

# CHAPTER - ONE

## INTRODUCTION

### 1.1 General Background

Language is primarily a means of communication. It is one of the most widely used means of communication. It is also the most powerful and prominent means of communication through which we can express our thoughts, feelings, ideas, and emotions of everyday life. It is the distinctive property of mankind because of which human being seems extraordinary and superior to all the species on the earth. It is present every where in our thoughts, feelings, dreams, prayers, meditations and rituals. Without language man would have remained only a dumb animal. Without it human civilization would have remained impossible. There is no comprehensive definition of language. Different people have defined language in different ways. Some of the definitions of language have been given below:

Sapir (1978, p.8) says, “ Language is a purely human and non-instinctive method of communicating ideas, emotions and desires by means of voluntarily produced symbols.” Similarly, Richards et al. (1985, p. 153) define, "Language is the system of human communication by means of a structured arrangement of sounds to form larger unit. For example, morphemes, words, sentences and utterances. Likewise, Wardhaugh (1986, p. 3) defines, "Language is a system of arbitrary vocal symbols used for human communication."

According to Chomsky (1957), "Language is the innate capacity of native speakers to understand and form grammatical sentences.” (p.13). Similarly, Todd (1987, p.6) says, “...a language is a set of signals by which we communicate."

From the above definitions we can say that language is a unique asset and a very complex social phenomenon. It is an organized noise used in actual social situation. That is why it is also known as contextualized systematic sound. Every normal human being is completely competent on at least one language. As we know that language is species-specific to mankind i.e. only human beings can have the capability to speak language and their mind is genetically equipped with it. By physical inadequacies, animals do not have vocal organs and the type of brain which human beings possess. That is why, human being is the only possessor of language which makes him different from other animals.

Language is powerful means of communication. It is also a means of development of education, culture, society, media, science and technology. In the process of communication one perceives the clear picture of the whole world through the language. Most of the activities of the world are carried-out through the use of language. There are many languages in use in the world. Among them English is the most widely used and expanded language in the world.

### **1.1.1 Importance of the English Language**

English is an international language. It is mostly used as a lingua franca of the world. So, English is the language of communication, politics, journalism, commerce, education, science and technology.

David Crystal (1999) says

English is the main language of the world's books, newspapers and advertising. It is the official international language of airports and air traffic control. It is the language of international business and academic conference, of diplomacy, of sport, over two thirds of the world's

scientists write in English. Three quarters of the worlds' mail are written in English (p.7).

In the context of our country, it is taught and learnt as a foreign language of global significance. Formally, the English language was started after the establishment of Durbar High School during the Rana regime in Nepal. Janga Bahadur Rana established this school after returning from England. It was limited to ruling and elite families. In 1891, it was shifted at Rani Pokhari and was allowed to the common people of the society. During the Rana regime, there were only a limited number of schools and colleges including “Durbar High School” providing education in English medium. After the establishment of democracy in 1950, a number of schools and colleges were established. Consequently, the common people got an opportunity to get education where English was being taught as a compulsory subject for all. The government formulated and implemented nation-wide master plan to improve the existing education system. As a result, national education system plan (NESP) brought a revolution in the English language teaching in Nepal also. It had been taught as a compulsory subject from grade one to bachelor degree. It is also used in different media, travel and tourism as well. So, people are directly or indirectly influenced by the English language in their daily communication. In recent years, English is also taught for specific purposes such as English for business, English for tourist guide, etc. Similarly, the English language has been used differently in different areas.

#### **1.1.1.1 Linguistics**

The discipline or knowledge that studies language scientifically is called linguistics. Linguistics is the scientific study of language or linguistic science. It is scientific in the sense that it has its own spirit, principles and methods to

study about language. It endeavors to answer the question what is language and how it is represented in the mind? It studies the language explicitly, systematically, comparatively and objectively.

Crystal (2003, p.77) says,

... for any enterprise to qualify as scientific in the usual sense it should display at least three major characteristics which should be in evidence regardless of whether we see linguistics related more to the scientific ness of the natural and physical science or to that of the sciences terminologically varied some what these three characteristics are explicitness, systematicness and objectivity....

Similarly, according to Todd (1987), "Linguistics can be defined as the scientific study of language in much the same way as a scientist studies physics or chemistry that is, systematically and objectively and uses these results to formulate hypothesis" (p. 35). Thus, linguistics is the theoretical study of language. Linguists focus on describing and explaining language and which are not concerned with prescriptive rules of language (i.e. do not split infinitives) Linguists are not interpreters. The underlying goal of a linguist is to try to discover the universality concerning languages. i.e., what the common elements of all languages are. The linguist then tries to place these elements in a theoretical framework that will describe all languages and also predict all languages and also predict what can not occur in a language.

