. Since the focus of this research was on the terminologies. In order to find out important terms, the three word types, i.e. general (GSL), academic (AWL), and off-list words were analyzed by using RANGE\_GAL\_AWL Programs. Then, the abbreviations, symbols, and compounds and multiwords, were identified.

### 3.5 The Corpus Inputs to the Dictionary

The corpus is a primary source of information about the way words behave. It shows the frequency of words, grammatical information, and compounds and multiwords. The main factor in deciding whether or not to include a word as an entry in the dictionary is how often it occurs in the corpus. The sample sentences from the concordance are the main sources of example sentences presented in the dictionary (Vitayapirak, 2001).

### 3.6 Headword Selection

The information about the word frequency is very important for choosing or grading vocabularies. Therefore, the single words, compound words, multi-words, abbreviations and symbols with highest frequency were selected as the samples of rock guitar dictionary.

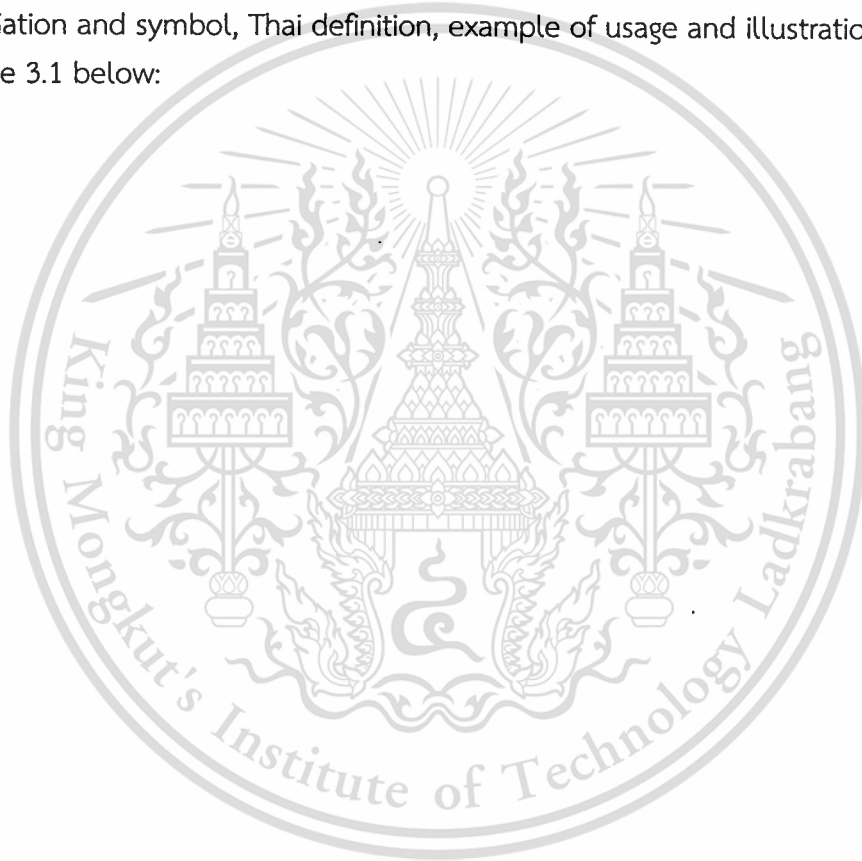
### 3.7 The Design of the Sample Bilingual (English - Thai) Rock Guitar Dictionary

This section is devoted to the rationale for the design of the dictionary. Zgusta (1971) identified the four main tasks of the dictionary maker as (1) the collection of material (2) the selection of entries, (3) the construction of entries, and (4) the arrangement of the entries. The selection of the construction and internal

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

arrangement of the entries are based on Landau (2001) that a typical dictionary provides its users with various kinds of information about words: their meaning, pronunciation, etymology, part of speech and status. In addition, dictionaries will contain a series of example sentence to illustrate in a meaningful context to show the various meaning that a given word has. Besides, Redman and Edward (1997: 8) mentioned that a good bilingual dictionary usually gives information about the meaning, pronunciation, word classes or part of speech (POS), word grammar, collocations, example sentences, and synonyms. From the variant ideas of these scholars, the researcher therefore created sample rock guitar dictionary entries consisting of headword, grammatical information, pronunciation, Thai synonym, abbreviation and symbol, Thai definition, example of usage and illustration as shown in Figure 3.1 below:



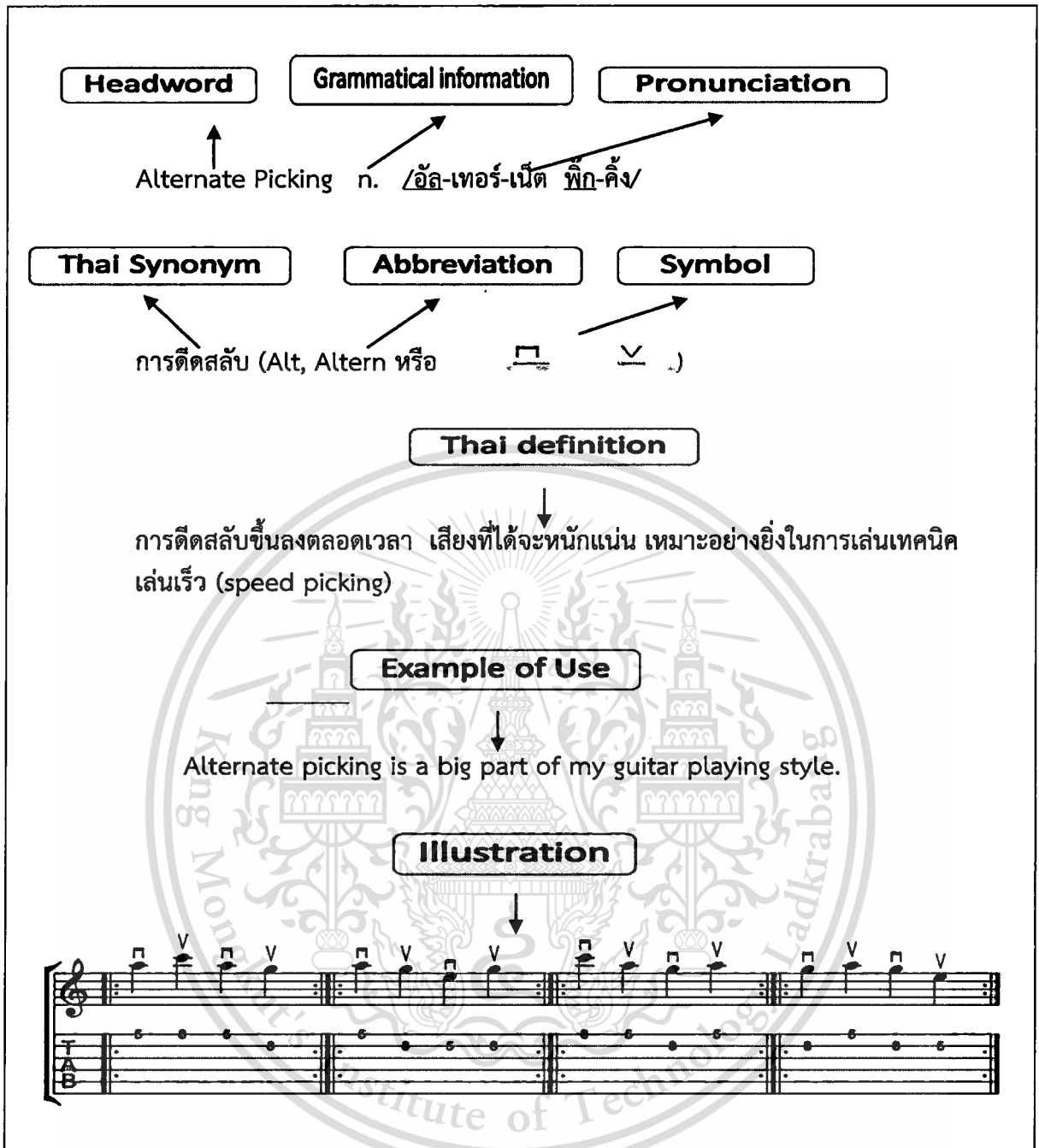


Figure 3.1 The Design of Sample Bilingual (English - Thai) Rock Guitar Dictionary Entry

### 3.7.1 An Entry Structure of the Dictionary

#### 3.7.1.1 Headwords

The headwords list for the dictionary starts with the technical terms with high frequencies in the RGL Corpus. Since, the single words, compound words, multi-words, abbreviations and symbols with highest frequency were selected as the samples of rock guitar dictionary.

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

### 3.7.1.2 Example of Usages

Words or terms in context are a recognized feature of English language teaching. They provide information on collocations and grammatical information in authentic text. The dictionary must therefore provide a number of examples to show typical contexts that the word is likely to be used in. These examples are drawn from the concordance of the RGL Corpus.

### 3.7.1.3 Grammatical Information

It is important that the technical dictionary should provide grammatical information. The grammatical information is more essential for the person who is trying to speak or understand a foreign language than for the native speaker. Hence, the sample bilingual (English - Thai) rock guitar dictionary provides grammatical information in terms of part of speech. A set of grammatical information in abbreviated forms are used, i.e. *n.* for noun, *v.* for verb, *adj.* for adjective, *adv.* for adverb.

### 3.7.1.4 Thai Definitions

This sample bilingual (English - Thai) rock guitar dictionary provides Thai definitions for the headword. Thai definitions were translated from the English definition in music dictionary on [www.dolmetsch.com](http://www.dolmetsch.com) and guitar dictionary on [www.guitarscholar.co.uk](http://www.guitarscholar.co.uk). Besides, Thai guitar website, [Guitarthai.com](http://Guitarthai.com) and [folkpeople.com](http://folkpeople.com) were used as a guideline to define Thai definition.

### 3.7.1.5 Pronunciation

Two kinds of information are needed to pronounce a word properly: the sounds and stress. In the dictionary, the pronunciation is based on the International Phonetic Alphabet (IPA) which is used virtually in standard monolingual dictionaries because IPA symbols are phonetically based on, i.e. the area and manner of articulation (Landau 2001: 128). The IPA will be translated into Thai pronunciation using English-Thai pronunciation comparison table (Vitayapirak, 2006). This research will use American English pronunciation style because rock music is originated from America.

### 3.7.1.6 Thai Synonym

According to Siwarak (2011: 39) synonym is one of two or more words corresponding in the same meaning. The sample of rock guitar dictionary provides Thai synonyms for the headword as well as the English synonyms. The Thai synonym

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

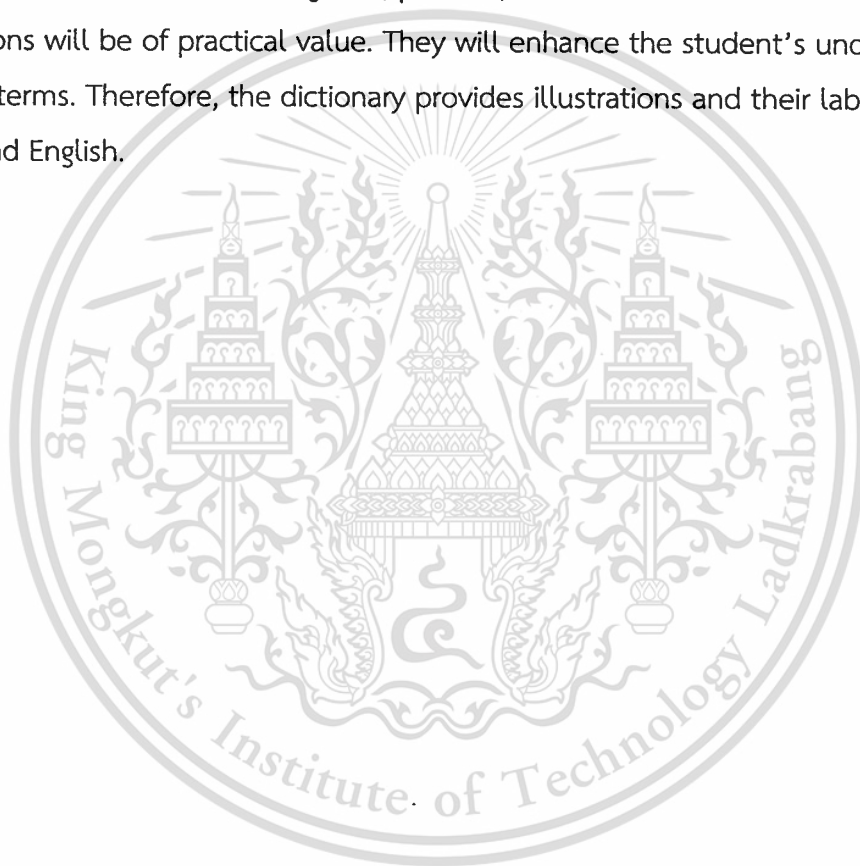
words which have the corresponding meaning with the English rock guitar headword were based on the website; [www.Guitarthai.com](http://www.Guitarthai.com).

### 3.7.1.7 Abbreviations and Symbols

Abbreviations and symbols are found most in the RGL Corpus respectively. Therefore, they are very important feature to be defined in the sample of rock guitar dictionary. The online guitar dictionary namely: music dictionary from [www.dolmetsch.com](http://www.dolmetsch.com) and guitar dictionary from [www.guitardictionary.co.uk](http://www.guitardictionary.co.uk) were used as a guideline to find what do the abbreviations stand for?

### 3.7.1.8 Illustrations

Illustrations such as diagrams, pictures, and charts are used where their inclusions will be of practical value. They will enhance the student's understanding of the terms. Therefore, the dictionary provides illustrations and their labels in both Thai and English.



## CHAPTER 4

### RESULTS

This chapter emphasizes on the results of vocabulary analysis used in the rock guitar lessons. The corpus findings contain the statistical analysis of the whole RGL Corpus, the word frequency lists, content words, technical vocabulary, collocation, abbreviations and symbols. The sample entries of the sample bilingual (English - Thai) rock guitar dictionary are added in this chapter.

#### 4.1 Corpus Findings

This section shows the statistical analysis and the word frequency list in the Rock Guitar Lesson Corpus (RGL Corpus)

##### 4.1.1 Statistical Analysis of the RGL Corpus

Figure 4.1 below shows the statistics or the output of the lexicon extraction program, showing the size of the lexicon produced from the RGL Corpus.

text file	Overall
file size	14465223.00
tokens (running words) in text	1356029.00
tokens used for word list	1158603.00
types (distinct words)	40542.00
standardised TTR	31.76
STTR std.dev.	66.62
STTR basis	1000.00
mean word length (in characters)	3.54
word length std.dev.	2.47
sentences	90564.00
mean (in words)	14.70
std.dev.	573.84
paragraphs	140.00
mean (in words)	8275.74
std.dev.	20862.70

Figure 4.1 Statistical Analysis of RGL Corpus

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

Statistics can provide various kinds of summary of the contents of the RGL corpus. They can show the Type/Token ratio of the whole vocabulary, which is computed by dividing the number of the tokens by the number of types. It indicates the relative concentration or dispersion of the vocabulary, and offers a measure of its diversity. The lower of type-token ratio was the greater the diversity of words in the corpus.

Table 4.1 below displays the type/token ratio computed how many times each word type occurs in the RGL Corpus.

**Table 4.1** The Tokens and Word Type in the RGL Corpus

Tokens	1,356,029
Word types	40,542
Type/token ratio	1:33.44

In Table 4.1 the overall corpus size comprised of 1,356,029 tokens or running words. The total number of word types equals 40,542 words in the corpus since a recurrent word is counted only once. For the whole corpus, the ratio of types/tokens is 1:33.44. The ratio indicated that each word was repeated nearly 34 times on average throughout the corpus.

#### 4.1.2 The Word Frequency Lists

This part offers two main word frequency lists. First, it shows the most fifty frequent words, abbreviation and symbols of the whole corpus. Second it reveals the word frequency list of the 15 high-frequency content words from the rock guitar lessons corpus.

Table 4.2 The Top Fifteen Frequent Words in the RGL Corpus

Rank	Word	Frequency	% of occurrence
1.	THE	55214	4.07
2.	I	52844	3.90
3.	A	32138	2.37
4.	AND	22677	1.67
5.	TO	21073	1.55
6.	OF	18896	1.39
7.	IN	16817	1.24
Rank	Word	Frequency	% of occurrence
8.	YOU	13313	0.98
9.	E	11860	0.87
10.	IS	11801	0.87
11.	H	10403	0.77
12.	ON	7896	0.58
13.	II	7849	0.58
14.	IT	7818	0.58
15.	F	7751	0.57
<b>Total</b>			12.29

Table 4.2 shows the top fifteen frequent words, abbreviations and symbols of the whole corpus. The function words are found in the top ten rank. Those words are 'THE', 'A', 'AND', 'TO', 'OF', and 'IN'. They accounted for 12.29 % of the total list. The function word 'the' occurred the most frequently with 55,214 times or 4.07 %. Besides, the result shows the abbreviations, E (Freq. 11,860 or 0.87%), H (Freq. 10,403 or 0.77%), II (Freq. 7,849 or 0.58%), and F (Freq. 7,751 or 0.57%).

#### 4.1.3 Content Words

Content words are those that belong to the large, lexical words of the language including: nouns, verbs, adjectives, and adverbs. The next table shows the 20 high frequency content word found in the RGL Corpus.

Figure 4.2 below is an example of the content word; 'CHORD', taken out from KWIC concordance

#	KWIC
1	means that, used judiciously, it can fit over any chord. Before you can apply chromatic ideas to scales
2	s sound good over F#m, but they can work over any chord. Experiment.
3	perly, its usually because he holds down a barre chord while articulating each note (and the notes end u
4	from string to string as if you were strumming a chord. Its important that you dont separate the pick
5	ing into one another and sounding like a strummed chord. Ive written out some of my favorite arpeggio pe
6	stedly made the same mistake: they'd hold a barre chord while articulating each note. To play sweep arpeg
7	from string to string as if you were strumming a chord. Don't try to separate the pick strokes! This tec
8	each other and sounding like an ordinary strummed chord. FIGURE 1 is an atonal-sound sweep picking exerci
9	the same fret, as when sweeping a familiar barre chord shape. The key to muting the strings properly and
10	stedly made the same mistake: they'd hold a barre chord while articulating each note. To play sweep arpeg
11	from string to string as if you were strumming a chord. Don't try to separate the pick strokes! This tec
12	each other and sounding like an ordinary strummed chord. FIGURE 1 is an atonal-sound sweep picking exerci
13	the same fret, as when sweeping a familiar barre chord shape. The key to muting the strings properly and
14	means that, used judiciously, it can fit over any chord. Before you can apply chromatic ideas to scales
15	s sound good over F#m, but they can work over any chord. Experiment. 1111 FHEKH BEMERHLE DEDICATION I w
16	8° 8 An important point to remember is to see the chord shape when you play these arpeggios. /All an arpe
17	u play these arpeggios. /All an arpeggio is, is a chord broken up and played with the individual notes. S
18	gs 4, 3, 2 and 1, it is simply the shape of a Cm7 chord voicing 1, b3, 5, b7, and the shape of a straight
19	straight C minor descending. So don't forget the chord shapes while soloing with SPEED PICKING. You can
20	atonic scale arpeggios over a static (nonmoving) chord. For example, try using all the arpeggios of C ma
21	, Dm7, Em7, Fmaj7, G7, Am7, Bm7(b5) all over a Dm7 chord. The notes of Cm7 are also the notes of Eb7, Abm7
22	but they do not always include the notes from the chord in each octave, though they do capture the requir
23	ords with different bass notes, e.g., Eb/C, this chord creates a C11 sound although it is not, technical
24	e C root. This is just one possibility of a slash chord, all combinations have been used, and all are ver
25	y a straight A major (1 3 5) arpeggio over an A/B chord, its very "hip" sounding and certainly doesn't s

Figure 4.2 KWIC Concordance Sample of the word 'Chord' in the RGL Corpus

From Figure 4.2, KWIC concordance can show how the word: 'CHORD' functions or behaves in different situations or the environments of the word. This is an advantage of KWIC concordance program.

## 4.2 Technical Vocabularies

In order to find out the technical vocabularies, "RANGE\_GAL\_AWL Programs" was used to classify to the word lists into three groups; general, academic, and technical vocabularies. It helps distinguishing the technical vocabularies from general and academic vocabularies.

### 4.2.1 Vocabulary Levels

The 1,356,029 tokens were divided into three main types, they are general vocabulary, academic vocabulary, and off-list words in Figure 4.3 below:

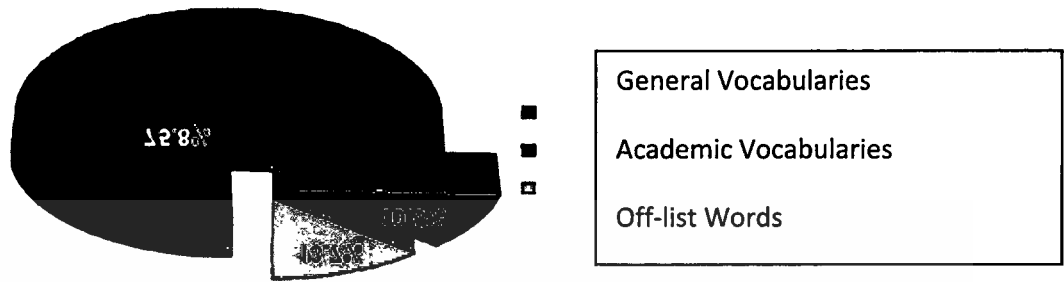


Figure 4.3 Proportion of General, Academic, and Off-list Vocabularies

It was found out that the three types of vocabulary used in the rock guitar lesson corpus were 13.7% of general vocabulary, 10.5% of academic vocabulary and 75.8% of off-list words.

In the off-list words, it could further be divided into 8.32% of technical vocabulary, 44.6% of abbreviations, and 22.87% of symbols as shown in Figure 4.4 below:

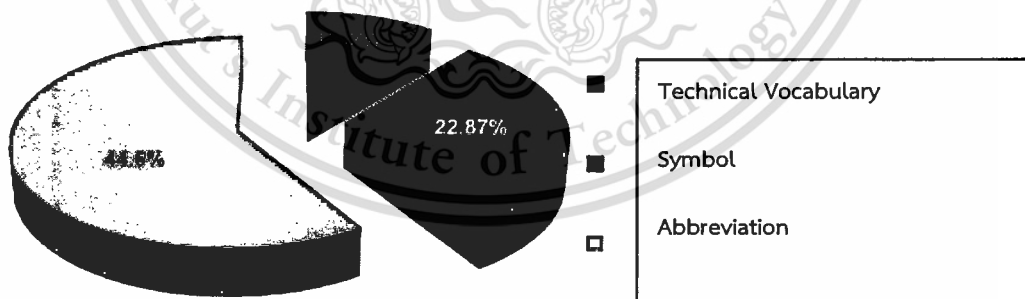


Figure 4.4 Proportions of Technical Vocabulary, Symbol, and Abbreviation

This finding did not align itself closely with the figures cited by Coxhead (2000) and Nation (2012) that on average, the GSL and AWL vocabulary represent approximately 90% of running words in academic text. The technical vocabulary

covers around 5% and the other low frequency words such as proper name, abbreviation, and numbers represents around 5% of the total words in the text. We can see that the rock guitar lesson is a text-type that covers a large amount of off-word lists, i.e. abbreviations, symbols, and technical terms.

**Table 4.4** The Comparison of Findings between Nation (2012) and the RGL Corpus

Nation (2012)	%	The RGL Corpus	%
GSL and AWL	90	GSL (13.7%) and AWL (10.5%)	24.2
Off-list words	10	Off-list words	75.8
1. Technical Vocabularies (5%)		1. Technical Vocabularies (8.32%)	
2. Low frequency words (5%)		2. Low frequency words (67.47%)	
- Abbreviations		- Abbreviations (44.6%)	
- Symbols		- Symbols (22.87%)	
Total	100	Total	100

From the Table 4.4, it can be seen that the findings found in the RGL Corpus is very different from Nation (2012). Nation found 90% of GSL and AWL whereas the RGL Corpus found only 24.2%. In term of off-list words, the Nation found only 10% while the RGL Corpus found 75.8%. Interestingly, the rock guitar lessons are overwhelmed with off-list words which consist of Technical vocabularies (8.32%), Symbols (22.87%), and Abbreviations (44.6%). Noticeably, abbreviations and symbols mostly occurred in the off-list words which are more than a half of the whole corpus. It implies that rock guitar lesson texts are fertile with abbreviations and symbols which particularly used among guitar players.

#### 4.2.2 Technical Vocabularies in the RGL Corpus

After we classified the vocabulary levels from the RANGE\_GAL\_AWL Programs, we used Wordsmith Tools for distilling technical vocabularies from the general and academic vocabularies. The top 20 technical vocabularies found and shown in Table 4.5 below:

Table 4.5 The Top 20 Technical Vocabularies in RGL Corpus

No.	Rank	Words	Freq.	%
1.	111	PENTATONIC	1496	0.11
2.	173	ARPEGGIO	850	0.06
3.	174	HARMONIC	848	0.06
4.	210	MELODIC	679	0.05
5.	214	DIMINISHED	664	0.05
6.	271	DOMINANT	511	0.04
7.	318	MODES	437	0.03
8.	332	TAPPING	422	0.03
9.	369	DORIAN	379	0.03
10.	371	CHROMATIC	377	0.03
11.	392	PULL	362	0.03
12.	406	VIBRATO	349	0.03
13.	439	LYDIAN	315	0.02
14.	454	ALTERNATE	300	0.02
15.	476	HAMMER	285	0.02
16.	503	PHRYGIAN	265	0.02
17.	518	MIXOLYDIAN	253	0.02
18.	532	BENDING	247	0.02
19.	539	SWEEP	243	0.02
20.	569	AEOLIAN	233	0.02

In terms of technical vocabularies with high frequency in RGL corpus, we found the terms such as 'PENTATONIC' (1,496 times), 'ARPEGGIO' (850 times), 'HARMONIC' (848 times), 'Diminished' (664 times), 'Dominant' (511 times) and so on.

### 4.3 Compounds and Multiword Terms

In this study, we could see the compounds and multiword terms by using a computer program; AntConc 3.4.3. It plays an important role in finding the word clusters. The program can show two words (compound) and more than two words (multiword) occurred in the RGL Corpus.

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

### 4.3.1 Compounds

Compounds comprise of two words only as Quirk (1985) mentioned and function as a single word. Table 4.6 shows the compounds found the RGL Corpus.

**Table 4.6** Compounds Found in the RGL Corpus

No.	Word	Compounds	Frequency
1.	MAJOR	MAJOR SCALE	1,317
2.	GUITAR	BLUES GUITAR	1,053
3.	SCALE	MAJOR SCALE	904
4.	BLUES	BAR BLUES	540
5.	MINOR	MINOR SCALE	449
6.	CHORD	CHORD PROGRESSION	369
7.	CHORDS	POWER CHORDS	175
8.	STRING	E STRING	119
9.	NOTE	EIGHT NOTE	114
10.	NOTES	QUARTER NOTES	55

From Table 4.6 the word 'MAJOR SCALE' (Freq. 1,317); functions as a noun and a single word. It means a fundamental scale or a core scale used to alter to other scales and it consists of seven notes (C MAJOR SCALE: C--D--E-F--G--A--B-C). The word 'BLUES GUITAR' (Freq. 1,053) also functions as a noun and single word as well. It means to use guitar as a major instrument and emphasis on using the blues notes in playing blues songs. The word 'BAR BLUES' (Freq. 540) is the basic chord progression of the Blues music and it always calls 'the 12 bar blues'. Figure 4.5 shows the example of compound of the word 'CHORD PROGRESSION' extracted from the KWIC concordance.

down all your fingers FIGURE 2-2 Open-position chord progression examples 1//, ;, -, ~//, -//; -/1, -/6 C Am ?n ?e  
 B c ct/Db D D2/E1; E - FIGURE 2-3 Standard rock chord progression 2 G F111 C D 54 \*c1 us? n4-u r U113. Ilt...11 T  
 FIGURE 2-6 uses barre chords in a standard rock chord progression This example uses the same barre chord shapes f  
 e. Twelve Bars The blues is based on a repeated chord progression that repeats every twelve bars. While no two bl-  
 HZ EVERYTHING ROCK 8| BLUES GUITAR BOOK a major chord progression. you get a clash on some of the notes, and not  
 rs do it unknowingly For many players, a 1-IV-V chord progression simply sounds right; they are not aware of its  
 you keep placing thirds on top of the original chord progression diatonically, you keep building up the chords.  
 The arpeggios are taken from the same repeating chord progression that is used throughout the song. Becoming Awar  
 ready to apply this to 11it.151C Let's invent a chord progression using simple open-position chords to play arpeg  
 s to play arpeggios over. Lets use this simple chord progression in the key of C Major: C Major, A minor, F Major  
 EVERYTHING ROCK 8- BLUES GUITAR BOOK nouns 9-19 Chord progression using FIGURE 9'19 is a great chord pro added ni  
 7, 16 arpeggios and. 123-124 blues scale, 60-61 chord progression in, 100-101 dominant seventh chords in, 109 ess  
 122 ascending and arpeggio descending, 194-195 chord progression in, 101 chord theory and, 96-99 contrasted to C  
 s, reading chord, 12-14 chord boxes, xv-xvi, 14 chord progression, 95, 100-102 arpeggios and, 121-122 chords, 95-  
 ck music, 7, 185-186, 197 arpeggios in, 192-196 chord progression in, 101-102 combination licks, 194-197 essentia  
 s in, 186-188 pentatonic scale and, 34 standard chord progression lor, 12 tapping and. 193-196 roots 01 major sca  
 professional tips on: - Inflection and phrasing - Chord progression ' Alternate tuning, harmonics, and slide playin  
 s, folk and many jazz songs too. The basic blues chord progression is 12 bars (measures) long and is usually calle  
 , G 1, 6, 4, 5 in the key of C. The 1, 6, 4, 5 chord progression is very common. You should learn to play it in e  
 of 6ths, Cycle of flattened 6ths, etc.) EXAMPLE: chord progression Am7 - D7(b9) - Gm7. The A note in an Am7 Form I  
 ày the song! Heres some tablature for a common chord progression that many popular songs are based on. Once you f  
 t any arrangements in this lesson, as it is the chord progression and not a particular playing style that is cove  
 nation, go to lesson on bluesprogression in the chord progression series. They are in 8 keys and three tempos (65  
 nation, go to lesson on bluesprogression in the chord progression series. Download all files as a zip-file. 65 ve  
 nation, go to lesson on bluesprogression in the chord progression series. Download all files as a zip-file 1 as v

Figure 4.5 KWIC Concordance Sample of the Compound 'CHORD PROGRESSION' in the RGL Corpus

### 4.3.2 Multiword terms

In this study, the multiword terms can be found by using AntConc 3.4.3 (Anthony, 2014). The same top 10 content words were used as guidelines to find out the multiword terms. Interestingly, it was found that some of top 10 content words could be extended more than two words, i.e. they form multiword terms, such as "MINOR PENTATONIC SCALE" and "MELODIC MINOR SCALE" as shown in Figure 4.6 below:

also learned a couple of altered modes from the melodic minor scale to use over dominant 7th chords. This set me up  
 er a Cmaj7 chord in common tension. EXAMPLE 1? MELODIC MINOR SCALE ON 6 '1'his scale is called the Lydian augmented.  
 If the chord is Cmaj7#11. you would play an A melodic minor scale. This is one of the modes of the melodic minor  
 ic minor scale. This is one of the modes of the melodic minor scale. You'll see more of these modes later. :1 H5 F  
 NOR 9 (MAJOR 7) ARPEGGIO ON 6 This is simply a melodic minor scale without the 4th and 6th. Anytime you can use  
 out the 4th and 6th. Anytime you can use the melodic minor scale you can use this arpeggio. Its written three p  
 MELE 21 MINOR WITH MAJOR 7 ARPEGGIO Play the melodic minor scale without the 4th or 6th. an W ("11 1'4\_I\_1\_b 7 H,  
 's of Locrian mode with a #11. Actually, its a melodic minor scale starting on b3, and yes, it is another mode of  
 LODIC MINOR ON 7 This is another mode of the melodic minor scale For Caus4(,9), play the B8 melodic minor scale  
 e qmrxing on ihr ???h d?grcc, For C7, play a G melodic minor scale yes, its another mode of melodic minor. '13 I  
 ] '5 B H " I R 1-8 Here is another mode of the melodic minor scale. Over altered dominant chords, play the melodi  
 scale. Over altered dominant chords, play the melodic minor scale up a half-step. For C7alt, play Db melodic min  
 XAMPLE 45 MELODIC MINOR ON 7:-7 The same B1? melodic minor scale we used over the Phrygian chords will work for  
 memorize all the fingerings to both the A Jazz Melodic Minor Scale and the D Jazz Melodic Minor Scale, Form II. S  
 the A Jazz Melodic Minor Scale and the D Jazz Melodic Minor Scale, Form II. Step #13 Turn to page 62. Practice a  
 hed 2. Locrian D0m9 1. Mixolydian Mode 2. Jazz Melodic Minor Scale 3. Minor Pentatonic from the 5th of chord 4. F  
 nic Minor/Maj? 1. Harmonic Minor Scale 2. Jazz Melodic Minor Scale Minor7(b5) 1. Locrian Mode 2. Whole Step - Hal  
 3rd of chord D0m13 1. Mixolydian Mode 2. Jazz Melodic Minor Scale D0m13(b9) or D0m13(#9) 1. Half Step - Whole St  
 With artificial modes based on for example a Melodic Minor Scale. Here is what the table for these artificial Chur  
 ic a minor second below the root, blues scale, melodic minor scale, Lydian dominant mode Altered dominant chord w  
 ith Melodic Minor Scales. ....486 Melodic minor scale pattern #1 .a.....487 Melodic minor scale p  
 6 Melodic minor scale pattern #1 .a.....487 Melodic minor scale pattern #2 .a.....489 Melodic minor scale p  
 7 Melodic minor scale pattern #2 .a.....489 Melodic minor scale pattern #3 .....490 Melodic minor scale p  
 9 Melodic minor scale pattern #3 .....490 Melodic minor scale pattern #4 .....492 Melodic minor scale p  
 0 Melodic minor scale pattern #4 .....492 Melodic minor scale pattern #5 .....494 Harmonizing with Harm

Figure 4.6 KWIC Concordance Sample of the Multiword Term 'MELODIC MINOR SCALE' in the RGL Corpus

Table 4.7 below shows the multiword terms found in the RGL Corpus. The top ten content words were also used as guidelines to find out the additional words which formed the multiword terms. This stage the AntConc 3.4.3 (Anthony, 2014) program played a very important role.

Table 4.7 Multiword Terms Found in the RGL Corpus

No.	Word	Multiword Terms	Frequency
1.	MAJOR	C MAJOR SCALE	569
2.	BLUES	BLUES GUITAR LESSON	540
3.	GUITAR	BLUES GUITAR LESSONS	434
4.	SCALE and MINOR	MINOR PENTATONIC SCALE	127
5.	MINOR	A MINOR PENTATONIC	67
6.	SCALE and MINOR	MINOR SCALE PATTERN	66
7.	MINOR	MELODIC MINOR SCALE	63
8.	CHORD	GUITAR CHORD SECRETS	63
9.	SCALE and MINOR	HARMONIC MINOR SCALE	60

From the first top ten content words as shown in Table 4.7, we found 9 multiword terms. It actually has the multiword terms more than these if we find the whole corpus. However, the researcher used the most frequency words from the first

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

top ten content words as stems to find its clusters, compounds and multiword terms so the researcher found only 9 multiword terms. For example, the word 'MAJOR'(Freq. 4,628) can be added by other words to form multi-word term 'C MAJOR SCALE', the word 'BLUES' (Freq. 4,627) formed 'BLUES GUITAR LESSON' the word 'GUITAR' (Freq. 7,180) formed 'BLUES GUITAR LESSON', the word 'SCALE' (Freq. 4,361) and 'MINOR' (Freq. 4,324) formed the same multiword terms namely: 'MINOR PENTATONIC SCALE', 'MINOR SCALE PATTERN', and 'HARMONIC MINOR SCALE', Besides, the word 'MINOR' (Freq. 4,324) also formed 'MELODIC MINOR SCALE', and the word 'CHORD' (Freq. 5,456) formed 'GUITAR CHORD SECRETS'.

#### 4.4 Abbreviations and Symbols

Abbreviations were frequently found in the rock guitar lessons. In this study, we found many symbols and 5 main types of abbreviations, i.e. 1) clippings, 2) acronyms, 3) initializers, 4) contractions, and 5) substitutions as shown in Table 4.8 below:

Table 4.8 The 20 High-Frequency Abbreviations in RGL Corpus

No	Abbreviations	Words	Freq.	%
1.	E	E MAJOR	11860	0.87
2.	H	HAMMER ON	10403	0.77
3.	F	F MAJOR	7751	0.57
4.	G	G MAJOR	7528	0.56
5.	M	MUTING	7441	0.55
6.	T	TAPPING	7398	0.55
7.	C	C MAJOR	7046	0.52
No	Abbreviations	Words	Freq.	%
8.	S	SLIDE	7019	0.52
9.	D	D MAJOR	5791	0.43
10.	B	BENDING	5035	0.37

Table 4.8 (continued)

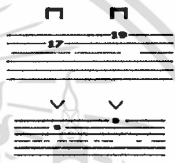

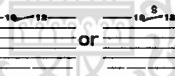

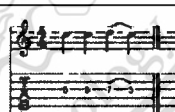

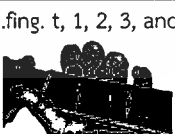
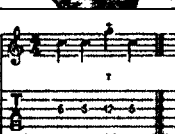

No	Abbreviations	Words	Freq.	%
1.	E	E MAJOR	11860	0.87
2.	H	HAMMER ON	10403	0.77
3.	F	F MAJOR	7751	0.57
4.	G	G MAJOR	7528	0.56
5.	M	MUTING	7441	0.55
6.	T	TAPPING	7398	0.55
7.	C	C MAJOR	7046	0.52
No	Abbreviations	Words	Freq.	%
8.	S	SLIDE	7019	0.52
9.	D	D MAJOR	5791	0.43
10.	B	BENDING	5035	0.37
11.	W	WHAMMY BAR	5023	0.37
12.	R	RELEASE NOTE	4857	0.36
13.	U	UP STROKE PICKING	3788	0.28
14.	LL	WILL	3730	0.28
15.	N	NATURAL HARMONIC	3704	0.27
16.	P	PULL OFF	2942	0.22
17.	AM	A MINOR	1679	0.12
18.	ILL	I'LL	1329	0.10
19.	EM	E MINOR	1168	0.09
20.	RE	RELEASE BEND	845	0.06

Regarding the abbreviations in the rock guitar lesson corpus, Table 4.8 shows the twenty most frequent abbreviations. The high frequency abbreviations include 'E' (E MAJOR-11,860 times), 'H' (Hammer on – 10,403 times), and 'F' (F MAJOR – 7,751 times) and so on. We can see that some of these abbreviations are guitar techniques used only the way of playing guitar namely 'H' (HAMMER ON; 10,403), 'M' (MUTING), 'T' (TAPPING), 'S' (SLIDE), 'B' (BENDING), 'W' (WHAMMY BAR), 'R' (RELEASE BEND), 'U' (UP STROKE PICKING), 'N' (NATURAL HARMONIC), 'P' (PULL OFF), and 'RE' (RELEASE BEND). This shows the evidence of getting the true representativeness and it indicates how good the corpus compilation is. Noticeably, the abbreviations 'R' in

the rank 12<sup>th</sup> and 'RE' in the rank 20<sup>th</sup> share the same meaning. It means that they can be used both in the rock guitar lesson texts depending on the publisher's format.

The abbreviation LL in No. 14 is stand for WILL and ILL in No. 18 is stand for I'LL. They are general abbreviations found in the most twenty abbreviations and they are used in general text. It reflects that the pronoun 'YOU' and 'I' always used in the text of teaching. The top twenty high frequency symbols in RGL corpus are in Table 4.9 below:

**Table 4.9** The top 20 High-Frequency Symbols in RGL Corpus

No.	Words	Symbols	Freq.
1.	DOWN STROKES AND UP STROKES (ALTERNATE PICKING)		8,579
2.	LEGATO		4,850
3.	SLIDE		2,576
4.	BENDING		2,214
5.	PULL-OFF		1,584
6.	HAMMER-ON		1,545
7.	LEFT HAND FINGERING	Lh.fing. t, 1, 2, 3, and 4 	1,393
8.	TAPPING		1,333
9.	PALM MUTING		1,316

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

Table 4.9 (continued)

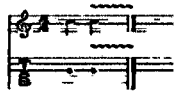

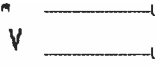





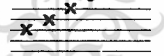
No.	Words	Symbols	Freq.
10.	VIBRATO		1,182
No.	Words	Symbols	Freq.
11.	ACCENT		648
12.	SWEEP PICKING		357
13.	HARMONICS		311
14.	WHAMMY BAR		288
15.	GHOST NOTE		287
16.	VOLUME SWELLS		104
17.	LET RING	Let ring 	103
18.	RAKE		86
19.	RIGHT HAND FINGERING	RH: 1 2 3 4	43
20.	ASCENDING AND DESCENDING	asc. ↗, desc. ↘	43
Total			28,842

Table 4.9 showed the most twenty frequent symbols in RGL Corpus. These symbols could not be read by a computer readable program so, they were counted manually.

## 4.5 A Sample Bilingual (English - Thai) Rock Guitar Dictionary

### 4.5.1 The Corpus Inputs to the Dictionary

The corpus is a primary source of information about the way words behave. It shows the frequency of words, grammatical information, and collocations. The main factor in deciding whether or not to include a word as an entry in the dictionary is how often it occurs in the corpus. The sample sentences from the concordance are

the main sources of example sentences presented in the dictionary (Vitayapirak, 2001).

#### 4.5.1.1 Headword Selection

The information about the word frequency is very important for choosing or grading vocabularies. Therefore, the single words, compound words, multi-words, abbreviations and symbols with highest frequency were selected as the samples of rock guitar dictionary.

#### 4.5.1.2 The Sample Entries of the Rock Guitar Lessons Dictionary

An Entry Structure: The four sample entries below (See more in Appendix G) offers as a headword, pronunciation in Thai, Abbreviation, Thai synonym, Thai definition, example of English usage in a sentence taken from the concordance and an illustration. The sample entries below shows the examples of single word, compound, grammatical collocation, multiword term, abbreviation, and symbol.

#### SAMPLE ENTRIES

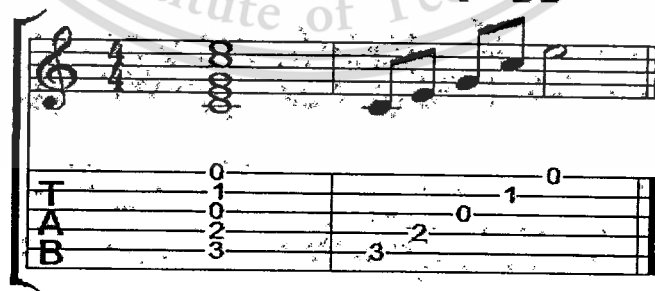
Arpeggio น./อาร์เพจจิโอ/

อาร์เพจจิโอ

การเล่นโน้ตในคอร์ดโดยเล่นโน้ตทีละตัว บางครั้งเรียกว่าการเล่นกระจายเสียงหรือกระจายตัวโน้ต  
ข้อสังเกตคือไม่เล่นโน้ตเหล่านั้นพร้อมกัน

Arpeggio is a set of notes that you play one at a time either in order or otherwise.

#### C Chord C Arpeggio



Power Chords น./เพาเวอร์คอร์ด/

เพาเวอร์คอร์ด, คอร์ดรีอค, คู่ 5 เพอร์เฟ็ค

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.