Linguistics is the social science that shares common ground with other social sciences such as psychology, anthropology, sociology and archaeology. It also

may influence other disciplines, such as English communication studies and computer science. Linguistics for the most part though can be considered a cognitive science. It is ultimately concerned with how the human brain functions. There are different disciplines within linguistics. The fields of phonetics, phonology, morphology, syntax, semantics and language acquisition are considered the core field or study and a firm knowledge of each is necessary in order to tackle more advanced subjects. Linguistics has made great contribution to the study of several other fields in many ways. The contribution of linguistics to language teaching is one of them. Linguistics has its other branches of life viz. educational linguistics, clinical linguistics, psycholinguistics and so on. When the subject's findings, methods or theoretical principles are applied to the study of problems from other areas of experience and which come under applied linguistics. So, linguistics is concerned with the study of a particular language as an end in itself in order to produce complete and accurate description of them and it also studies language as a means to a further end, in order to obtain information about the nature of language in general.

#### **1.1.1.2 Sociolinguistics**

Sociolinguistics is a branch of applied linguistics. It deals with the social norms, values, practices or groups and language and their nature. It studies the ways in which language interacts with society. According to Hudson (1980, p. 1), "Sociolinguistics is the study of language in relation to society." The function of language is not only to communicate information but also it is a very important means of establishing social relationship. It is a social phenomenon so that language has intimate relationship and influence society. From sociolinguistic perspective, Lyons defines, "Languages are the principal system of communication used by particular groups of human beings within the

particular society/linguistic community of which they are members" (1986, p. 266). No language takes place in vacuum. Language is born, grown up and even dies in society.

Similarly, Holmes (1992, p. 16) says, 'Sociolinguists' aim is to move towards a theory which provides a motivated account of the way language is used in a community and of the choices people make when they use language.'

Sociolinguistics is a branch of applied science, which refers to the study of language in relation to society. Thus, sociolinguistics is concerned with social dimensions of a language: how different people use different varieties of language in different social situations. It is concerned with identifying the social functions of language and the ways it is used to convey social meaning. A language can affect a society by influencing or even controlling the world view of its speakers. It investigates the field of language and society and has close connections with the social sciences especially social psychology, anthropology, human geography and sociology. It explores the interrelationship between the verbal and social behavior of the speakers of speech community. They are in a state of constant interaction that means the relationship is bi-directional i.e. language and society influence each other. A sociolinguist should be very carefully prepared to look into various aspects and relation between language and society.

It deals with the society and languages, not only with the tribes, nation and social classes but also that the individuals because it takes individual speaker as important in much the same way as individual cell is important in biology, because without the understanding of individual works we can not understand how collections of individuals behave either. The reason for emphasis in individual is that not two speakers have the same language because no two speakers have the same experience of language. It incorporates, in principle at

least, every aspect of the structure and use of language related to its social and cultural functions.

According to Varsney (1977),

Language with its different varieties is the subject matter of sociolinguistics. Sociolinguistics studies the varied linguistic realizations of socio cultural meanings which in a sense are both familiar and unfamiliar on the occurrence of everyday social interactions which are nevertheless related to particular cultures, societies, social groups, speech communities, languages, dialects, language varieties, i.e. why language variation generally forms a part of socio-linguistic study (p. 295).

### **1.1.2 Varieties of Linguistic Codes**

In general, code refers to language. In linguistics, a code is a system used for communication between two or more parties. Wardhaugh (1986, p. 40) says, “One chooses to use on any occasion is a code.” Any linguistic code is manifested in the form of different varieties and is the sum total of its varieties. They are dialects, idiolect and register.

#### **1.1.2.1 Dialect**

Broadly speaking, it is a variety of language according to user. In other words, the use of a language that varies according to place, time and group of people is called dialect. The use of same language is interpreted and presented in many different forms in terms of pronunciation, grammatical construction vocabulary, idiomatic use of words and so on. It also reflects the personality of the speaker i.e. who the speaker is and which geographical area he/she belongs

to. If we meet unknown people, we get engaged in conversation and then we make a fair guess about them. We know something about their social and geographical background, social status they are enjoying, etc.

Dialect is a cover term that includes two kinds of sub varieties: language variation in a geographical dimension is called dialect and language variation in the social dimension is known as sociolect. The regional or geographical varieties are due to the distance from one group of speakers to those of the others. Greater the distance, greater is the difference. This distance is caused by natural barriers, e.g. mountain, river, etc. Distance is the most important factor for variation in geographical dialects whereas sociolect originates from social groups and depends on a variety of factors such as social class, religion and ethnicity.