สเกลไมเนอร์เพนทาโทนิค เป็นสเกลที่ประกอบด้วยโน้ต 5 ตัว โดยตัดโน้ตตัวที่ 2 กับ 6 ออกจากสเกลไมเนอร์ ซึ่งจะได้โครงสร้างโน้ตดังนี้ 1, 3, 4, 5, 7

The minor pentatonic scale is 1, 3, 4, 5, 7 of the natural minor scale.

**THE MINOR PENTATONIC SCALE**

**Scale Formula**  
 TS<sup>♯</sup>T<sup>♯</sup>T<sup>♯</sup>TS<sup>♯</sup>T  
 TS = 1 Tone and 1 Semitone  
 T = 1 Tone

**Legend**  
 1 = Index Finger      □ = Root Note  
 2 = Middle Finger  
 3 = Ring Finger  
 4 = Pinky Finger

E (E Major) น./อีเมเจอร์/

คอร์ดอี หรือคอร์ดอีเมเจอร์(E)

คอร์ดอีเมเจอร์คือ คอร์ดที่ประกอบขึ้นด้วยเสียง 3 เสียง E - G<sup>#</sup> - B

The chords in the E major are E, F<sup>#</sup>m, G<sup>#</sup>m, A, B, C<sup>#</sup>m, and D<sup>#</sup> diminished.

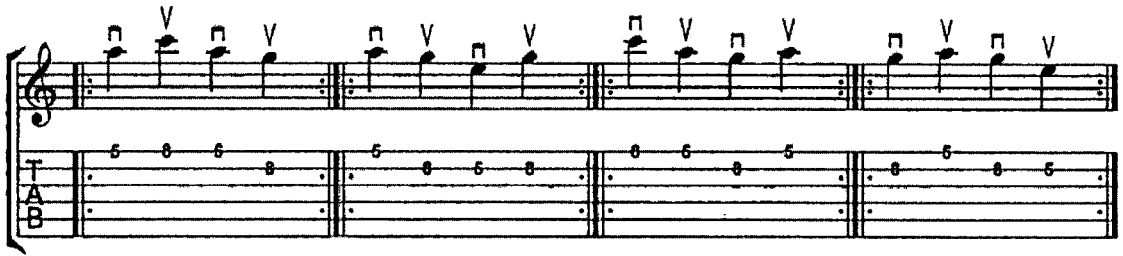


□    ∨ (Down Strokes and Up Strokes) หรือ (Alternate Picking) น./ดาวนส์โตรคและอัปส์โตรค/ หรือ /อัลเทอร์เนทีฟปีคกิ้ง

การตีคอร์ดสลับ ( □    ∨ ) หรือ Alternate Picking (Alt, Altern.)

การตีคอร์ดสลับคือ การตีคอร์ดกีตาร์สลับขึ้นลงตลอดเวลา เสียงที่ได้จะหนักแน่น เหมาะอย่างยิ่งในการเล่นเทคนิคเล่นเร็ว (speed picking)

Alternate picking is arguably one of the most used right hand techniques on the guitar amongst sweep/economy picking and strumming.



This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

## CHAPTER 5

# DISCUSSIONS CONCLUSIONS AND SUGGESTIONS

This chapter presents discussions, conclusions and suggestions of the study. The first part focuses on the discussions of the study. The second part deals with the conclusions of the study. The last part offers the suggestions of the further studies.

### 5.1 Discussions

The discussion goes along with the objectives of the research: to analyze technical vocabulary used in rock guitar lessons, to identify abbreviations and symbols found in rock guitar lessons, to examine collocations found in rock guitar lessons, and to design a sample dictionary entries based on the technical vocabularies found in the corpus.

#### 5.1.1 To analyze technical vocabulary used in rock guitar lessons

The technical vocabularies found in the RGL corpus emerged in the off-list words (8.32%) which was more than 5% (Nation 2012) (See Figure 4.3). Interestingly, the abbreviation occurred higher in RGL Corpus than other corpora so it shows that abbreviations are special features of rock guitar lessons. Moreover, the findings (See Table 4.5) shows the technical vocabularies: 'PENTATONIC' (1496 or 0.11%), 'APPEGGIO' (850 or 0.66%), 'HARMONIC' (848 or 0.66%) and so on. It can be seen that those words are specific terminologies and meanings which used only in the field of rock guitar playing.

When we take a look at the technical words (single word) in depth, it is found that they are not always a single word or many of them cannot stand alone. They coexist with other words called compound and multiword term. Furthermore, when they occur with other words they provide a more specific or technical meanings. For example, the word 'PENTATONIC' occurs with other words and form a new word such as 'PENTATONIC MINOR' or 'MINOR PENTATONIC SCALE'.

### 5.1.2 To identify abbreviations and symbols found in rock guitar lessons

In this research we use the theory about abbreviation and symbol of Barnhart (1995) to describe the abbreviations found in the RGL Corpus. In Barnhart's theory, he offers seven types of abbreviations namely, clippings, aphaeresis, initialism, acronyms, substitutions, contractions, and symbols.

The abbreviations and symbols play important role in rock guitar lessons. they, thus, frequently occur in the RGL Corpus. The abbreviations (See Figure 4.4), namely 'E' (Freq. 11,860), 'H' (Freq. 10,403), 'F' (Freq. 7,751), and so on appear in the rock guitar lessons. The abbreviations 'E' mean E MAJOR, 'H' mean HAMMER ON, 'F' mean F MAJOR, and 'G' mean G MAJOR (See Table 4.8). It can be seen that these abbreviations are commonly used among musicians especially guitar players. Moreover, most of them have a specific meaning which is different from general abbreviations such as the abbreviation 'H' in general sense it means or stands for 'HOUR' but 'HAMMER ON', a technical term in playing guitar, in the field of rock guitar playing. Another example, the abbreviation 'AM' means or stands for 'ante meridiem', times are after midnight but before midday, in general sense. On the one hand, it means or stands for 'A MINOR CHORD' or 'A MINOR SCALE' in the area of music or rock guitar playing.

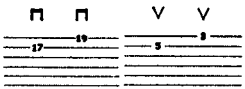
Abbreviations that mostly found in the RGL Corpus are initialism, some clippings, and musical symbols (like phonetic symbols). In terms of initialism, we found that they usually occur more than others. The abbreviation 'E' (See Table 4.8) stands for 'E MAJOR', 'H' stands for 'HAMMER ON', F stands for F MAJOR, 'G' stands for 'G MAJOR', 'M' stands for 'MUTING', 'AM' stands for 'A MINOR', 'EM' stands for 'E MINOR, and so on. There is an interesting point of the abbreviations 'E' which is stood for 'E MAJOR' and 'EM' stood for 'E MINOR', why 'E MAJOR' cannot be reduced to 'EM', It may be because of escaping the complication between the abbreviation 'EM' which is from 'E MINOR'. If we stick with the idea of clipping we will get confusing because the word 'E MAJOR' and 'E MINOR' can be abbreviated in the same way, 'EM'. On the one hand we can imply them, 'E' and 'EM' as chemical symbols exemplified by Barnhart (1995) that the abbreviation 'Au' stands for 'GOLD' and 'Ag' stands for 'SILVER'. In the same way, we can indicate the abbreviation 'E' stands for 'E MAJOR' and 'EM' stands for 'E MINOR'.

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

Concerning clippings or contractions (See Table 4.8), the abbreviations 'LL' stands for 'WILL', 'ILL' stand for 'I WILL', and 'RE' stands for 'RELEASE'. Since some parts of the word is omitted in the process of clipping. It may be because of rock guitar lessons is an easy communication or informal communication, we always find the contraction forms of language.

Symbols are important things that guitar learners must understand for getting

the meaning in them. The symbol  stands for 'DOWN STROKES

AND UP STROKES' (See Table 4.9),  stands for 'LEGATO',  or 

stands for 'SLIDE',  stands for 'BENDING'.

Therefore, abbreviation and symbols are important for guitar learners or guitar players because in the rock guitar lessons or music score are fertile with symbols. According to Barnhart (1995), he mentioned that symbols are used more in scientific and technical literature than in any other area. This study can be used to prove that not only scientific and technical prose use a lot of symbols, but guitar lessons also contain many of them.

### 5.1.3 To examine compounds and multiword terms in rock guitar lessons

The compound (See Table 4.6) are formed by two words combination such as 'BLUES GUITAR', 'CHORD PROGRESSION', 'MAJOR SCALE', BAR BLUES, and so on. They can be found by using the concordance program to find the clusters of the words. It can be seen that those compounds mentioned above are content words which can be found in the general music. When they are with other content words, they become more specific. However, they perform as a single word which has only one meaning. For example, the word 'CHORD PROGRESSION' consists of the word 'CHORD' which means a group of three or more notes which are played in the same times while 'PROGRESSION' means being or continuing. Whenever they coincidence, they will have a specific meaning. In this case, the word 'CHORD PROGRESSION' means a series of musical chords or chord changes are arranged to produce new and interesting sounds. It can be seen that the compound comprises of two words and forms a new word and new meaning. Nevertheless, even though the compound has

two words combination it has only one meaning as Quirk (1985) calls them as a single word.

In terms of the multi-word terms which comprise of more than two words in the corpus which consist of the words such as 'BLUES GUITAR LESSONS', 'GUITAR CHORD SECRETS', 'C MAJOR SCALE', 'BLUES GUITAR LESSON', 'MINOR PENTATONIC SCALE' and so on. It can be seen that the multiword terms can give more specific meaning or technical words similar to compound as mentioned above, even though they comprise of general service list, academic word lists, and other vocabularies (Chung and Nation, 2003). For example, the term 'MINOR PENTATONIC SCALE' which means the scale comprised 5 notes A, C, D, E, and G and mostly used by rock guitar players. MINOR is from an academic word list, 'PENTATONIC' is a technical vocabulary, and 'SCALE' is from a general service list. Noticeably, the words 'SCALE' and 'MINOR' can be used in many multi-word terms. The word 'SCALE' can form 'MINOR PENTATONIC SCALE', 'MINOR SCALE PATTERN' and 'HARMONIC MINOR SCALE'. The word 'MINOR' can form 'MINOR PENTATONIC SCALE', 'A MINOR PENTATONIC', 'MINOR SCALE PATTERN', 'MELODIC MINOR SCALE', and 'HARMONIC MINOR SCALE'. The word 'SCALE' and 'MINOR' are as the stem of words (multiword terms) which can form various multi-word terms. Moreover, the multi-word terms derived from the two words, 'SCALE' and 'MINOR' provide a specific meaning rather than they occur alone or compound. The multi-word terms, 'HARMONIC MINOR', 'A MINOR PENTATONIC', 'MINOR PENTATONIC SCALE' which give specific meanings are sometimes called technical noun phrase (TNPs) (Chung and Nation, 2003)

How are the prominent features of compound and multiword useful for musical students and Thai guitar learners? For example, the word 'MINOR PENTATONIC SCALE' is a multiword comprises of three words but it provides one meaning, a scale comprises of five notes (A MINOR PENTATONIC SCALE: A – C – D – E – G). Therefore, when students or guitar learners see the compound and multiword, they do not waste their time to translate every words. It can be seen that this feature can help the musical students and Thai guitar learners quickly understand the meaning of terminologies in the form of compound and multiword term.

## 5.2 Conclusions

This study started from compiling a corpus of rock guitar lessons (RGL Corpus). It was used to analyze the technical vocabulary, identify abbreviations and symbols, examine compounds and multiword terms, and design a sample bilingual (English - Thai) rock guitar dictionary.

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

One hundred and fifty rock guitar lessons from magazines and 150 rock guitar lessons from instruction books were used as samples in this research. They were classified into 2 categories because they were equally adopted among Thai guitar learners. The samples; magazine and instruction books, were published during the year 2011-2013. All rock guitar lessons were downloaded and stored in a computer as plain-text files (\*.txt).

In vocabulary analysis, the concordancing program called “Word Smith tools Version 6” was used to analyze the high frequent words, in terms of word classes, types, tokens, and concordance. The program; RANGE\_GAL\_AWL Programs was used to analyze the vocabulary level: general vocabulary, academic vocabulary, technical vocabulary and off-list words. It was used to identify technical vocabulary, abbreviations and symbols. AntConc 3.4.3 program was used to examine compounds and multiword terms.

In defining the technical vocabulary, abbreviations and symbols, the music dictionary “[www.dolmetsch.com](http://www.dolmetsch.com)” and the guitar dictionary [www.Guitarscholar.co.uk](http://www.Guitarscholar.co.uk) were used as guidelines on the technical vocabulary definitions. Thai definitions were interpreted from the English definition and integrated with the Thai definitions launched by websites, [Guitarthai.com](http://Guitarthai.com) and [folkpeople.com](http://folkpeople.com)

According to the statistical analysis of the RGL Corpus, the whole corpus consists of 1,356,029 tokens and 40,542 word types. The ratio of word type to tokens of the whole corpus was 1:33.34. This means that each word was repeated 34 times on average throughout the RGL Corpus. It was also found out that the three types of vocabulary used in the RGL Corpus were 13.7% of general vocabulary, 10.5% of academic vocabulary and 75.8% of off-list words. In the off-list words, it could also be divided into 8.32% of technical vocabulary, 44.6% of abbreviations, and 22.87% of symbols.

The findings found in this research did not parallel closely with the figures cited by Coxhead (2000) and Nation (2012) that on average, the GSL and AWL vocabulary represent approximately 90% of running words in academic text. The technical vocabulary covers around 5% and the other low frequency words such as proper names, abbreviations, and numbers represents around 5% of the total words in the text. We can see that the rock guitar lesson is a text-type that covers a large amount of off-word lists, i.e. abbreviations, symbols, and technical terms.

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

In designing a sample bilingual (English - Thai) rock guitar dictionary; the rationale for the design of the dictionary (Zgusta, 1971) and a typical dictionary (Landau 2001) were used as a guideline to create a dictionary structure. Besides, in headword selection process, the information about the word frequency is very important for choosing or grading vocabularies. Therefore, the single words, compound words, multi-words, abbreviations and symbols with highest frequency were selected as the samples of rock guitar dictionary.

### 5.3 Implications

Since the findings of this study derived from the authentic texts, they can be applied for English teacher, musical teachers and course designers to develop and evaluate vocabulary for teaching and learning guitar.

#### 5.3.1 Implications for Teachers

A corpus-based analysis of English vocabulary is an effective process in finding out the real and authentic vocabularies used in a general and particular texts and communications which are already transcribed in the form of writing. How is it very important? The answer is that the corpus-based research can provide the users the frequency, representativeness, specification of words upon the users' purposes. Additionally, the users can see the example of usages taken out from the real texts or communication and allow them to see the environments of the words. According to Nation and Newton (1997: 239) that learners usually can guess the meanings from the context. Therefore, the teacher can take those real vocabularies and real example sentences to teach students. Furthermore, the teachers can choose the most important and frequent vocabularies and example sentences to adopt in their teaching. Effectively, students can learn the frequent important vocabularies and sentences for avoiding wasting time in learning unimportant words which rarely occur.

#### 5.3.2 Implications for ESP Pedagogy

In terms of English for Specific purpose (ESP), teachers can use a corpus-based analysis of English vocabulary technique to seek the specific or technical vocabularies comfortably. The programs, Wordsmith Tools Version 6.0,

RANGE\_GAL\_AWL Program and AntConc 3.4.3 are the valuable instruments to help teachers to select the best vocabularies; the most frequency vocabularies, and specific vocabularies for their teaching. Noticeably, the students, especially in a specific area in a university must simultaneously learn Thai and English in one subject. The ESP students can learn and remember vocabularies more quickly because those vocabularies are familiar with them. Furthermore, being able to use vocabulary in a meaningful context reinforces and increases students' motivation (Hutchinson and Waters 1986:19). Therefore, this idea should be spread to any Thai English teachers to gain the effectiveness on student recognition in English vocabularies.

### 5.3.3 Implications for Making a Technical Dictionary

In the field of musical study, a corpus-based analysis of English vocabulary technique can be directly used to pursue the technical vocabularies including abbreviations and symbols and leads to compile a technical dictionary even an encyclopedia. Besides, this technique can find out the frequency of the words accurately, they also find out the low frequency words. The low frequency word can be used to find out the important technical vocabularies which are important for making a technical dictionary. Hence, students can learn musical texts or practical techniques faster through a technical dictionary. Parallel to Vitayapirak (2001: 28), students can learn vocabularies in their own field and they also spend time on low frequency words to expand their vocabulary size. Moreover, students themselves can learn and develop their knowledge and skills through the dictionary. As Summers (1988: 111) said that students can and should be encouraged to avail them of the substantial information contained in their dictionaries. This is an evidence to support the benefit of the corpus-based analysis of English vocabulary.

## 5.4 Suggestions for Further Studies

5.4.1 This research only focuses on rock guitar lessons so further studies should be carried out in other disciplines such as jazz guitar lessons, blues guitar lessons, classical guitar lessons, and so on. The other instruments such as piano, base, keyboard, etc. are also interested as well.

5.4.2 In terms of computer program used in this study, they could not count or read musical symbols so the researcher had to take a lot of time counting them manually. Therefore, it is suggested that the next generation of computer program should be designed to cope with symbols more effectively.



## BIBLIOGRAPHY

- Anthony, L. 2014. AntConc (Windows, Macintosh OS X, and Linux) Build 3.4.3. Retrieved September 17, 2014, from <http://www.laurenceanthony.net/software.html>.
- Barnhart, R.K. (Ed.) 1995. **Banhart Abbreviations Dictionary**. United State of America: John Willey & Sons, Inc.
- Baumand, J. and Culligan, B. 1995. The General Service List. [Online]. Available: <http://Jbauman.com/gsl.html>.
- Bergenholtz, H. and Trap, S. 1995. **Manual of Specialised of Lexicography: The Preparation of Specialised Dictionaries**. Amsterdam/Philadelphia. John Benjamin's Publishing Company.
- Biber, D. et al. 1999. **Longman Grammar of Spoken and written English**. Harlow: Pearson Education Limited.
- Biber, D. et al. 1998 **Corpus Linguistics. Investigating Language Structure and Use**. C.U.P.
- Bofman, T. and Prez, P. 2008. Thai pop music: Corpus analysis and second language learning. *Journal of Southeast Asian language teaching*. Volume 14, 2008
- Boswood, T. (Ed.) 1997. **New Ways of Using Computers in Language teaching**. Illinois: TESOL Inc., pp. 253-275
- Camino, R. 2010. **Getting on with Corpus Compilation: from History to Practice**. *ESP World*, Issue 1 (27), Volume 9, <http://www.esp-world.info>.
- Chevalier, M. et al. 1978. TAUM-METEO: Description du Systeme. Groupe de recherche en traduction automatique, Universite de Montreal.
- Cholviroj, B. 1995. The Influence of Western Culture on the Modern Compositions of Saman Kanchanaphalin, M.A. Thesis, Mahidol University.
- Chung, T.M. and Nation, I.S.P. 2003. **Technical Vocabulary in Specialised Texts**. *Reading in A Foreign Language* 15 (2), 103-116. <http://nflrc.hawaii.edu/rfl>.
- Clercq, T. and Temperley D. 2011. **A Corpus Analysis of Rock Harmony**, Cambridge University Press 2011, pp. 47-70
- Coxhead, C. 2000. **A new academic word list**. *TESOL Quarterly*, 34,213-238.

- Coxhead, A., and Nation, P. 2001. **The specialised vocabulary of English for academic purposes**. In J. Flowerdew & M. Peacock (Eds.), *Research perspectives on English for academic purposes* (pp. 252-267). Cambridge University Press.
- Collins, COBUILD. 1987. **English Language Dictionary**, Edition in Chief John Sinclair, Managing Editor Patrick Hanks. London, Glasgow: Collins.
- Crystal, D. 1992. **An Encyclopedia Dictionary of Language and Languages**. Cambridge: Cambridge University Press.
- Dato, W. 2003. **The Development of Web Based Instruction of Music Scales for Matthayomsuksa Three**. M.A. thesis, Mahidol University.
- Dudley, E. and John, M. 1998. **Development in English for specific Purposes: a Multidisciplinary Approach**. Cambridge: Cambridge University Press.
- Gardner, D. 2006. **Validating the Construct of Word in Applied Corpus-based Vocabulary Research: A Critical Survey**. Oxford University Press. 2007. From <http://applied.oxfordjournals.org/content/28/2/241.abstract>
- Guitarthai.com: [Online]. Available: <http://www.guitarthai.com/lessonboard/question.asp?QID=570>
- Harris, Z. 1968. **Mathematical Structures of Language**. New York. Wiley (Interscience).
- Hirschman, L. and Sager, N. 1983. **Automatic Information Formatting of a Medical Sublanguage**. In Kittredge and Lehrberger: 27-80
- Hunston, S. 2002. **Corpora in Applied Linguistics**. Cambridge: Cambridge University Press.
- Hutchison, T. and Water, A. 1986. **English for Specific Purposes: A Learning Centered Approach**. Cambridge: Cambridge University Press.
- Kamien, R. 1976. **Music and Appreciation**. (5th ed.), U.S.A. : McGraw – Hill, Inc.
- Kennedy, G. 1998. **An Introduction to Corpus Linguistics**. Harlow : Pearson Education.
- Kirr, L. 1979. **English for Specific purposes**. In *English for Specific Purposes*, ed. Susan Holden, 11-12. Oxford: Modern English Publication.
- Kitrenu, W. 2004. **The analytical study of 1st prize guitar playing in the 4th Overdrive Guitar Contest**, M.A. Thesis, Mahidol University.

- Krishnamurthy, R. 1987. "The Process of Compilation." In Sinclair, J.M. Looking Up: An account of the COBUILD project in Lexical computing ELT. 2<sup>nd</sup> ed. London: Collins.
- Landau, S. 2001. *Dictionaries: the Art and Craft of Lexicography*. Cambridge: Cambridge University Press.
- Larkin, C. 1992. *The Guinness Who's Who of Heavy Metal*. England: Guinness Publishing.
- Leech, G. 1991. "The state of the art in corpus linguistics." In Aijmer, K. and Altenberg, B. (Eds.) *English corpus linguistics: Studies in Honour of Jan Svartvik*. London: Longman.
- Leech, G. et al. 2001. *Word Frequencies in Written and spoken English*. 2nd ed. Malaysia: Pearson Education.
- Lehrberger, J. 1983. *Automatic Translation and the Concept of Sublanguage*. In Kittredge and Lehrberger.
- Mackey, R. and Mountford, M. 1987. *English for Specific purposes: Applied Linguistics and Language study*. 2d ed. London: Longman.
- Marsh, E. et al. 1984. *A Production rule System for Message Summarization*. Proceedings of the 1984 National Conference on Artificial intelligence. Austin, Texas.
- McArther, T. 1992. *The Oxford Companion to English Language*. Oxford: Oxford University Press.
- McEnery, T. and A. Wilson. 1996. *Corpus Linguistics*. Edinburgh: Edinburgh University Press.
- Meyer, C.F. 2002. *English Corpus Linguistics: An Introduction*. Cambridge: Cambridge University Press.
- Morgan, J. and Rinvoluceri, M. 2004. *Vocabulary (2nd)*, Oxford University Press.
- Mullensiefen, D. et al 2007. High-level feature descriptors and corpus-Based musicology: Techniques for modeling music cognition.
- Nagao, M. 1994. 'A methodology for the Construction of a Terminology Dictionary'. In Atkins and Zampolli (eds). *Computational Approaches to the lexicon*. New York: Oxford University press.

- Nation, P. and Newton, J. (1997). **Teaching vocabulary**. In Coady, J. & Huckin, T. (Eds.), *Second language vocabulary acquisition*. New York: Cambridge University Press.
- Nation, I.S.P. 2001. **Learning Vocabulary in another Language**. Cambridge: Cambridge University Press.
- Nation, P. 2012. Range Program with GSL and AWL. Retrieved September 12, from <http://www.victoria.ac.nz/lals/about/staff/paul-nation>, 2005.
- Opitz, K. 1983. **Special-purpose Lexicography: Dictionaries for Technical Use**. In R.R.K. Hartmant (ED) *Dictionaries and their Users*, Exeter Linguistic studies 4. Exeter: University of Exeter: 89-95
- Palingoon, P. et al. 2002. *Qualitative and Quantitative Approaches in Bilingual Corpus-Based Dictionary*. Information Research and Development Division National Electronics and Computer Technology Center, NSTDA.
- Pearson, J. 1998. **Terms in Context**. Amsterdam: John Benjamin's Publishing Company.
- Pongnan, P. 2006. *Corpus-Based Analysis of English Vocabulary in Pharmaceutical Leaflets and a Design of a Sample Dictionary*. M.A. Thesis. King Mongkut's Institute of Technology Ladkrabang.
- Potipiti, T. et al. 2000. *Toward Building a Corpus-Based Dictionary for Non-Word-Boundary Language*. [Online]. Available: <http://conf.org/irec2000/Korterm.kaist.ac.kr/irec2000/wtrcfile/TanapongPotipiti.pdf>.
- Quirk, R. et al. 1985. **A Comprehensive Grammar of the English Language**. London and New York: Longman.
- Redman, S. and Edward, L. 2003. **English Vocabulary in Use (pre-intermediate and intermediate)**. 2nd ed. United Kingdom: Cambridge University Press.
- Renouf, A.J. 1978. 'Corpus Development'. In J.M. Sinclair (ed.) *Looking up: An Account of the COBUILD Project in Lexical Computing*. London: Collins.
- Richard, J. 1999. **Dictionary of Language teaching & Applied Linguistics**. London. Longman.
- Robinson, P. 1991. **ESP today: A Practitioner's Guide**. Prentice Hall International.
- Scott, M. 2012. **Oxford WordSmith Tools**. Oxford: Oxford University Press.

- Simon, M. 1996. **Linguistic corpora and language teaching**. Annual Review of Applied Linguistics, 16, pp. 82-199.
- Sinclair, J. 1991. **Corpus, Concordance and Collocation**. Oxford: Oxford University Press.
- Siwarak, P. 2011. **Corpus-Based Analysis of English Vocabulary in Weather Forecast Texts and a Design of a Sample Dictionary**. M.A. Thesis. King Mongkut's Institute of Technology Ladkrabang.
- Summer, D. 1988. 'The Role of Dictionary in Language Learning'. In R. Carter and M. McCarthy (eds.). **Vocabulary and Language Teaching**. Longman. USA.
- Swales, J.M. 2000. **Language for Specific Purposes**. Annual Review of Applied Linguistics(20), pp. 59-76.
- Trumble, C. and Jones, G. 1990. **Concordance in the classroom**. London. Longman.
- Trimble, R.M.T. and Trimble, L. 1978. 'The development of EFL Materials for Occupational English': In R.M.T. Trimble, L. Trimble and K. Drobonic (eds.). **English for Specific Purposes, Science and Technology**. English Language Institute. Oregon State University: 74-132.
- University of Essex. 2004. "Corpus Linguistics". [Online]. Available: [http://clwww.essex.ac.uk/w3c/corpus\\_ling/content/corpora/list/index2.html](http://clwww.essex.ac.uk/w3c/corpus_ling/content/corpora/list/index2.html).
- Varese, E. 2011. **Different Types of Music**. [Online]. Available: <http://www.buzzle.com/articles/different-types-of-music.html>.
- Vitayapirak, J. 2001. **A Corpus-Based Approach to ESP Lexicography: The Case Study Of English for Thai Computer Science Students**. Ph.D. Thesis, The School of Linguistics, Macquarie University.
- Vitayapirak, J. 2006. **English-Thai Dictionary of Food Engineering**. Directory of Food Processing and Packaging Machinery. Food Network Solutions Co,Ltd.
- Wasuntarasophit, S. 2008. **Technical and Academic Vocabulary in Electrical Engineering**. Textbooks. Ph.D. Thesis, Suranaree University of Technology.
- West, M. 1953. **General Service List of English words**. London: Longman, Green & Co.
- Wiwan, S. 2004. **Effect of Yngwie Malmsteen's guitar style on the Thai guitarists**. M.A. Thesis, Mahidol University.
- Wynne, M. (Eds.) 2005. **Developing Linguistic Corpora: a Guide to Good Practice**. ASDS Literature, Languages and Linguistics. Oxford.

Zgusta, L. 1971. *Manual of Lexicography*. The Hague: Mouton; Prague, Academia.

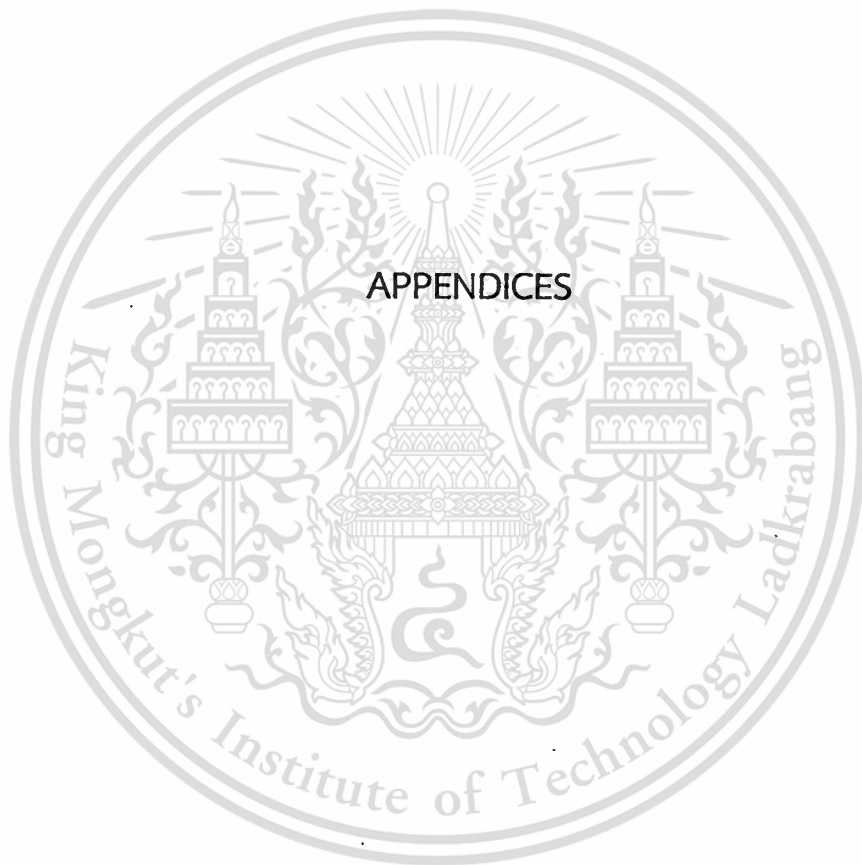
วิทยา วอสเบียน.2531. ประวัติความเป็นมาของกีตาร์ตั้งแต่ศตวรรษที่ 15 ถึงศตวรรษที่ 20.

โอ. เอส. พรินดีง เฮาส์: สำนักพิมพ์โอเดียนสโตร์.



This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.



This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

## APPENDIX A

## THE GUITAR REFERENCES IN THE TOP TEN MUSIC INSTITUTIONS

University	Textbook	Author	Year	Publisher
1. College of Music Mahidol University	1 Guitar	Morgan, Dan	1971	London : corgi
	2 Guitar (from "Aerial boundaries")	Windham Hill	1986	Montvale, N.J. : Windham Hill Productions
	3 Guitar gadgets	Anderton, Craig	c 1983	New York : Amsco Publications ; New York : Distributed throughout the world by Music Sales Corp.
	4 Guitar highway Rose	Lowry, Brigid	c1997	New York : Holiday House.
	5 Guitar in the moonlight	สมนึก อุ่นแก้ว	2539	No details
	6 The guitar man	ปฤณ รักชีพ	2520	No details
	7 Guitar scales	กฤษฎา วงศ์คำจันทร์	2523	กรุงเทพฯ : MUSICO
	8 The Guitar teaching packages for Thonburi polytechnic college	วิสาร จิตตการมงคล	2545	Thesis
	9 The guitar teaching packages in a course of music skill I, the Faculty of Fine and Applied Arts of Khon kaen University	Marten, Neville	c 2007	Thesis
	10 Guitar technic	Snyder, Jerry	c 1993	กรุงเทพฯ : โพลิน
2. Silpakorn University	1 Guitar heaven : the instruments and players that electrified the music of our lives	Frederick Noad	c 1985	London : Mitchell Beazley Van Nuys, CA. : Alfred London ; New York : Amsco Publications
	2 Guitar method : an easy approach to lead & rhythm guitar	Chapman, Richard.	c 2003	New York : Dorling Kindersley
	3 Guitar music	แดง กีตาร์	2546	กรุงเทพฯ : บริษัท เอ็มโอ เอส ซอฟต์แวร์
	4 Guitar : music, history, players	Jerry Silverman and Gregory Coleman	c 2003	Miami, Florida : Warner Bros. Publications

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

	5 The guitar playing	Jerry Silverman and Gregory Coleman	c 2003	Miami, FL : Warner Bros. Pub.
	6 Guitar solo great standards	Oakes, David	c 2000	Milwaukee, WI : Hal Leonard Corporation
	7 Guitar solo jazz standards	Snyder, Jerry	c1987-1991	Van Nuys, CA : Alfred
	8 Guitar techniques	Kelly, Jim	c 1998	[Boston] : Berklee Press ; [Milwaukee] : Distributed by Hal Leonard
	9 Guitar today : a beginning acoustic & electric guitar method	compiled by John Pears ; [จัดทำโดย อิศระ ปัญญา]	2529	กรุงเทพฯ : มิตรไมตรี
	10 Guitar workshop	Appleby, Amy transcribed, arranged and edited by David Nadal	c 2000	New York : Amsco Publications : Exclusive distributors, Music Sales Corp.
	11 The guitarist's picture chord Encyclopedia	Steinel, Mike	c 1999	Mineola, N.Y. : Dover Publications
	12 The guitarist's bookshelf : a practical music encyclopedia for today's versatile guitarist	No details	c 2000	Milwaukee, Wis. : Hal Leonard
3. Rangsit University	1 Guitar classics works by Albeniz, bach, dowland, granados, scarlatti, sor and other great composers	Bennett, Joe	2543	กรุงเทพฯ : วงศ์สว่างการพิมพ์
	2 Guitar : essential elements for jazz ensemble : a comprehensive method for jazz style and improvisation	Dave Rubin	c 2000	London : Wise
	3 The Guitar midyear 2000	กรุงเทพฯ : เอ็มไอเอส	c 2000	Milwaukee, Wis. : Hal Leonard
	4 Guitar on top	Arnie Berle ; edited by Ronnie Ball	2553	เอ็มไอเอส
	5 The guitar style of George Benson	Russ Shipton	c1986	New York : Amsco : Exclusive distributor, Music Sales Corp.

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

4.Srinakari nwirot University	1	1,440 chords for guitar	Anita Sheer and Harry Berlow	2002	London : Omnibus Press
	2	Chords & progressions for jazz & popular guitar	Jack Buckingham	1972	No detail
	3	The complete guitar player	Paul Shipton	1967	Melville, N.Y. : Belwin Mill
	4	Flamenco guitar	William Grandison	2008	New York : Carl Fischer
	5	Flamenco guitar method for beginners	Dan Morgan	1980	Harlow : Pearson Education
	6	Flamenco guitar : music of the Andalusian provinces of Spain	compiled and edited by Michael Stimpson	1985	London : Trinity College of Music London
	7	Ghost in the guitar	Dave Hunter	1988	London : Corgi
	8	Guitar / fingered and edited	no	no	Oxford : Oxford University Press
	9	Guitar	Mark Phillips and Jon Chappell	2005	San Francisco, Calif. : Backbeat ; Enfield : Hi Marketing [distributor]
	10	The guitar : a guide for students and teachers	Roger Evans	1998	Foster City, CA : IDG Books Worldwide Lond : Elm Tree
	11	The guitar amp handbook : understanding tube amplifiers and getting great sounds	Rikky Rooksby	1979	Milwaukee, WI : Backbeat Books
	12	Guitar for dummies	Ervin Somogyi	2010	Oakland, CA :
	13	How to play guitar : a new book for everyone interested in the guitar	William G. Leavitt edited by John Simons	2010, c2009	Luthiers Press
	14	How to write songs in altered guitar tunings	David Oakes	1966- 1971	Boston, Mass : Berklee
5. Chulalong korn University	1	The guitar	Jon Buck	1985	พิมพ์กรุงเทพฯ : วิดีทัศน์
	2	Guitar and flute duets	Fradd, Dale	1977	Hodder and Stoughton : Teach Yourself Books
	3	Guitar basic training	Peter Draper	2542	New York : Consolidated Music
	4	the guitar picture chord encyclopedia	แดง กีตาร์	253-	[กรุงเทพฯ] : บริษัทเอ็มไอ เอส ซอฟต์แวร์

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

6. Kasetsart University	1	Guitar basic training	เพียรส์ จอห์น	254-	กรุงเทพฯ : มิตรไมตรี
	2	Guitar chord	แดง กีตาร์	2552	กรุงเทพฯ : เอ็มไอเอส ซอฟต์แวร์เทค
	3	Guitar chord and scale	อมรฤทธิ์ บุญศรี	2549	กรุงเทพฯ : เอ็มไอเอส
	4	Guitar greats	หมู คาไล (ศิริศักดิ์ สิริ โชตินันท์)	2007	กรุงเทพฯ : เอ็มไอเอส ซอฟต์แวร์เทค
	5	Guitar playing	Greig, Charlotte	2548	London : Amber Books
	6	Guitar playing 1-2	มนัส พันธุ์รงค์ราช	2547	กรุงเทพฯ : เอ็มไอเอส ซอฟต์แวร์เทค
	7	Guitar pro	แดง กีตาร์	2551	กรุงเทพฯ : เอ็มไอเอส ซอฟต์แวร์เทค
	8	Guitar rock basic	สิริวิชญ์ คิมทการ	2548	กรุงเทพฯ : วิดีโอ กรุป
	9	Guitar solo	ศิริศักดิ์ สิริโชตินันท์	2549	กรุงเทพฯ : เอ็มไอเอส ซอฟต์แวร์เทค
	10	Guitar trick 1-2 :	ศิริศักดิ์ สิริโชตินันท์ (หมู คาไล)	2547	กรุงเทพฯ : เอ็มไอเอส ซอฟต์แวร์เทค
7. ABAC School of Music	1	Guitar : get your band together	แดง กีตาร์	2003	กรุงเทพฯ : เอ็มไอเอส ซอฟต์แวร์เทค
	2	Guitar : music, history, players	Baione, LarryThe Berklee Faculty, corp	2003	Boston, MA : Berklee Pr.
	3	Guitar chord book	Chapman, Richard	No	New York : Dorling Kindersley
	4	The guitar of God : gender, power, and authority in the visionary world of Mother Juana de la Cruz (1481-1534)	Dun, Fu Weng, Baishe, jt. Auth	c1990	Hong Kong : Xiandai Yinyue Yanjiu She, n.d.
	5	Guitar playing	Surtz, Ronald E.	2547	Philadelphia : Univ. of Pennsylvania Pr.
	6	Guitar QuickStart : a guide to playing and understanding music reading and chord techniques	มนัส พันธุ์รงค์ราช	c1994	กรุงเทพฯ : เอ็มไอเอส ซอฟต์แวร์เทค
	7	Guitar studies scales	ชิตพงษ์ กวีวรรุฒิ	c1996	West Bloomfield, MI : Lyra House
	8	The guitar style of George Benson	Disler, Mary Jo	c2000	New York : Second Floor Music
	9	Guitar tab 2002	Wayne, Chuck	c2001	Milwaukee, WI : Hal Leonard
	10	The guitar three chord songbook : play 50 rock hits with only 3 easy chords	Rubin, Dave	No	Milwaukee, WI : Hal Leonard Corp.

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

	11 The guitarist's guide to composing and improvising	No	c2001	Milwaukee, WI : Hal Leonard Corp., n.d.
8. Payap University	1 Beginning jazz guitar	No	1995	Boston, MA : Berklee Pr.,
	2 Mastering jazz guitar improvisation	Damian, Jon Feist, Jonathan, ed.	1995	Van Nuys, Calif. : Alfred Publishing, c
	3 Intermediate jazz guitar	Fisher, Jody	1995	Van Nuys, Calif. : Alfred Publishing, c
	4 The advancing guitarist : applying guitar concepts & techniques	Fisher, Jody	1987	Van Nuys, Calif. : Alfred Publishing, c
	5 Classic guitar technique. Volume 2.	Fisher, Jody	1964	Milwaukee, Wis. : Hal-Leonard Corporation, c
	6 The Christopher Parkening guitar method. Vol. 2	Goodrick, Mick	1997	Miami, Fla. : Franco Colombo Publications, c
	7 Classic guitar technique. v. 1	Shearer, Aaron	1969	Milwaukee, Wis. : Hal Leonard Corporation, c
	8 The Christopher Parkening guitar method. Vol. 1	Parkening, Christopher	1999	New York : Franco Colombo, c
	9 Frederick Noad's classical guitar treasury	Shearer, Aaron	1998	Milwaukee, Wis. : Hal Leonard Corporation, c
	10 Pumping Nylon : the classical guitarist's technique handbook	Parkening, Christopher	1995	London : Chester Music, c
	11 The Jazz guitar	Frederick Noad	1976	Van Nuys, Calif. : Alfred, c
	12 Berkley practice method : guitar	Tennant, Scott	19-	Rochelle Park, N. J. : Hayden Book, c.S.l. : s.n.
	13 Solo jazz guitar : the complete chord melody method	Towers, T. D.	1999	Milwaukee, Wi. : Hal Leonard Corporation, c
	14 Antonio Carlos Jobim for solo guitar	Summerfield, Maurice J.	1996	Milwaukee, Wi. : Hal Leonard Corporation, c
	15 Easy jazz ensemble : guitar	Hart, Bill	2006	Milwaukee, Wi : Hal Leomard

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

	16 The art of classical guitar playing	Sokolow, fred	2547	เชียงใหม่ : โปรแกรมวิชาดนตรี มหาวิทยาลัยราชภัฏเชียงใหม่
	17 Amazing phrasing : guitar : 50 ways to improve your improvisational skills	No details	2002	Milwaukee, Wis. : Hal Leonard, c
	18 Young jazz ensemble collection : guitar	เอกพิชัย สอนศรี	2004	Miami, Fla. : Warner Bros., c
	19 The guitar book : a handbook for electric and acoustic guitarists	Kolb, Tom Wheeler, Tomas Hutchin	1978	New York : Harper & Row,c
	20 Beatles complete : easy guitar	No details	2010	Milwaukee, Wis. : Hal Leonard Corporation
	21 Guitar playing 2	มนัส พันธวงศ์ราช	2547	กรุงเทพฯ : เอ็มไอเอสซอฟต์แวร์เทค
	22 The guitar handbook	Denyer, Ralph	1992	New York : Alfred A. Knopf
	23 Basic guitar	Helen Casabona.	1988	Milwaukee, Wis. : Hal Leonard ; Cupertino, Calif. : GPI Publications, c
9. Khon Kaen University	1 Guitar instruction and study musical notation grades 1-8	Associated Board of the Royal Schools of Music	1988	London : Associated Board of the Royal Schools of Music, c.New York : Amsco Music Pub.,
	2 The guitar songbook	Noad, Frederick M.	1969	กรุงเทพฯ : เอ็มไอเอสซอฟต์แวร์เทค
	3 Guitar	แดง กีตาร์	2547	
10. Burapha University				No details

## APPENDIX B

### DICTIONARY OF MUSIC

University	Dictionary of music	Author	Year	Publisher
1. College of Music Mahidol University	1. Chambers dictionary of music	Chambers editor: Katie Brooks Originally published	2006	Edinburgh : Chambers
	2. Chambers editor: Katie Brooks Originally published	Alan Isaacs, Elizabeth Martin	1982	London : Sphere Reference
	3. The Harper Collins dictionary of music	Christine Ammer	1987	New York : Harper Perennial
	4. Harper's dictionary of music	Christine Ammer	1972	New York : Harper & Row, c
	5. Dictionary of musical terms	Vincent J. Picerno	1976	Brooklyn, N.Y. : Haskell House
2. Silpakorn University	1. The grove concise dictionary of music	Stanley Sadie	1988	London : Macmillan, c
	2. Harrap's illustrated dictionary of music & musicians	No details	1989	London : Harrap's Reference, c
	3. The New Grove dictionary of music and musicians	Stanley Sadie	1980	London : Macmillan, c
	4. A Dictionary of musicians : from the earliest times	John. S. Sainsbury ; with an introduction by Henry George Farmer	1966	New York : Da Capo Press, c

3. Rangsit University	No references			
4.Srinakarinwirot University	1. The concise edition of Baker's biographical dictionary of musicians	Theodore Baker ; rev. by Nicolas Sbnimsky	1994	New York : Schirmer Books
	2. The concise Oxford dictionary of music	Michael Kennedy	1996	Oxford : Oxford University Press
	3. The concise Oxford dictionary of music	Michael Kennedy	1980	Oxford : Oxford University Press
	4. The concise Oxford dictionary of music	Percy A. Scholes ; edited by John Owen Ward	1964	London ; New York : Oxford University Press
	5. Dictionary of music	Michael Kennedy ; associate editor, Joyce Bourne	1973	New York : Galahan Books
	6. Dictionary of music	Alan Isaacs, Elizabeth Martin	1982	London : Hamlyn
	7. Dictionary of music terms and chords	Albert DeVito	1995	Milwaukee, WI : H. Leonard [distributor]
	8. Dictionary of twentieth-century music	John Vinton	1974	London : Thames and Hudson
	9. Grove's dictionary of music and musicians	edited by Eric Blom ; associate editor, Denis Stevens	1966	New York : St. Martin's Press

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

10. Harrap's illustrated dictionary of music and musicians	No detail	1989	London : Harrap
11. Harvard concise dictionary of music	Don Michael Randel	1978	Cambridge, Mass. : The Belknap Press of Harvard University Press
12. Harvard dictionary of music	Willi aped	1964	Cambridge :
13. The new Grove dictionary of music and musicians	Stanley Sadie	1994	Harvard University Press
14. The new Harvard dictionary of music	Don Michael Randel	1986	London : Macmillan
15. The Oxford dictionary of music	Michael Kennedy ; associate editor, Joyce Bourne	1994	Cambridge : Belknap Press of Harvard University Press
16. The Oxford dictionary of music	Michael Kennedy ; associate editor, Joyce Bourne	1999	Oxford : Oxford University Press
17. The Oxford dictionary of music	Michael Kennedy	2006	Oxford : Oxford University Press
18. The Penguin dictionary of music	Arthur Jacobs	1985	Oxford : Oxford University Press
19. Practical dictionary of music composers	Sandy Feldstein	1991	London, England Penguin Books

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

	20. Practical dictionary of music theory	Sandy Feldstein	1994	Van Nuys, Calif.: Alfred
	21. What's what in the 1980 s : a dictionary of contemporary history, literature arts, technology, medicine, music, cinema, theatre, controversies, fads, movements and events	Christopher Pick	1992	Van Nuys, Calif. : Alfred
5.Chulalongkorn University	1. The biographical dictionary of music	Don Michael Randel	1982	London : Europa
	2. Dictionary of music	Sir Jack Westrup and F. Ll. Harrison	1996	Cambridge, Mass. : Belknap Press of Harvard University Press
	3. A Dictionary of music	Robert Ilting	1988	London : Collins
	4. Dictionary of music	Alan Isaacs, Elizabeth Martin	1950	Harmondsworth : Penguin Books
	5. Dictionary of music	Alan Isaacs, Elizabeth Martin	1982	London : Hamlyn
	6. Harvard dictionary of music	W. Apel	1983	New York : Facts On File
	7. Harvard dictionary of music	Willi Apel	1972	Cambridge, Mass. : Belknap Press of Harvard Univ. Press,c

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

	8. The new Everyman dictionary of music	David Cummings ; originally compiled by Eric Bloom	1953	Cambridge, Mass. : Harvard University Press
	9. The New Harvard dictionary of music	Don Michael Randel	1981,c1988	New York : Weidenfeld and Nicolson
	10. The Oxford dictionary of music	Michael Kennedy	1986	Cambridge, Mass. : Belknap Press of Harvard University Press
	11. Grove's dictionary of music and musicians	Eric Blom	1985	Oxford : Oxford University Press
	12. The new Grove dictionary of music and musicians	Stanley Sadie ; executive editor, John Tyrrell	1973, c1961	New York : St. Martin's Press
	13. The New Grove dictionary of music and musicians		2001	Oxford : Oxford University Press
	14. Dictionary of music terms and chords	Stanley Sadie	c1980	[London] : Macmillan
	15. A dictionary of musical quotations	Albert DeVito	c1995	Milwaukee, Wis. : Kenyon Publications
	16. Dictionary of musical terms	Derek Watson	1994	Ware [England] : Wordsworth Editions
	17. Dictionary of musical terms	Sir John Stainer and W.A. Barrett	1923	London : Novello
	18. Baker's biographical dictionary of musicians	Vincent J. Picerno	1976	Brooklyn : Haskell House

6. Kasetsart University	1. Dictionary of music	Theodore Baker	c1984	New York : Schirmer Books
	2. Dictionary of musical technology	Alan Isaacs, Elizabeth Martin	1986	New York : Facts on File
7. ABAC School of Music	1. Dictionary of music terms and chords	Tristram Cary	c1992	New York : Greenwood Press
8. Payap University	1. พจนานุกรมดนตรี = music dictionary	DeVito, Albert	c1995	กรุงเทพฯ : กรมวิชาการ กระทรวงศึกษาธิการ
	2. The Harvard dictionary of music	Marilyn Kornreich davis, เขียน ; พิชัย ปริญญาสุรณัฒ, แปล	2539	Cambridge, Ma. : The Belknap Press of Harvard University Press
	3. พจนานุกรม : ศัพท์ดนตรีสากล = Music dictionary	Don Michael Randel	c2003	กรุงเทพฯ : จัดจำหน่าย, ศูนย์หนังสือจุฬาลงกรณ์มหาวิทยาลัย
9. Khon Kaen University	1. Dictionary of music	วิระ ทรพรานนท์	2553	London : Collins
	2. Harvard dictionary of music	Sir Jack Westrup and F. Ll. Harrison	1988	Cambridge, Mass. : Belknap Press of Harvard Univ. Press
	3. The Oxford dictionary of music	W. Apel	c1972	Oxford : Oxford University Press
	4. The new Penguin dictionary of music	Michael Kennedy	1985	New York : Penguin
	5. Harper's dictionary of music	Arthur Jacobs	1977	New York , Barnes & Noble
	6. The concise Oxford dictionary of music	Carmela M. Ciampa and Kenneth L. Donlon	c1972	London , Oxford University Press

7. Harper's dictionary of music	Percy A. Scholes	1964	New York : Barnes & Noble Books
8. A Dictionary of music	Christine Ammer	1973, c1972	Harmondsworth : Penguin Books
9. Dictionary of music	Robert Illing	1950	London : Hamlyn
10. Dictionary of music	Alan Isaac and Elizabeth Martin	c1982	London : Collins
11. Dictionary of music	Jack Westrup, F.L.L. Harrison; revised by Conrad Wilson	c1988	London : Hamlyn
12. Harrap's illustrated dictionary of music & musicians	Alan Isaacs	1982, 1989	London : Harrap
13. Dictionary of music and musicians	Eric Blom	1966	New York : St. Martin Press
14. Grove's dictionary of music and musicians	Eric Blom	1954	London : Macmillan
15. Grove's dictionary of music and musicians : supplementary volume to the fifth edition	Eric Blom ; associate editor, Denis Stevens	1961	London : Macmillan
16. The Dictionary of music business terms	Tim Whitsett	1998	Emeryville, Calif. : MixBooks
17. Dictionary of music terms and chords	Albert DeVito	c1995	Milwaukee, Wis. : Kenyon Publications
18. Dictionary of musical technology	Tristram Cary	1992	New York : Greenwood Press
19. Dictionary of musical terms	Sir John Stainer and W.A. Barrett	1923	London : Novello
20. A dictionary of musical themes	Harold Barlow, Sam Morgenstern	1983	London : Faber and Faber

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

	21. A Dictionary of musicians : from the earliest times	John. S. Sainsbury ; with an introduction by Henry George Farmer	c1966	New York : Da Capo Press
10. Burapha University	1. Harper's dictionary of music	Christine Ammer	1973, c1972	New York : Barnes & Noble Books



This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

## APPENDIX C

## THE EXAMPLE OF GUITAR LESSONS

(1) Magazine

PLAY: METAL

ON THE CD  TRACKS 17-18




# Yngwie Malmsteen



Reacquaint yourself with the amazing tone and ridiculous chops of the mighty Malmsteen. Steve Allsworth unleashes... everything!

## ABILITY RATING

●●●●● Advanced

KEY: F#m minor  Sweep picking  
 TEMPO: 168 bpm  Alternate picking  
 CD: TRACKS 17-18  Legato technique

THERE AREN'T MANY GUITARISTS that divide opinion as much as Yngwie J Malmsteen, born Lars Johann Yngwie Lannerback in Sweden, 1963. One thing's for sure: there's no doubting that Yngwie possesses one of the finest techniques together with an unparalleled tone that knocks most of today's shredders into oblivion. When he burst onto the scene in the early '80s as a prodigious teenager, he was taken under the wing of Mike Varney who founded Shrapnel Records, the infamous shredding label. After short stints with Steeler and Alcatraz, he went on to form his own band Rising Force with his friend and keys player Jens Johansson. The

## TECHNIQUE FOCUS

### HARMONIC MINOR THEORY

Before ploughing through the technique, it's a good idea to have some understanding of harmonic minor and diminished theory and how it works in the context of this track. Based around the F# harmonic minor scale (F#, G#, A, B, C#, D, E), our pool of unusual 7th chords is F#m/maj7, G#m7b5, Amaj7#5, Bm7, C#7, Dmaj7 and E#dim. Yngwie tends to stick to basic triads or power chords, but the underlying harmony is the same. The sweep-picked diminished 7th arpeggios are generally referred to the E#dim chord, but since every note in a diminished triad or 7th chord can be considered the root (the chord repeats itself when transposed up or down a minor 3rd) (G#dim, Bdim and Ddim and their power chord eq. valents also work.

subsequent eponymous debut Yngwie Malmsteen's Rising Force (1984) was a mostly instrumental album that quickly established his technique as a new benchmark for aspiring metal guitarists.

Initially inspired by Hendrix at the age of seven and his favourite band Deep Purple, Malmsteen quickly became obsessed with honing his technique. Ritchie Blackmore had a

**“It was his love of two disparate styles that became the basis of his fusion of classical and metal; ‘neoclassical’, as it came to be known.”**

particularly important role, in that his classically-inspired use of minor scales over blues and hard rock chord progressions led the young Yngwie towards classical music. His sister introduced him to Vivaldi, Mozart, Bach and Beethoven and he soon became infatuated with violinist Niccolò Paganini. It was this love of two disparate styles that was to become the basis of his fusion of classical and metal, or ‘neoclassical’ as it came to be known.

Despite early success Yngwie also had his fair share of tragedy, including a near fatal car crash in 1987 that put him in a coma and severely damaged the nerves in his picking hand. After the successful follow-up albums *Marching Out* (1985), *Trilogy* (1986) and *Odyssey* (1988), a waning interest in shred during the '90s saw Yngwie temporarily fall out of favour.

The debut album featured this month's track *Far Beyond The Sun*, along with other standout tracks *Black Star* (GT M# 17-18), *Electricus*, *Dream Suite* and *Evil Eye*. In this Yngwie demonstrates a mountain of trademark licks.

Yngwie's arsenal is so much more than sweep-picked arpeggios and harmonic minor however, trills and other ornaments, descending and ascending full-note scale sequences, three-notes-per-string ad-off pedal note licks, harmonic minor and Phrygian dominant scale runs, and diminished 7th arpeggios are just some of the tools he frequently uses. Our featured track has a Nordic baroque-meets-gothic metal theme with mainly triplet-based rhythms and a defined structure.

Traditional themes and exercises, as well as improvised jazz style ‘tracing tours’ mean that it isn't just a case of blazing away with the appropriate scale. Like the original, the GT version is in Eb tuning (F# Ab Db Gb Bb Eb) so make sure you tune down a semitone! ■

## GET THE TONE



On this track, Yngwie uses a combination of sweep picking and alternate picking to create a fast, melodic line. The sweep-picked diminished 7th arpeggios are generally referred to the E#dim chord, but since every note in a diminished triad or 7th chord can be considered the root (the chord repeats itself when transposed up or down a minor 3rd) (G#dim, Bdim and Ddim and their power chord eq. valents also work.

**TRACK RECORD:** With so many albums available a compilation is a good bet. The Yngwie Malmsteen Collection (1991) charts his early career while *The Best Of: 1980-1989* (2000) and *High Impact* (2008) showcase modern material. Or try *Concerto Suite For Electric Guitar & Orchestra in E Flat Minor* (2002), which features flawless renditions of his best songs with full orchestra as well as new symphonic compositions. ▶▶

30 Guitar Techniques Co

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.



# Modes

This section is on the modes. These little guys can get pretty confusing, so read carefully. In a nutshell, a mode is just an inversion of the Major scale (an inversion is the rearranging of the order of notes). Below are the notes of the C Major scale and the mode names corresponding with each scale degree:

C	D	E	F	G	A	B	C
Ionian	Dorian	Phrygian	Lydian	Mixolydian	Aeolian	Locrian	Ionian

*Memorize the order of these modes and their names.*

An easy way to remember whether a particular mode works over a major or minor chord is to look at the third scale degree in the formula. If the third note is flatted (a flat sign before it), then the mode works over a minor chord. If the third note is a natural (no flat sign before it), then the mode works over a major chord.

Since Ionian is the first mode and starts and ends on the first note of the Major scale, the Ionian mode is simply just the Major scale. The second mode is the Dorian and starts on the second note in the Major scale. This means you play the C major scale beginning on 'D' and ending on 'D'. The Dorian mode looks like this:

	D	E	F	G	A	B	C	D
Formula -	1	2	b3	4	5	6	b7	8

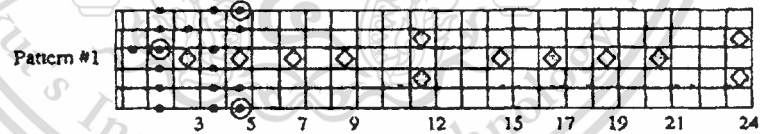
The third mode is Phrygian and starts on the third note in the Major scale. This means you play the C Major scale beginning on 'E' and ending on 'E'. The E Phrygian mode looks like this:

	E	F	G	A	B	C	D	E
Formula -	1	b2	b3	4	5	b6	b7	8

The same process is used to complete the rest of the modes. Notice that there are seven different modes, one for each note of the Major scale.

## Ionian Mode

	A	B	C#	D	E	F#	G#	A
Formula -	1	2	3	4	5	6	7	8



Source : Monster Scales and Modes

## APPENDIX D

## WORD FREQUENCY LISTS

N	Word	Freq.	%	Texts	%
1	#	197426.00		140.00	98.59
2	THE	55214.00		139.00	97.89
3	I	52844.00		123.00	86.62
4	A	32138.00		137.00	96.48
5	AND	22677.00		137.00	96.48
6	TO	21073.00		138.00	97.18
7	OF	18896.00		137.00	96.48
8	IN	16817.00		138.00	97.18
9	L	15095.00		48.00	33.80
10	YOU	13313.00		131.00	92.25
11	E	11860.00		112.00	78.87
12	IS	11801.00		136.00	95.77
13	H	10403.00		44.00	30.99
14	ON	7896.00		134.00	94.37
15	II	7849.00		48.00	33.80
16	IT	7818.00		131.00	92.25
17	F	7751.00		81.00	57.04
18	G	7528.00		97.00	68.31
19	M	7441.00		51.00	35.92
20	T	7398.00		49.00	34.51
21	GUITAR	7180.00		133.00	93.66
22	THAT	7147.00		134.00	94.37
23	C	7046.00		91.00	64.08
24	S	7019.00		52.00	36.62
25	AS	6888.00		132.00	92.96
26	WITH	6865.00		134.00	94.37
27	FOR	6695.00		136.00	95.77
28	V	6689.00		48.00	33.80
29	THIS	6615.00		134.00	94.37
30	D	5791.00		93.00	65.49
31	CHORD	5456.00		87.00	61.27
32	ARE	5248.00		126.00	88.73
33	J	5180.00		44.00	30.99

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

34	B	5035.00	0.37	105.00	73.94
35	W	5023.00	0.37	41.00	28.87
36	OR	4958.00	0.37	122.00	85.92
37	YOUR	4874.00	0.36	127.00	89.44
38	R	4857.00	0.36	48.00	33.80
39	O	4838.00	0.36	47.00	33.10
40	MAJOR	4628.00	0.34	97.00	68.31
41	BLUES	4627.00	0.34	59.00	41.55
42	Q	4540.00	0.33	44.00	30.99
43	BE	4388.00	0.32	126.00	88.73
44	SCALE	4361.00	0.32	93.00	65.49
45	MINOR	4324.00	0.32	99.00	69.72
46	CAN	3917.00	0.29	126.00	88.73
47	BY	3895.00	0.29	138.00	97.18
48	STRING	3832.00	0.28	110.00	77.46
49	CHORDS	3809.00	0.28	73.00	51.41
50	U	3788.00	0.28	44.00	30.99
51	NOTE	3767.00	0.28	118.00	83.10
52	LL	3730.00	0.28	44.00	30.99
53	N	3704.00	0.27	45.00	31.69
54	AN	3615.00	0.27	122.00	85.92
55	NOTES	3600.00	0.27	112.00	78.87
56	AT	3524.00	0.26	136.00	95.77
57	ALL	3456.00	0.25	120.00	84.51
58	X	3433.00	0.25	45.00	31.69
59	PLAY	3380.00	0.25	121.00	85.21
60	FROM	3315.00	0.24	122.00	85.92
61	ONE	3268.00	0.24	123.00	86.62
62	IF	3041.00	0.22	107.00	75.35
63	P	2942.00	0.22	44.00	30.99
64	BUT	2885.00	0.21	123.00	86.62
65	UP	2799.00	0.21	126.00	88.73
66	HAVE	2713.00	0.20	101.00	71.13
67	EXAMPLE	2703.00	0.20	98.00	69.01
68	MUSIC	2630.00	0.19	90.00	63.38
69	WILL	2601.00	0.19	105.00	73.94
70	WE	2491.00	0.18	82.00	57.75
71	Z	2450.00	0.18	43.00	30.28

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

72	III	2422.00	0.18	40.00	28.17
73	MORE	2420.00	0.18	112.00	78.87
74	PLAYING	2377.00	0.18	120.00	84.51
75	SO	2325.00	0.17	115.00	80.99
76	TWO	2217.00	0.16	104.00	73.24
77	NOT	2124.00	0.16	99.00	69.72
78	WHEN	1993.00	0.15	116.00	81.69
79	THESE	1942.00	0.14	112.00	78.87
80	MY	1923.00	0.14	102.00	71.83
81	OUT	1902.00	0.14	111.00	78.17
82	USE	1869.00	0.14	112.00	78.87
83	LIKE	1792.00	0.13	120.00	84.51
84	SOUND	1768.00	0.13	93.00	65.49
85	FIGURE	1742.00	0.13	83.00	58.45
86	SOME	1737.00	0.13	114.00	80.28
87	HAND	1722.00	0.13	96.00	67.61
88	ROCK	1714.00	0.13	76.00	53.52
89	STRINGS	1705.00	0.13	82.00	57.75
90	AM	1679.00	0.12	54.00	38.03
91	TIME	1670.00	0.12	103.00	72.54
92	WHICH	1644.00	0.12	106.00	74.65
93	JUST	1636.00	0.12	97.00	68.31
94	PART	1635.00	0.12	107.00	75.35
95	WAS	1627.00	0.12	88.00	61.97
96	BOOK	1616.00	0.12	39.00	27.46
97	KEY	1605.00	0.12	83.00	58.45
98	FIRST	1604.00	0.12	113.00	79.58
99	HOW	1588.00	0.12	115.00	80.99
100	THEY	1581.00	0.12	75.00	52.82
101	ALSO	1572.00	0.12	108.00	76.06
102	DOWN	1559.00	0.11	94.00	66.20
103	SEE	1555.00	0.11	81.00	57.04
104	OTHER	1538.00	0.11	90.00	63.38
105	ME	1517.00	0.11	79.00	55.63
106	FRET	1508.00	0.11	75.00	52.82
107	NO	1508.00	0.11	84.00	59.15
108	THERE	1499.00	0.11	93.00	65.49
109	EACH	1498.00	0.11	99.00	69.72

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

110	PENTATONIC	1496.00	0.11	64.00	45.07
111	DO	1489.00	0.11	94.00	66.20
112	K	1488.00	0.11	48.00	33.80
113	WHAT	1472.00	0.11	101.00	71.13
114	BAR	1452.00	0.11	64.00	45.07
115	SAME	1425.00	0.11	96.00	67.61
116	THEN	1412.00	0.10	102.00	71.83
117	SCALES	1384.00	0.10	68.00	47.89
118	GET	1376.00	0.10	98.00	69.01
119	OVER	1343.00	0.10	95.00	66.90
120	ILL	1329.00	0.10	39.00	27.46
121	CHAPTER	1298.00	0.10	18.00	12.68
122	WAY	1297.00	0.10	100.00	70.42
123	POSITION	1294.00	0.10	73.00	51.41
124	TRIAD	1281.00	0.09	36.00	25.35
125	THEM	1268.00	0.09	90.00	63.38
126	Y	1262.00	0.09	44.00	30.99
127	HAS	1249.00	0.09	90.00	63.38
128	HERE	1231.00	0.09	86.00	60.56
129	ONLY	1214.00	0.09	95.00	66.90
130	INTO	1206.00	0.09	102.00	71.83
131	HE	1200.00	0.09	71.00	50.00
132	BASS	1197.00	0.09	43.00	30.28
133	LESSON	1191.00	0.09	59.00	41.55
134	USED	1177.00	0.09	88.00	61.97
135	PRACTICE	1170.00	0.09	79.00	55.63
136	EM	1168.00	0.09	63.00	44.37
137	USING	1160.00	0.09	112.00	78.87
138	HIS	1144.00	0.08	82.00	57.75
139	DIFFERENT	1141.00	0.08	91.00	64.08
140	FINGER	1127.00	0.08	77.00	54.23
141	THAN	1122.00	0.08	83.00	58.45
142	ANY	1116.00	0.08	91.00	64.08
143	PATTERN	1100.00	0.08	83.00	58.45
144	MAKE	1096.00	0.08	89.00	62.68
145	PLAYED	1083.00	0.08	91.00	64.08
146	RIGHT	1066.00	0.08	80.00	56.34
147	THREE	1060.00	0.08	92.00	64.79

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

148	NEW	1056.00	0.08	75.00	52.82
149	NOW	1042.00	0.08	82.00	57.75
150	ROOT	1042.00	0.08	57.00	40.14
151	MOST	1040.00	0.08	85.00	59.86
152	BECAUSE	1022.00	0.08	80.00	56.34
153	RHYTHM	999.00	0.07	72.00	50.70
154	GO	995.00	0.07	88.00	61.97
155	SONG	988.00	0.07	52.00	36.62
156	MAY	986.00	0.07	75.00	52.82
157	KNOW	979.00	0.07	63.00	44.37
158	STEP	957.00	0.07	69.00	48.59
159	IV	933.00	0.07	42.00	29.58
160	THEIR	928.00	0.07	74.00	52.11
161	TECHNIQUE	926.00	0.07	75.00	52.82
162	ABOUT	924.00	0.07	81.00	57.04
163	FORM	924.00	0.07	51.00	35.92
164	BETWEEN	919.00	0.07	74.00	52.11
165	MANY	918.00	0.07	77.00	54.23
166	PROGRESSION	916.00	0.07	46.00	32.39
167	OPEN	915.00	0.07	69.00	48.59
168	PICKING	913.00	0.07	74.00	52.11
169	WELL	895.00	0.07	89.00	62.68
170	LICKS	877.00	0.06	71.00	50.00
171	MODE	877.00	0.06	49.00	34.51
172	WHERE	877.00	0.06	71.00	50.00
173	ARPEGGIO	850.00	0.06	53.00	37.32
174	HARMONIC	848.00	0.06	64.00	45.07
175	RE	845.00	0.06	39.00	27.46
176	ARPEGGIOS	835.00	0.06	64.00	45.07
177	MELODY	830.00	0.06	49.00	34.51
178	TONE	818.00	0.06	63.00	44.37
179	GOOD	816.00	0.06	74.00	52.11
180	TRY	815.00	0.06	80.00	56.34
181	ITS	812.00	0.06	69.00	48.59
182	LEFT	805.00	0.06	77.00	54.23
183	SHOULD	805.00	0.06	73.00	51.41
184	BACK	804.00	0.06	74.00	52.11
185	MM	799.00	0.06	36.00	25.35

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

186	NECK	795.00	0.06	63.00	44.37
187	SECOND	790.00	0.06	72.00	50.70
188	WOULD	789.00	0.06	87.00	61.27
189	THROUGH	777.00	0.06	90.00	63.38
190	VERY	775.00	0.06	79.00	55.63
191	PICK	770.00	0.06	72.00	50.70
192	FOUR	762.00	0.06	76.00	53.52
193	IT'S	729.00	0.05	70.00	49.30
194	SOLO	720.00	0.05	64.00	45.07
195	LI	719.00	0.05	37.00	26.06
196	HALF	714.00	0.05	73.00	51.41
197	LICK	712.00	0.05	63.00	44.37
198	RIFF	711.00	0.05	48.00	33.80
199	ANOTHER	708.00	0.05	84.00	59.15
200	EVEN	708.00	0.05	65.00	45.77
201	EVERY	701.00	0.05	75.00	52.82
202	WHOLE	700.00	0.05	81.00	57.04
203	WHILE	697.00	0.05	96.00	67.61
204	CHORUS	692.00	0.05	15.00	10.56
205	ALTERED	691.00	0.05	35.00	24.65
206	SONGS	690.00	0.05	36.00	25.35
207	IL	686.00	0.05	38.00	26.76
208	SECTION	681.00	0.05	55.00	38.73
209	SUCH	680.00	0.05	68.00	47.89
210	MELODIC	679.00	0.05	57.00	40.14
211	WORK	677.00	0.05	85.00	59.86
212	POWER	672.00	0.05	44.00	30.99
213	TONES	668.00	0.05	50.00	35.21
214	DIMINISHED	664.00	0.05	42.00	29.58
215	LEAD	662.00	0.05	55.00	38.73
216	BOTH	659.00	0.05	83.00	58.45
217	STYLE	651.00	0.05	78.00	54.93
218	WANT	650.00	0.05	65.00	45.77
219	NEED	648.00	0.05	58.00	40.85
220	WWW	647.00	0.05	41.00	28.87
221	TRACK	644.00	0.05	41.00	28.87
222	METAL	638.00	0.05	52.00	36.62
223	TAKE	633.00	0.05	82.00	57.75

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

224	SOUNDS	630.00	0.05	78.00	54.93
225	THIRD	618.00	0.05	65.00	45.77
226	START	617.00	0.05	81.00	57.04
227	LINE	611.00	0.05	62.00	43.66
228	LEARN	608.00	0.04	73.00	51.41
229	EXERCISE	601.00	0.04	42.00	29.58
230	EXAMPLES	598.00	0.04	66.00	46.48
231	GREAT	596.00	0.04	90.00	63.38
232	NEXT	595.00	0.04	82.00	57.75
233	MUCH	588.00	0.04	69.00	48.59
234	EB	584.00	0.04	38.00	26.76
235	TOO	583.00	0.04	56.00	39.44
236	EXERCISES	580.00	0.04	47.00	33.10
237	MUSICAL	578.00	0.04	71.00	50.00
238	FINGERS	575.00	0.04	62.00	43.66
239	FINGERING	574.00	0.04	39.00	27.46
240	IIIII	571.00	0.04	26.00	18.31
241	OFTEN	567.00	0.04	60.00	42.25
242	BEEN	566.00	0.04	63.00	44.37
243	DON'T	564.00	0.04	55.00	38.73
244	IIII	560.00	0.04	28.00	19.72
245	LITTLE	557.00	0.04	66.00	46.48
246	PROGRESSIONS	557.00	0.04	32.00	22.54
247	SEVENTH	557.00	0.04	53.00	37.32
248	VERSE	557.00	0.04	16.00	11.27
249	FEEL	555.00	0.04	73.00	51.41
250	CLASSICAL	553.00	0.04	37.00	26.06
251	THEORY	551.00	0.04	42.00	29.58
252	REALLY	549.00	0.04	78.00	54.93
253	VI	549.00	0.04	40.00	28.17
254	JAZZ	548.00	0.04	49.00	34.51
255	BELOW	547.00	0.04	57.00	40.14
256	FIND	547.00	0.04	58.00	40.85
257	PITCH	542.00	0.04	37.00	26.06
258	BEFORE	539.00	0.04	72.00	50.70
259	LOOK	538.00	0.04	65.00	45.77
260	CD	529.00	0.04	44.00	30.99
261	FL	529.00	0.04	33.00	23.24

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

262	MOVE	527.00	0.04	70.00	49.30
263	OWN	526.00	0.04	78.00	54.93
264	IMPORTANT	523.00	0.04	66.00	46.48
265	COM	519.00	0.04	58.00	40.85
266	FORMS	518.00	0.04	34.00	23.94
267	COME	517.00	0.04	63.00	44.37
268	HEAR	517.00	0.04	68.00	47.89
269	LET	517.00	0.04	56.00	39.44
270	OFF	513.00	0.04	65.00	45.77
271	DOMINANT	511.00	0.04	47.00	33.10
272	BASIC	509.00	0.04	52.00	36.62
273	LONG	508.00	0.04	48.00	33.80
274	THOSE	508.00	0.04	67.00	47.18
275	CALLED	507.00	0.04	43.00	30.28
276	ACOUSTIC	506.00	0.04	27.00	19.01
277	DON	506.00	0.04	24.00	16.90
278	ELECTRIC	505.00	0.04	29.00	20.42
279	FOLLOWING	504.00	0.04	55.00	38.73
280	AFTER	503.00	0.04	63.00	44.37
281	COMMON	502.00	0.04	52.00	36.62
282	WITHOUT	502.00	0.04	68.00	47.89
283	BEND	500.00	0.04	43.00	30.28
284	BB	498.00	0.04	37.00	26.06
285	WERE	496.00	0.04	57.00	40.14
286	PATTERNS	494.00	0.04	61.00	42.96
287	END	493.00	0.04	72.00	50.70
288	ABOVE	486.00	0.04	57.00	40.14
289	WHO	481.00	0.04	62.00	43.66
290	FULL	476.00	0.04	44.00	30.99
291	LOVE	475.00	0.04	50.00	35.21
292	SHAPES	473.00	0.03	45.00	31.69
293	TUNING	473.00	0.03	26.00	18.31
294	LEARNING	472.00	0.03	47.00	33.10
295	ALWAYS	470.00	0.03	72.00	50.70
296	AGAIN	469.00	0.03	77.00	54.23
297	COULD	467.00	0.03	52.00	36.62
298	BEST	463.00	0.03	62.00	43.66
299	NOTICE	462.00	0.03	73.00	51.41

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

300	GUJARISTS	461.00	0.03	73.00	51.41
301	BASED	455.00	0.03	58.00	40.85
302	OCTAVE	455.00	0.03	52.00	36.62
303	KEEP	454.00	0.03	65.00	45.77
304	AROUND	453.00	0.03	68.00	47.89
305	GIVE	451.00	0.03	64.00	45.07
306	KEYS	451.00	0.03	48.00	33.80
307	LESSONS	451.00	0.03	56.00	39.44
308	DB	448.00	0.03	37.00	26.06
309	FIVE	448.00	0.03	57.00	40.14
310	LE	448.00	0.03	33.00	23.24
311	PAGE	446.00	0.03	42.00	29.58
312	DM	444.00	0.03	42.00	29.58
313	GOT	444.00	0.03	48.00	33.80
314	SHAPE	444.00	0.03	46.00	32.39
315	TI	443.00	0.03	35.00	24.65
316	EIGHTH	442.00	0.03	37.00	26.06
317	SIMPLE	441.00	0.03	70.00	49.30
318	MODES	437.00	0.03	37.00	26.06
319	SLIDE	437.00	0.03	39.00	27.46
320	HAD	436.00	0.03	52.00	36.62
321	NATURAL	435.00	0.03	54.00	38.03
322	AB	434.00	0.03	36.00	25.35
323	BEAT	432.00	0.03	47.00	33.10
324	CHANGE	429.00	0.03	53.00	37.32
325	YOU'RE	429.00	0.03	53.00	37.32
326	MADE	428.00	0.03	49.00	34.51
327	MUST	428.00	0.03	44.00	30.99
328	ORDER	428.00	0.03	49.00	34.51
329	SPEED	424.00	0.03	59.00	41.55
330	HARD	422.00	0.03	55.00	38.73
331	PLAYERS	422.00	0.03	57.00	40.14
332	TAPPING	422.00	0.03	42.00	29.58
333	GM	421.00	0.03	36.00	25.35
334	GUITARS	421.00	0.03	31.00	21.83
335	RIFFS	421.00	0.03	39.00	27.46
336	HELP	419.00	0.03	65.00	45.77
337	FRETS	418.00	0.03	45.00	31.69

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

338	TECHNIQUES	418.00	0.03	54.00	38.03
339	NAME	417.00	0.03	38.00	26.76
340	SHOWS	417.00	0.03	57.00	40.14
341	SHUFFLE	414.00	0.03	11.00	7.75
342	HIGH	411.00	0.03	67.00	47.18
343	CREATE	410.00	0.03	74.00	52.11
344	ONCE	410.00	0.03	72.00	50.70
345	OI	407.00	0.03	31.00	21.83
346	HEAVY	404.00	0.03	44.00	30.99
347	HI	404.00	0.03	32.00	22.54
348	SINGLE	404.00	0.03	55.00	38.73
349	FREE	399.00	0.03	36.00	25.35
350	LA	398.00	0.03	40.00	28.17
351	LOW	398.00	0.03	51.00	35.92
352	SAY	398.00	0.03	51.00	35.92
353	WRITTEN	398.00	0.03	53.00	37.32
354	EL	396.00	0.03	37.00	26.06
355	GB	396.00	0.03	26.00	18.31
356	USES	395.00	0.03	55.00	38.73
357	I'I	394.00	0.03	16.00	11.27
358	BOX	389.00	0.03	24.00	16.90
359	GUITARIST	389.00	0.03	67.00	47.18
360	PIECE	389.00	0.03	45.00	31.69
361	EAR	387.00	0.03	52.00	36.62
362	MI	387.00	0.03	35.00	24.65
363	FRETBOARD	386.00	0.03	67.00	47.18
364	NEVER	384.00	0.03	44.00	30.99
365	SURE	384.00	0.03	78.00	54.93
366	WORLD	384.00	0.03	79.00	55.63
367	FIFTH	381.00	0.03	50.00	35.21
368	THINK	380.00	0.03	58.00	40.85
369	DORIAN	379.00	0.03	40.00	28.17
370	EASY	378.00	0.03	61.00	42.96
371	CHROMATIC	377.00	0.03	48.00	33.80
372	TOP	376.00	0.03	49.00	34.51
373	ETC	375.00	0.03	52.00	36.62
374	HARMONY	375.00	0.03	45.00	31.69
375	STILL	375.00	0.03	58.00	40.85

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

376	INTERVALS	374.00	0.03	37.00	26.06
377	FEW	373.00	0.03	62.00	43.66
378	TOGETHER	373.00	0.03	54.00	38.03
379	STEPS	372.00	0.03	37.00	26.06
380	INSTEAD	370.00	0.03	64.00	45.07
381	PLAYER	370.00	0.03	48.00	33.80
382	LOT	368.00	0.03	64.00	45.07
383	NUMBER	367.00	0.03	48.00	33.80
384	SET	367.00	0.03	57.00	40.14
385	THOUGH	365.00	0.03	64.00	45.07
386	GOING	364.00	0.03	58.00	40.85
387	PLACE	364.00	0.03	48.00	33.80
388	RST	364.00	0.03	32.00	22.54
389	MEANS	363.00	0.03	53.00	37.32
390	STANDARD	363.00	0.03	37.00	26.06
391	BETTER	362.00	0.03	54.00	38.03
392	PULL	362.00	0.03	55.00	38.73
393	BM	360.00	0.03	34.00	23.94
394	HOWEVER	360.00	0.03	45.00	31.69
395	USUALLY	356.00	0.03	50.00	35.21
396	COURSE	354.00	0.03	50.00	35.21
397	POSITIONS	354.00	0.03	38.00	26.76
398	US	353.00	0.03	57.00	40.14
399	LOWER	352.00	0.03	45.00	31.69
400	VE	352.00	0.03	29.00	20.42
401	ALONG	350.00	0.03	45.00	31.69
402	DE	350.00	0.03	25.00	17.61
403	REMEMBER	350.00	0.03	60.00	42.25
404	MEASURE	349.00	0.03	33.00	23.24
405	SHOWN	349.00	0.03	56.00	39.44
406	VIBRATO	349.00	0.03	26.00	18.31
407	AWAY	348.00	0.03	45.00	31.69
408	INTERVAL	347.00	0.03	38.00	26.76
409	CHANGES	346.00	0.03	47.00	33.10
410	DAY	344.00	0.03	55.00	38.73
411	OUR	344.00	0.03	57.00	40.14
412	POINT	343.00	0.03	62.00	43.66
413	LAST	342.00	0.03	72.00	50.70

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

414	THING	342.00	0.03	60.00	42.25
415	VERSION	341.00	0.03	40.00	28.17
416	YOU'LL	341.00	0.03	51.00	35.92
417	AL	340.00	0.03	44.00	30.99
418	HIGHER	339.00	0.02	53.00	37.32
419	SOMETHING	335.00	0.02	55.00	38.73
420	ADD	333.00	0.02	53.00	37.32
421	HARMONICS	333.00	0.02	27.00	19.01
422	BRIDGE	332.00	0.02	32.00	22.54
423	BL	328.00	0.02	34.00	23.94
424	FOURTH	328.00	0.02	48.00	33.80
425	LT	328.00	0.02	31.00	21.83
426	EITHER	327.00	0.02	55.00	38.73
427	BOOKS	326.00	0.02	30.00	21.13
428	PER	326.00	0.02	45.00	31.69
429	PIECES	323.00	0.02	25.00	17.61
430	AMP	322.00	0.02	15.00	10.56
431	NOTATION	322.00	0.02	30.00	21.13
432	SLOW	322.00	0.02	46.00	32.39
433	UNTIL	322.00	0.02	58.00	40.85
434	MASTER	320.00	0.02	54.00	38.03
435	FLAT	319.00	0.02	48.00	33.80
436	THINGS	319.00	0.02	59.00	41.55
437	LN	316.00	0.02	33.00	23.24
438	BEING	315.00	0.02	62.00	43.66
439	LYDIAN	315.00	0.02	31.00	21.83
440	FOUND	314.00	0.02	55.00	38.73
441	TUNE	314.00	0.02	37.00	26.06
442	ABLE	313.00	0.02	54.00	38.03
443	FR	312.00	0.02	27.00	19.01
444	IE	312.00	0.02	29.00	20.42
445	TIMES	311.00	0.02	52.00	36.62
446	SIMPLY	309.00	0.02	56.00	39.44
447	LISTEN	308.00	0.02	49.00	34.51
448	DOES	306.00	0.02	40.00	28.17
449	INVERSION	305.00	0.02	10.00	7.04
450	DOUBLE	303.00	0.02	41.00	28.87
451	INSTRUMENT	303.00	0.02	35.00	24.65

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

452	SINCE	301.00	0.02	58.00	40.85
453	SIX	301.00	0.02	57.00	40.14
454	ALTERNATE	300.00	0.02	53.00	37.32
455	MAKES	300.00	0.02	54.00	38.03
456	LLL	299.00	0.02	28.00	19.72
457	BARRE	298.00	0.02	25.00	17.61
458	EASIER	298.00	0.02	49.00	34.51
459	MAN	297.00	0.02	32.00	22.54
460	I'M	296.00	0.02	43.00	30.28
461	HM	295.00	0.02	28.00	19.72
462	SOMETIMES	295.00	0.02	46.00	32.39
463	GRADE	294.00	0.02	3.00	2.11
464	POPULAR	294.00	0.02	39.00	27.46
465	REST	294.00	0.02	45.00	31.69
466	POSSIBLE	293.00	0.02	50.00	35.21
467	APPROACH	291.00	0.02	62.00	43.66
468	SHE	291.00	0.02	11.00	7.75
469	BARS	290.00	0.02	37.00	26.06
470	DIAGRAM	290.00	0.02	18.00	12.68
471	WHY	290.00	0.02	45.00	31.69
472	EVERYTHING	289.00	0.02	36.00	25.35
473	FAST	289.00	0.02	57.00	40.14
474	STARTING	287.00	0.02	46.00	32.39
475	IR	286.00	0.02	25.00	17.61
476	HAMMER	285.00	0.02	51.00	35.92
477	JOHN	285.00	0.02	49.00	34.51
478	SOUNDING	285.00	0.02	62.00	43.66
479	LINES	284.00	0.02	55.00	38.73
480	THUMB	284.00	0.02	34.00	23.94
481	YOURSELF	284.00	0.02	56.00	39.44
482	ML	281.00	0.02	33.00	23.24
483	HOME	280.00	0.02	42.00	29.58
484	RM	280.00	0.02	29.00	20.42
485	SOLOS	280.00	0.02	46.00	32.39
486	MAIN	278.00	0.02	39.00	27.46
487	MELODIES	278.00	0.02	34.00	23.94
488	DESCENDING	277.00	0.02	45.00	31.69
489	OH	277.00	0.02	19.00	13.38

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

490	QUARTER	276.00	0.02	38.00	26.76
491	SECRETS	275.00	0.02	11.00	7.75
492	RING	274.00	0.02	47.00	33.10
493	BAND	273.00	0.02	50.00	35.21
494	TURN	272.00	0.02	33.00	23.24
495	DIATONIC	271.00	0.02	35.00	24.65
496	OLAV	271.00	0.02	2.00	1.41
497	SIXTH	271.00	0.02	39.00	27.46
498	PUT	270.00	0.02	46.00	32.39
499	PAGES	268.00	0.02	20.00	14.08
500	TURNAROUND	268.00	0.02	6.00	4.23



## APPENDIX E

### COMPOUNDS AND MULTIWORD TERMS IN THE RGL CORPUS

No.	Word	Collocations	Frequency
1.	GUITAR (Freq. 7,180)	BLUES GUITAR BLUES GUITAR LESSON ROCK GUITER CLASSICAL GUITAR ELECTRIC GUITAR ACOUSTIC GUITAR GUITAR CHORD RHYTHM GUITAR GUITAR TECHNIQUE	1,053 434 278 216 176 135 82 60 50
2.	CHORD (5,456)	CHORD PROGRESSION CHORD SHAPE POWER CHORD MAJOR CHORD GUITAR CHORD CHORD CHANGES MINOR CHORD GUITAR CHORD SECRETS BARRE CHOR	369 172 92 86 82 77 74 63 57
3.	MAJOR (4,628)	MAJOR SCALE C MAJOR SCALE MAJOR TRIAD G MAJOR MAJOR PENTATONIC D MAJOR MAJOR CHORD E MAJOR F MAJOR MAJOR THIRD MAJOR APPEGIO	1,317 569 531 245 96 95 86 78 73 56 55
4.	BLUES (4,627)	BLUES GUITAR BAR BLUES BLUES GUITAR LESSON	1,107 540 434

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

		BLUES SCALE	118
		TRITONE BLUES	77
		BLUES PROGRESSION	50
5.	SCALE (4,361)	MAJOR SCALE	904
		PENTATONIC SCALE	449
		MINOR SCALE	341
		SCALE PATTERN	136
		MINOR PENTATONIC SCALE	127
		MINOR SCALE PATTERN	66
		C MAJOR SCALE	65
		MELODIC MINOR SCALE	63
		HARMONIC MINOR SCALE	60
		CHROMATIC SCALE	55
6.	MINOR (4,324)	MINOR SCALE	449
		MINOR PENTATONIC	395
		A MINOR	394
		HARMONIC MINOR	160
		MELODIC MINOR	143
		MINOR TRIAD	143
		MINOR 7 th	133
		MINOR PENTATONIC SCALE	127
		E MINOR	113
		D MINOR	93
		MINOR CHORD	74
		A MINOR PENTATONIC	67
		G MINOR	66
		MINOR SCALE PATTERN	66
		MELODIC MINOR SCALE	63
		C MINOR	60
		HARMONIC MINOR SCALE	60
		B MINOR	55
		MINOR CHORD	55
		MINOR THIRD	50
7.	STRING (3,832)	E STRING	119
			64
			56
8.	CHORDS	POWER CHORDS	175

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

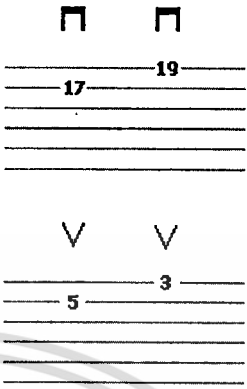
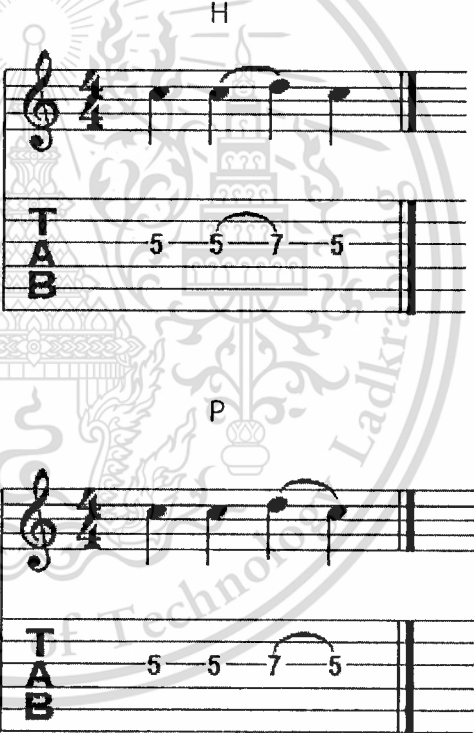
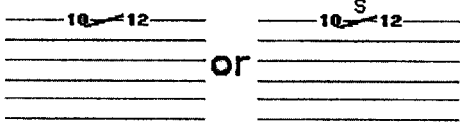
	(3,809)	BARRE CHORDS SEVENTH CHORDS MINOR CHORDS	69 57 55
9.	NOTE (3,767)	EIGHT NOTE ROOT NOTE NOTE TRIPLET	114 113 70
10.	NOTES (3,600)	EIGHT NOTES QUARTER NOTES SINGLE NOTES	123 55 51



This material is reserved for educational use only, not allowed for commercial use.

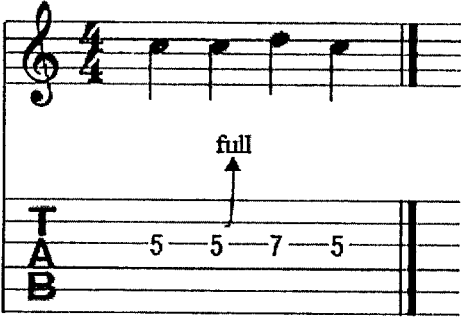

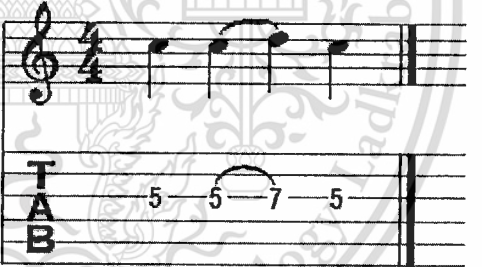
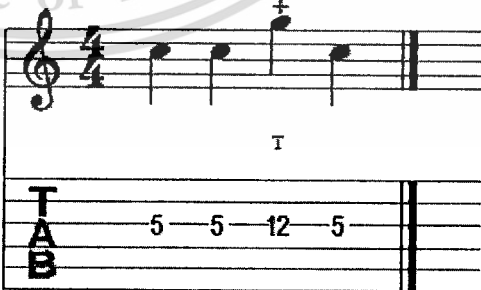
Forbidden to modify the content, and cite the document when use.

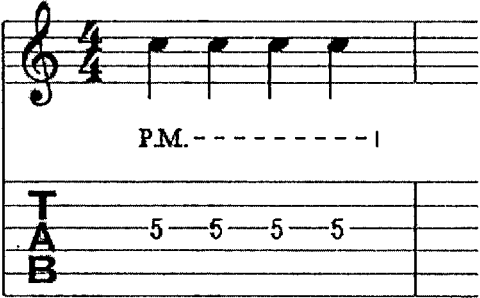

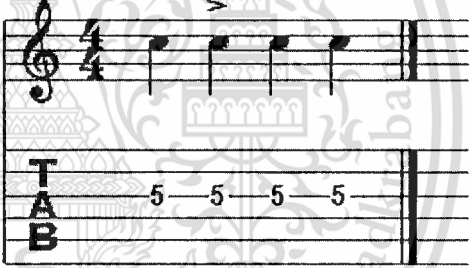

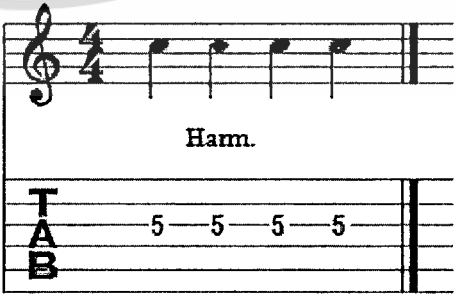
## APPENDIX F SYMBOLS FOUND IN RGL CORPUS

Number	word	Abbreviations and Symbols	Freq.
1	Down Strokes and Up Strokes		8,579
2	Legato		4,850
3	Slide		2,576

This material is reserved for educational use only, not allowed for commercial use.

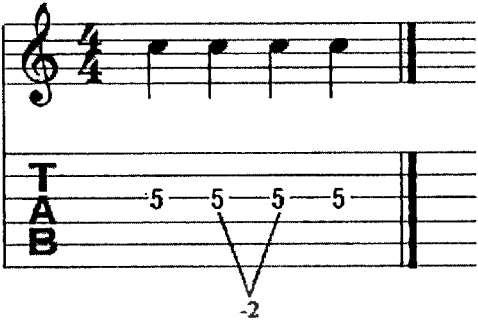

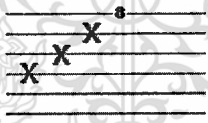

Forbidden to modify the content, and cite the document when use.

<p>4</p>	<p>Bending</p>		<p>2,214</p>
<p>5</p>	<p>Pull-Off</p>	<p>P</p> 	<p>1,584</p>
<p>6</p>	<p>Hammer-On</p>	<p>H</p> 	<p>1,545</p>
<p>7</p>	<p>Left Hand Fingering</p>	<p>l.h.fing. 1 2 3 4</p>	<p>1,393</p>
<p>8</p>	<p>Tapping</p>		<p>1,333</p>

<p>9</p>	<p>Palm Muting</p>		<p>1,316</p>
<p>10</p>	<p>Vibrato</p>		<p>1,182</p>
<p>11</p>	<p>Accent</p>		<p>648</p>
<p>12</p>	<p>Sweep Picking</p>		<p>357</p>
<p>13</p>	<p>Harmonics</p>		<p>311</p>

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

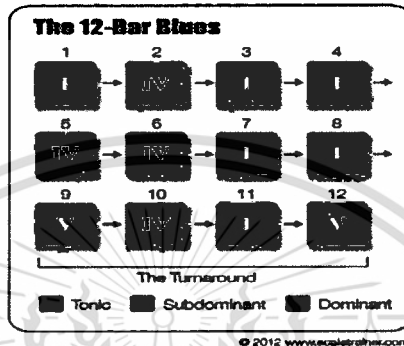
<p>14</p>	<p>Whammy Bar</p>	<p>w/bar</p> 	<p>288</p>
<p>15</p>	<p>Ghost Note</p>		<p>287</p>
<p>16</p>	<p>Volume Swells</p>	<p>&lt;</p>	<p>104</p>
<p>17</p>	<p>Let Ring</p>	<p>Let ring -----</p>	<p>103</p>
<p>18</p>	<p>Rake</p>		<p>86</p>
<p>19</p>	<p>Right Hand Fingering</p>	<p>RH: 1 2 3 4</p>	<p>43</p>
<p>20</p>	<p>Ascending and Descending</p>	<p>asc. ↗, desc. ↘</p>	<p>43</p>
<p>21</p>	<p>Tremolo Picking</p>		<p>30</p>

<p>22</p>	<p>Arpeggiate</p>		<p>29</p>
<p>23</p>	<p>Muffled String</p>		<p>28</p>
<p>24</p>	<p>Pick Scraping</p>		<p>20</p>
<p>25</p>	<p>Trill</p>		<p>18</p>

ห้องเพลงบลูส์ หรือ บลูส์ 12 ห้อง

การเล่นเพลงบลูส์โดยมีพื้นฐานการเล่น 12 ห้อง และใช้คอร์ดอย่างน้อย 3 คอร์ดเข้าไปซ้ำมา หากเราเล่นเพลงบลูส์ในคีย์ E เราจะใช้คอร์ด E(7)-A7-B7 ซึ่งมักจะใช้สัญลักษณ์ เป็นตัวเลขโรมันดังนี้ I, IV, and V. หรือที่เราเรียกทางเดินคอร์ดนี้กันว่า วัน ไฟร์ ไฟว์ หรือ หนึ่ง สี่ ห้า

The 12 bar blues in simply chord progression to be play back and forth in a song.



Bending n./เบนดิง/

การดันสาย ( B หรือ )



การดันสายคือการใช้นิ้วมือซ้ายที่กดสายดันสายขึ้น เพื่อให้เกิดเสียงที่สูงขึ้นตามความต้องการของผู้ตี การดันสายมีหลายแบบ เช่น การดันสายแบบครึ่งเสียง ( Half step ) การดันสายแบบ 1 เสียงเต็ม ( Whole step ) การดันสายแล้วสั่นสายหรือเขย่าสาย ( Bend and Vibrato )

*Bending is pushing the string up so that the current notes bended to a higher note*

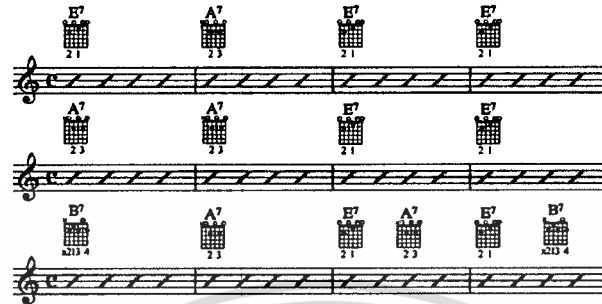


Blues Guitar n./บลูส์กีตาร์/

การเล่นกีตาร์แนวบลูส์

การเล่นกีตาร์แนวบลูส์ซึ่งเป็นแนวเพลงพื้นบ้านที่ถูกคิดค้นขึ้นมาโดยชาวผิวดำในช่วงศตวรรษที่ 20 โดยเพลงแนวบลูส์จะมีการเล่นพื้นฐานที่เรียกว่า การเล่นบลูส์ 12 ห้อง มักจะใช้ Dominant Chord อีกทั้งยังมีสเกลที่สำคัญที่เป็นเอกลักษณ์ของเพลงแนวบลูส์คือ Blues Scale.

*12 Blues guitar is a free and open site dedicated to the blues featuring.*

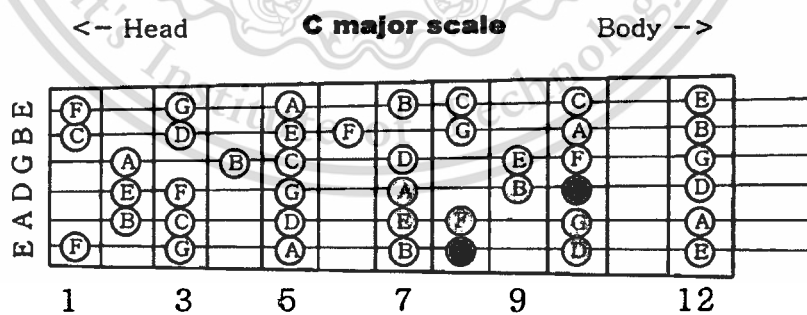


C Major Scale n./ซี เมเจอร์ สเกล/

ซีเมเจอร์สเกล หรือสเกลซีเมเจอร์

ซีเมเจอร์สเกลเป็นพื้นฐานที่ทำให้เกิดสเกลอื่นๆ ทุกสเกลจะสร้างขึ้นมาจากหลักพื้นฐานโครงสร้างมาจากซีเมเจอร์สเกล โน้ตในซีเมเจอร์สเกลประกอบไปด้วย C—D—E—F—G—A—B—C สังเกตว่าโน้ตลำดับที่ 3 กับ 4 และ 7 กับ 8 ห่างกันครึ่งเสียง ซึ่งรูปแบบการเรียงตัวโน้ตแบบเมเจอร์สเกลจะเหมือนกันทุกสเกลคือโน้ตลำดับที่ 3 กับ 4 และ 7 กับ 8 ห่างกันครึ่งเสียง

*C major scale is so fundamental to our system of music, that the names of our note are based on it*



Chord Progression n./คอร์ด โปรเกรสชัน/

ทางเดินคอร์ด, การเคลื่อนที่ของคอร์ด

ทางเดินคอร์ดคือ การเคลื่อนที่ของคอร์ดจากคอร์ดหนึ่งไปอีกคอร์ดหนึ่ง ทางเดินคอร์ดที่เราเคยคุ้นเคย เช่น C - Am - Dm - G ไม่ก็ C - Em - F - G ซึ่งคอร์ดเหล่านี้จะแทนด้วยเลขโรมัน เลขโรมันตัวใหญ่หมายถึงคอร์ดMajor ส่วนเลขโรมันตัวเล็กจะหมายถึงคอร์ดประเภท Minor

This material is for personal and non-commercial use.

Forbidden to modify the content, and cite the document when use.

A chord progression can be thought of as a harmonic simultaneity succession.

**Common Keys and Chord Progressions**

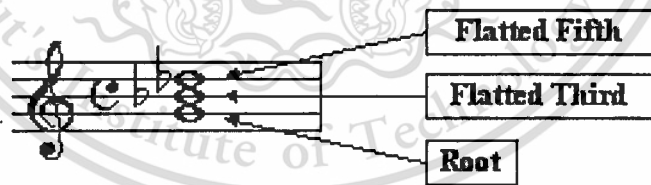
<b>I IV V I</b> G C D G A D E A C F G C D G A D E A B E	<b>I ii V I</b> G Am D G A Bm E A C Dm G C D Em A D E F#m B E	<b>I vi IV V</b> G Em C G A F#m D E C Am F G D Bm G A E C#m A B
<b>I vi ii V</b> G Em Am D A F#m Bm E C Am Dm G D Bm Em A E C#m F#m B	<b>I IV vi V</b> G C Em D A D F#m E C F Am G D G Bm A E A C#m B	<b>I V vi IV</b> G D Em C A E F#m D C G Am E D A Bm G E B C#m A

Diminished adj./คิมมินิช/

คิมมินิช, คอร์ดคิมมินิช, คิมมินิชสเกล, คอร์ดคิม, หรือ คิมมินิชคอร์ด

คิมมินิชคอร์ดคือ เมเจอร์คอร์ดที่ลดเสียงโน้ตตัวที่ 3 และ 5 ลงครึ่งเสียง หรือดีคพลดที่โน้ตตัวที่ 3 และ 5 ยกตัวอย่างเช่นในคอร์ด A major (A, C#, E) หากทำให้เป็นคอร์ด A Diminished จะประกอบไปด้วยโน้ต A, C, E.

*The diminished scale is constructed intervallically with alternating whole and half steps.*



Dominant n./โดมิแนนท์/

โดมิแนนท์ หรือ โดมิแนนท์คอร์ด

โน้ตตัวที่ 5 ในสเกลโดยนับจากโน้ตตัวแรก ส่วน dominant chord ก็คือคอร์ดลำดับที่ 5 ของคอร์ดในสเกล



The dominant chord provides movement in tonal music and it has an even stronger harmonic pull when the seventh is added.

F Major

F Minor

Dominant

Down Strokes and Up Strokes n./ดาวนส์โตรคและอัปส์โตรค/

การตีคดสลับ (   ) หรือ Alternate Picking (Alt, Altern.)

การตีคดสลับคือ การตีคดปิ๊กกีตาร์สลับขึ้นลงตลอดเวลา เสียงที่ได้จะหนักแน่น เหมาะอย่างยิ่งในการเล่นเทคนิคเล่นเร็ว (speed picking)

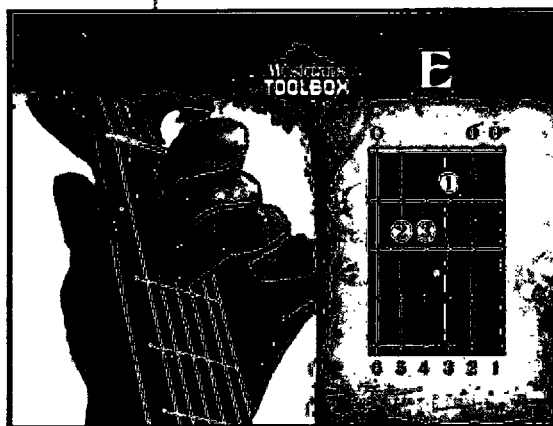
Alternate picking is arguably one of the most used right hand techniques on the guitar amongst sweep/economy picking and strumming.

E Major n./อีเมเจอร์/

คอร์ดอี หรือคอร์ดอีเมเจอร์(E) หรือคอร์ดอีไมเนอร์(Em)

คอร์ดอีเมเจอร์คือ คอร์ดที่ประกอบขึ้นด้วยเสียง 3 เสียง E - G# - B

The E major chord can be played in various positions on the fret board.

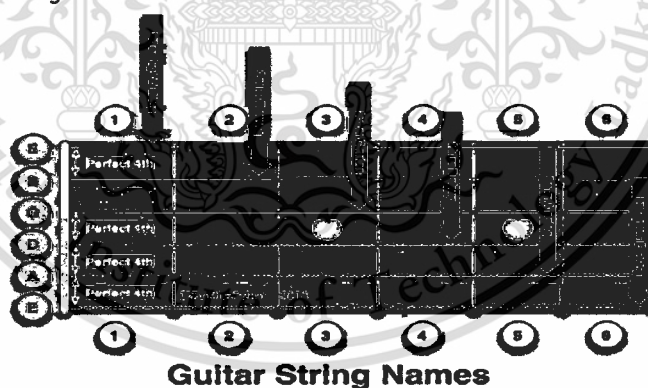


E String น./อี สตริง/

สายหก (E)

สายกีตาร์ลำดับที่ 6 หรือเส้นที่ 6 มักจะถูกใช้เล่นในเพลงร็อกบ่อยมาก โดยเฉพาะในการเล่นริธึมกีตาร์ที่มีการเล่นคอร์คอร์ดหรือพาวเวอร์คอร์ดผสมกับการเล่นสายปัดที่สาย 6 เสียงที่ได้ระหว่างการเล่นสายหกแบบปัดกับการเล่นริธึมของพาวเวอร์คอร์ดจะหนักแน่นและมีพลัง

*The 6th String or E string is the bottom string because it's the lowest sounding string.*

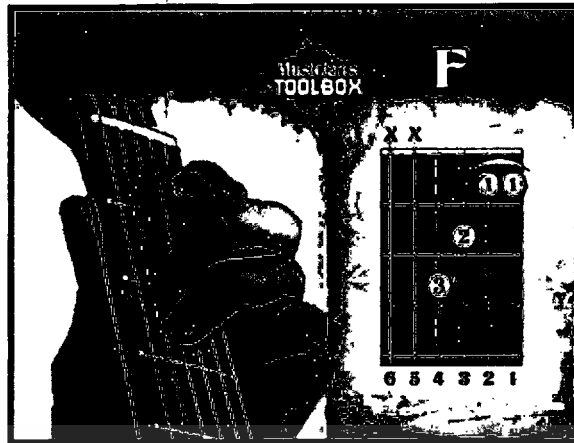


F Major น./เอฟเมเจอร์/

คอร์ดเอฟ หรือคอร์ดเอฟเมเจอร์ (F)

คอร์ดเอฟ หรือคอร์ดเอฟเมเจอร์ประกอบด้วยโน้ต 3 ตัวคือ F - A - Bb

*The chord in the key of F major are F, Gm, Am Bb, C, Dm, and E diminished.*

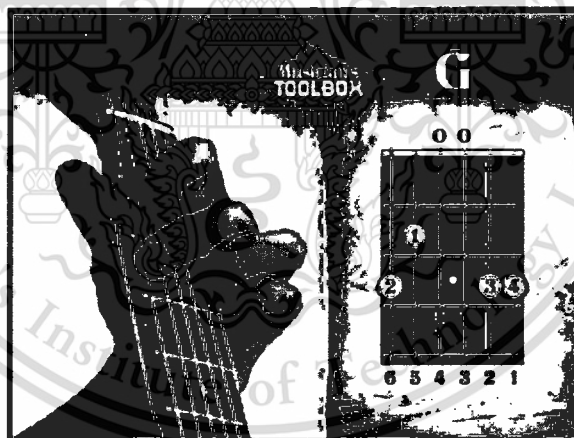


G Major n./จีเมเจอร์/

คอร์ดจี หรือคอร์ดจีเมเจอร์ (G)

คอร์ดจี หรือคอร์ดจีเมเจอร์ประกอบขึ้นด้วยโน้ต 3 โน้ตคือ G - B - D

*G major chord is played at the third fret. It takes some finger-strength and practice but the bare chord makes playing songs on guitar super-easy.*



Hammer On n./แอมเมอร์ออน/

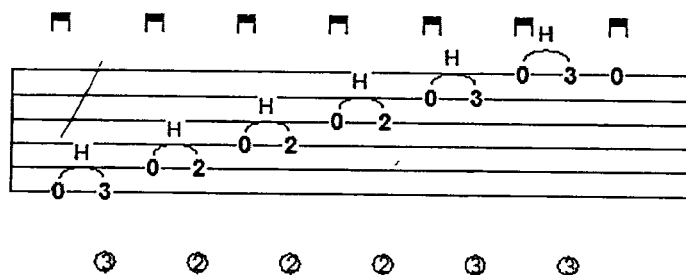
แอมเมอร์ออน(H, h หรือ  $\curvearrowright$ )

การตีโน้ตหนึ่งตัวแล้วใช้นิ้วกดไปกดที่โน้ตตัวอื่นโดยไม่ต้องดีดสายกีตาร์อีกตั้งนั้นดีดสายกีตาร์ 1 ครั้งแต่ได้โน้ต 2 ตัวหรือเสียงนั่นเอง

*A hammer on is a technique almost every guitarist uses to greatly boost their skill level on matter what style of music they play.*

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

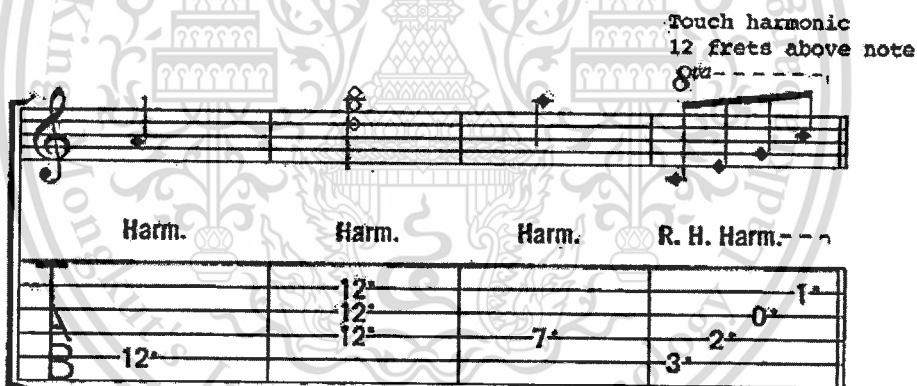


Harmonic n./ฮาร์โมนิก/

เสียงฮาร์โมนิก(N.H. หรือ Harm.)

ฮาร์โมนิกคือ เสียงที่เกิดจากการวางนิ้วแตะบนสายเหนือเฟรตที่สามารถให้เสียงฮาร์โมนิกที่ชัดเจนที่สุดคือ เฟรตที่ 5, 7, 12 และ 19 เสียงที่ได้จะใส และกังวาน บางครั้งเรียกว่าเสียงฮาร์โมนิกแท้ (Natural Harmonic; N.H.)

*Harmonic will produce sound that is higher in pitch than its fretted note counted part.*

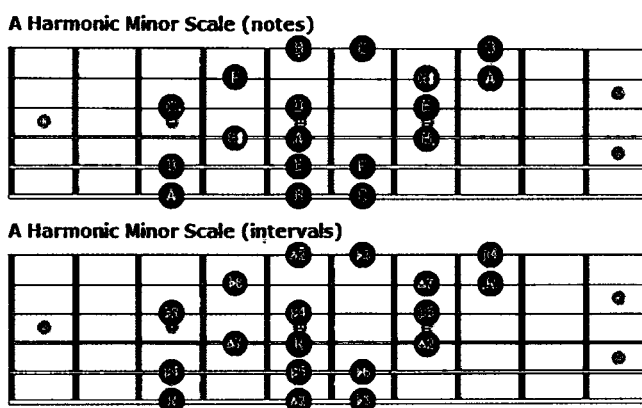


Harmonic Minor Scale n./ฮาร์โมนิก ไมเนอร์ สเกล/

สเกลฮาร์โมนิกไมเนอร์ หรือฮาร์โมนิกไมเนอร์สเกล

สเกลฮาร์โมนิกไมเนอร์มีพื้นฐานมาจากบันไดเสียงเนเจอร์ลไมเนอร์ เพียงแต่เพิ่มเสียงของโน้ตลำดับที่7 ให้สูงขึ้นครึ่งเสียง ทำให้ตัวโน้ตลำดับที่ 6 กับ7 ห่างกัน 1 เสียงเต็ม

*The harmonic minor scale is similar to the natural minor except for a raised seventh.*



Left Hand Fingering น./เล็ฟแฮนด์ฟิงเกอร์ริง/


นิ้วมือซ้ายที่ใช้กดสายกีตาร์(l.h.fing. หรือ 1 2 3 4)

นิ้วมือซ้ายที่ใช้กดสายกีตาร์จะถูกแทนด้วยสัญลักษณ์ 1 (Index finger) 2 (Middle finger) 3 (Ring finger) 4 (Little finger) and t (thumb) เพื่อให้ผู้เล่นกีตาร์ได้ทราบวิธีการวางนิ้วหรือนิ้วที่เหมาะสมในการกดสายกีตาร์

*Left hand fingering is to stretch your left hand fingers and warm up the hand and use a metro name to keep from speeding up and stop if your hand hurt.*



Legato น./เลกาโต้/

การเล่นเลกาโต้ (  )

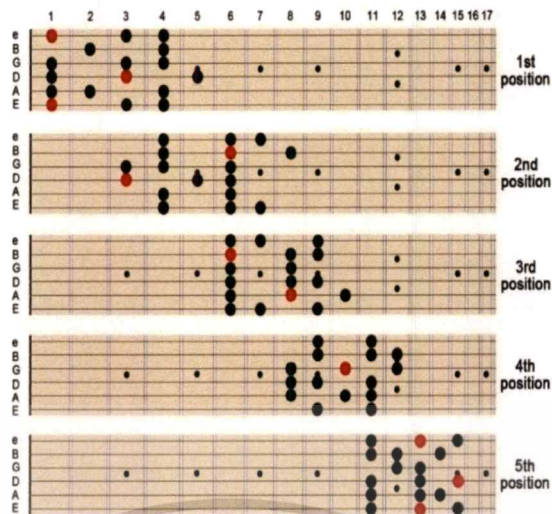
การเล่นเลกาโต้คือการเล่นเสียงต่อเนื่องเหมือนกับ Slur (สเลอ) แต่ต่างกันตรงที่การเล่นเลกาโต้จะมีเสียงที่ยาวกว่าสเลอ การเล่นเลกาโต้จะให้เสียงที่ต่อเนื่องและไม่ขาดจากกัน

*Legato technique on the guitar is basically the combination hammer- one and pull -offs.*

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.





Minor Pentatonic Scale n./ไมเนอร์เพนทาโทนิค สเกล/

สเกลไมเนอร์เพนทาโทนิค หรือเพนทาโทนิคไมเนอร์สเกล

สเกลไมเนอร์เพนทาโทนิค เป็นสเกลที่ประกอบด้วยโน้ต 5 ตัว โดยตัดโน้ตตัวที่ 2 กับ 6 ออกจากสเกลไมเนอร์ ซึ่งจะได้โครงสร้างโน้ตดังนี้ 1 3 4 5 7

*The minor pentatonic scale is 1, 3, 4, 5, 7 of the natural minor scale.*

**THE MINOR PENTATONIC SCALE**

Scale Formula  
 TS<sup>+</sup> T<sup>+</sup> T<sup>+</sup> TS<sup>+</sup> T<sup>+</sup>  
 TS = 1 Tone and 1 Semitone  
 T = 1-Tone

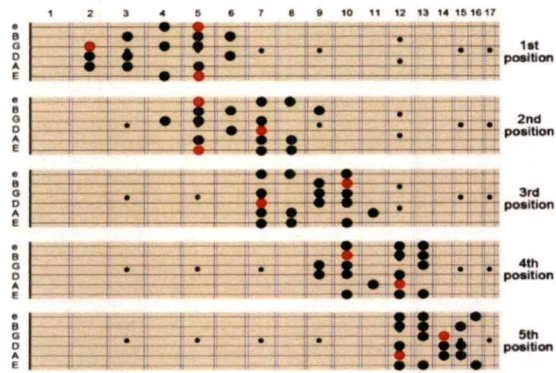
Legend:  
 1 = index Finger  
 2 = Middle Finger  
 3 = Ring Finger  
 4 = Pinky Finger  
 □ = Root Note

Minor Scale Pattern n./ไมเนอร์สเกลแพทเทิร์น/

ทางนิ้วไมเนอร์ หรือรูปแบบการไล่สเกลไมเนอร์

รูปแบบ, แพทเทิร์น, โดอะแกรม, หรือทางนิ้วสำหรับการฝึกไล่สเกลไมเนอร์

*Minor scale pattern will allow you to play any major or minor scale in any region of the fret board.*

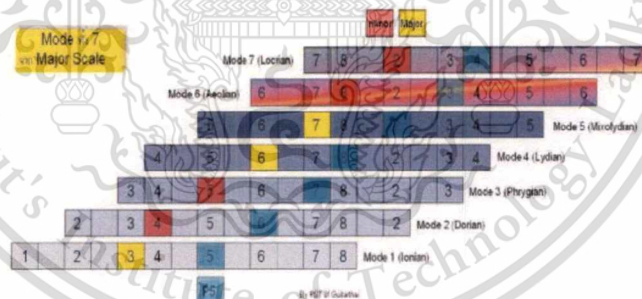


Modes n./โหมดส์/

โหมดส์

โหมดส์ คือการนำโน้ตในสเกลมาเรียงใหม่ หรือจะพูดได้ว่าเป็นสเกลเดิมแต่เริ่มต้นด้วยโน้ตตัวอื่น เช่น โหมดที่สอง (Dorian Mode) เริ่มต้นด้วยโน้ตตัวที่ 2 ของสเกล (2, 3, 4, 5, 6, 7, 1, และ 2) โหมดที่ 3 (Phrygian Mode) ให้นำโน้ตตัวที่ 3 มาขึ้นต้น (3, 4, 5, 6, 7, 1, 2 และ 3) ทำอย่างนี้ไล่ไปจนครบ จะได้โหมดทั้งหมด 7 โหมด

*Modes are basically scales that are derived from the major scale the only difference is that they have some flatted or shaped notes.*



Palm Muting n./มั่วตึง/

การทำเสียงบอด หรือการมั่วเสียง (P.M. หรือ X)

Muting หรือ Palm Muting คือการทำเสียงบอดหรือการมั่วเสียงมักใช้ในเพลงประเภทร็อก เช่นการเล่น power chord การทำเสียงบอด ทำให้คอร์ดกีตาร์มีความหนักแน่นและทรงพลังขึ้น วิธีทำให้เกิดเสียงบอดคือใช้สันมือด้านในของมือขวาที่จับปิ๊กก็ต้ารวางเบาๆ เหนือสายกีตาร์ในขณะที่ตีดีด

*Palm muting is a guitar technique executed in the picking hand used to muffle*

*The strings slightly while simultaneously hitting the strings with the pick.*

This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

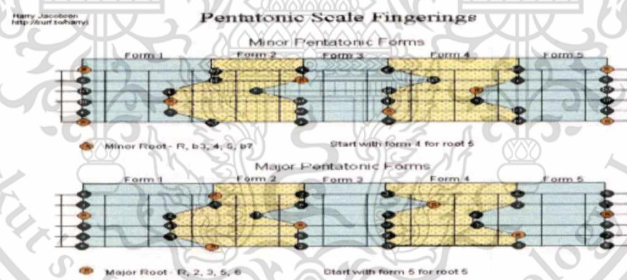


Pentatonic n./เพนทาโทนิค/

เพนทาโทนิค หรือ เพนทาโทนิคสเกล

สเกลที่มีเพียงห้าเสียงหรือ 5 โน้ต โดยโน้ตทั้งห้าถูกดึงมาจากสเกลเมเจอร์หรือไมเนอร์ โน้ตที่ดึงมาคือ โน้ตลำดับที่ 1, 2, 3, 5, และ 6 เช่นใน A Minor Pentatonic จะประกอบไปด้วยโน้ต A C D E G สังเกตว่าไม่มีโน้ตลำดับที่ 4 และ 7(B และ F)

*A pentatonic scale as the name implies has only five notes and is based on either the major or minor scale.*



Power Chords n./เพาเวอร์คอร์ด/

เพาเวอร์คอร์ด, คอร์ดร็อก, คู่ 5 เพอร์เฟ็ค

เพาเวอร์คอร์ด (Power Chord) คือการเล่นคอร์ดธรรมดาทั่วไปเพียงแต่ตัดโน้ตตัวที่ 3 ออกไป เช่นคอร์ด C Major(1 - 3 - 5) หากตัดโน้ตตัวที่ 3 ก็จะได้ C power chord (1 - 5) เพาเวอร์คอร์ดมักถูกเล่นในดนตรี ROCK โดยเฉพาะการเล่น RHYTHM โดยแต่งเสียงเอฟเฟ็คแบบ DISTORTION หรือ OVERDRIVE เสียงที่ได้จะหนักแน่นและทรงพลัง

*Power chords are used in most of music but particularly useful in rock guitar.*



Pull-Off n./พูลออฟ/

การเล่นพูลออฟ (P, p หรือ )

การเล่น Pull off (พูลออฟ)เป็นการเล่นที่คล้ายกับการเล่น Hammer on คือ การตีโน้ตครั้งเดียวได้โน้ต 2 ตัวหรือ 2 เสียงเหมือนกันแต่ต่างกันตรงที่ตัวเริ่มต้น ตัวเริ่มต้นของการเล่นพูลออฟจะเริ่มต้นตีจากตัวโน้ตที่เสียงที่สูงกว่าแล้วยกนิ้วขึ้นโดยที่ไม่มีการเลื่อนนิ้ว โน้ตตัวที่ 2 เสียงจะต่ำกว่า

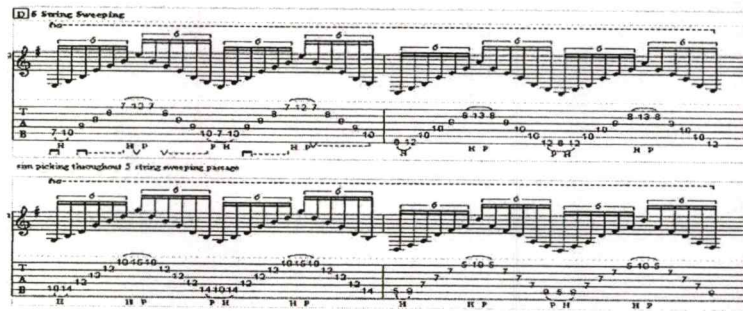
*A pull off is a stringed instrument technique performed by plucking a string by pulling the string off the finger board with one of the fingers being used to fret the note.*

Sweep Picking n./สวิปปีกกิ่ง/

การตีคกวาด, สวิปปีกกิ่ง

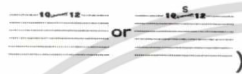
การตีคกวาดหรือการเล่นสวิปปีกกิ่ง คือการเล่นการกระจายเสียงโน้ตในคอร์ดหรือ Arpeggio ด้วยความรวดเร็ว โดยนำมาใช้เล่นในการโซโล่เพื่อเพิ่มความรวดเร็วในการเล่น เป็นการตีคลงอย่างต่อเนื่องและตีขึ้นอย่างต่อเนื่องหรือที่เรียกกันว่าตีคครั้งเดียวได้โน้ตหลายตัว

*Sweep picking is a guitar playing technique with a sweeping motion of the pick while using the fret hand to produce a specific series of notes that are fast and fluid in sound.*



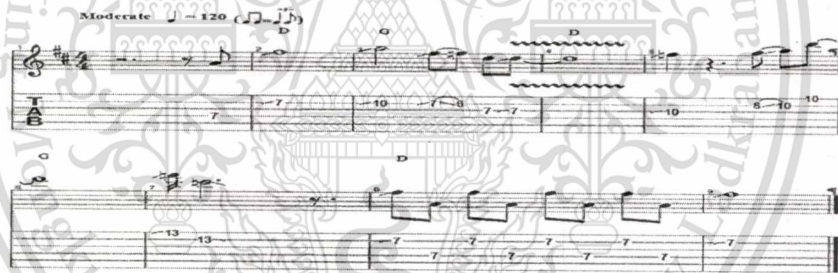
Slide n./สไลด์/

การสไลด์ (S, sl.หรือ



การสไลด์คือ การติดที่คล้ายเทคนิค Hammer on และ Pull off ที่ติดโน้ตหนึ่งครั้งได้โน้ตสองตัวหรือสองเสียง การสไลด์คือการติดโน้ตตัวแรก จากนั้นใช้นิ้วเดียวกันเลื่อนตำแหน่งไปยังตำแหน่งของเสียงที่ต้องการโดยไม่มีกรยกนิ้วออกจากสายกีตาร์

*A slide is a legato guitar technique where the player sounds one note and then moves slides their finger up or down the fretboard to another fret.*



Tapping n./แทปปีง/

การเล่นแทปปีง, การเล่นจิ้มสาย, หรือการเล่นเคาะสาย (T หรือ t)

การเล่นแทปปีง, การเล่นจิ้มสาย, หรือการเล่นเคาะสาย คือการใช้นิ้วมือซ้ายหรือมือขวา หรือทั้ง 2 มือ ใช้นิ้วหรือใช้ปิ๊กกีตาร์จิ้มก็ได้ตามความถนัดซึ่งการเล่นเทคนิคนี้ต้องอาศัยเทคนิคการเล่น hammer on และ pull off ประกอบด้วยเสมอ

*Tapping is technique where finger on our picking hand are used to play notes on the fretboard via hammer one and pulls offs.*



### Vibrato n./ไวบราโต้/

การสั่นสาย ( )

การสั่นสายกีตาร์เพื่อเพิ่มความนุ่มนวลให้กับเสียงโซโล่ การทำเสียงสั่นทำได้โดยการสั่นนิ้วในแนวขนานหรือแนวตั้งฉากกับคอกีตาร์ ในแนวขนานให้เขย่าหรือสั่นข้อมือซ้ายในแนวขนานกับคอกีตาร์ขณะที่นิ้วกดสายอยู่ ส่วนการสั่นนิ้วในแนวตั้งฉากกับคอกีตาร์ ให้เขย่าข้อมือในแนวตั้งฉากกับคอกีตาร์ขณะที่นิ้วกดสายอยู่ คล้ายกับการขยี้หรือดันสายขึ้นลงเล็กน้อยอย่างรวดเร็วหรือช้าแล้วแต่เสียงที่ต้องการ

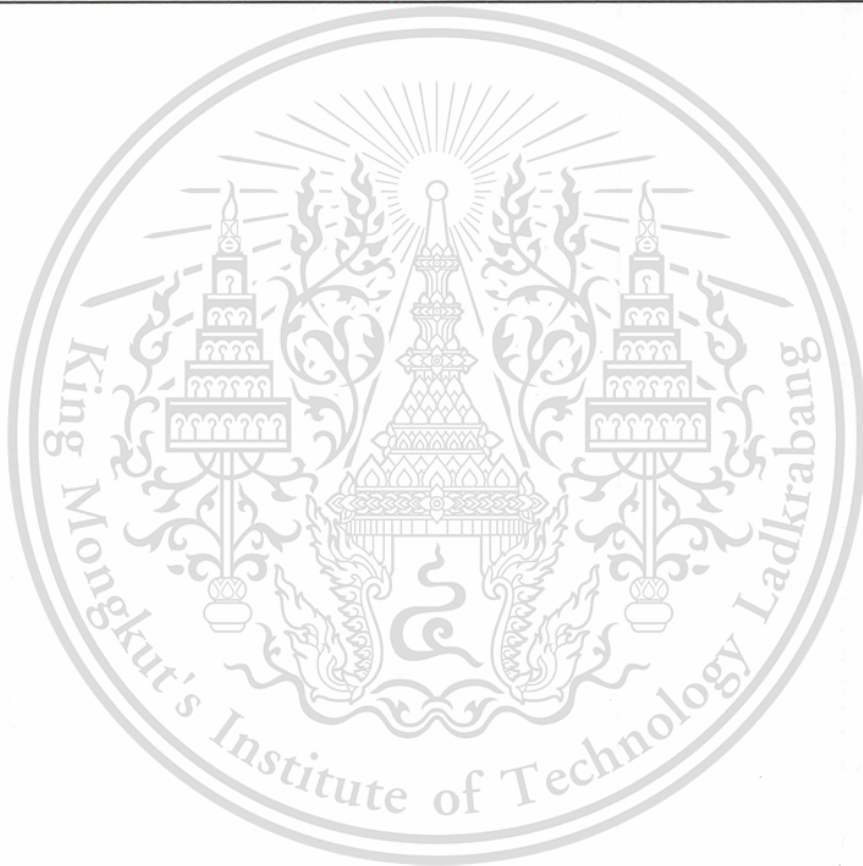
*The secret to get vibrato working well is to get a solid point.*

### Whammy Bar n./แวมมี่บาร์/

การเล่นคั่นโยก

การเล่นสั่นเสียงโดยใช้คั่นโยก (Whammy Bar) กดลงเล็กน้อยแล้วเขย่าหรือสั่นให้ได้เสียงตามที่ต้องการ

*A whammy bar or tremolo bar you screw it into your guitar and when you're playing you push and pull it to stretch or loosen the strings heightening or lowering the pitch.*



This material is reserved for educational use only, not allowed for commercial use.

Forbidden to modify the content, and cite the document when use.

## AUTHOR BIOGRAPHY

**Name:** Mr. Nantakarn Imphong  
**Date of Birth:** November 1, 1976  
**Place of Birth:** Chaiyaphum  
**Address:** 57 Sihaburanukit Road, Minburi Sub-district, Minburi District, Bangkok 10510

### Educational Background:

1994 Mathayom 6 from Sriyanusorn School, Chanthaburi  
 2000 Bachelor's degree from Ramkhamhaeng University  
 2009 Master's degree from Sukhothai Thammathirat Open University

### Work Experience:

2000 - 2008 Teacher at Chanthaburi Technical College, Muang district, Chanthaburi  
 2008 to present Teacher at Minburi Technical College, Minburi district, Chanthaburi