#### **1.1.2.2 Idiolect**

It refers to the linguistic system of an individual speaker, i.e. one's personal dialect. It can be defined as personal dialect in the sense that one speaker speaks differently from the way another speaker speaks, even if both are using the same language. The individual's peculiarity or uniqueness in tone, voice, intonation and even in the duration of pause between words, phrases or sentences are the features of idiolect.

Hockett (1916, p. 322) defines, "Generally speaking, the totality of speech habits of a single person at a given time constitutes an idiolect." The system of an idiolect has two major aspects: linguistic and extra linguistic. The linguistic aspect includes the choice of specific words, utterances, interpretation and phonological features like voice, quality, pitch and speech rhythm which characterize the system of each person's idiolect. The extra linguistic aspect refers to the social and regional factors like social class, ethnic background,



education, age, gender, locality and so on which determine the nature of each person's idiolect.

### **1.1.2.3 Registers**

Registers are the varieties of language according to situation, subject matter and topic. Registers are the varieties of language according to use. It is also called use-based variety of language. Like other forms of social activity, language has to be appropriate to the speaker, receiver, situation and subject matter. Effective communication demands not only the grammatically correct utterances but situationally appropriate also. A particular register distinguishes itself from others in terms of distinctive words, phrases, special grammatical constructions and so on. Register is a set of features of speech or writing characteristics of a particular type of linguistic activity or a particular group when engaged in it. For example, journalists, doctors, engineers, pilots, etc. The same person may use very different linguistic items to express more or less the same meaning on different occasions and the concept of the dialect can not reasonably be extended to include such variation.

In this context, Hudson (1980, p. 45) says, "The term register is widely used in sociolinguistics to refer to varieties according to use in contrast with dialect defined as varieties according to the user." Surgeons, airline pilots, bank managers, lawyers, engineers, etc. employ different registers which is used by a particular group of people, usually showing the same occupation or the same interest.

Each time we speak or write, we not only locate ourselves in relation to the rest of the society but we also relate our act of communication itself to a complex classificatory scheme of communication behaviour.

Regarding the use of different words in different types of register, Wardhaugh (1986, p. 48) says, "Registers are the set of vocabulary items associated with discrete occupational or social group. Surgeons, airline pilots, bank managers, clerks, lawyer's jazz fans and pimps employ different registers..."

Halliday (1978, p. 33) distinguishes three types of registers: *Field based, mode based and tenor based*.

**Field** refers to 'the subject matter' or 'topic'. Thus, the term field based register refers to variation based on the subject matter or topic of discourse. It is also called field of discourse. Thus, according to fields, there are the register of science, the register of law, the register of engineer, the register of religion, the register of journalism, etc.

A particular register is often distinguished from other registers in terms of distinctive words, phrases and grammatical constructions. **Mode**, means the medium used. So, mode is about 'how'. In language, there are two major types of medium: spoken medium or written medium. Spoken language differs from written language in several ways in terms of grammar and vocabulary. It is also known as mode of discourse. Third classification of register is **tenor based** which refers to the relations among the participants in discourse. The participants in a discourse are the speaker (or addresser) and the hearer (or addressee). The relation among the participants refers to their respective social status, e.g. teacher, student, lawyer, etc. Thus, tenor depends on the relations between participants; formal and informal varieties. The language used by the teacher to his/her students may be different from the language used by the student speaking to his classmate. It is also called 'style of discourse'.

Thus, registers are the special terms of any language, which differ according to the situation mode of language and field or topic. Here, language used in

engineering sector comes under the *field based register* where different sorts of vocabularies, sentences structures, sentence functions are to be found.

### **1.1.3 Language of Engineering**

Engineering is a discipline and profession of applying technical and scientific knowledge and utilizing natural laws and physical resources to design and implement materials, structure, machine, devices and systems. It is also a process that safely realizes a designed objective and meet specified criteria.

The American Engineers' Council for Professional Development (ECPD) has defined (<http://en.wikipedia.org/wiki/Architecture>

The creative application of scientific principles to design or develop structures, machines, apparatus or manufacturing process or works utilizing them singly or in combination or to construct or operate the same with full cognizance of their design or to forecast their behaviour under specific operating conditions. All as respects an intended function economic of operation and safely to life and property.

Engineering, much like science, is a broad discipline which is often broken down into several sub disciplines. These disciplines concern themselves with differing areas of engineering work. Throughout an engineer's career, the engineer may become multi disciplined having in several of the outlined areas. Although the areas of engineering have been increasing day by day. The main branches of engineering are as follows:

1. Architecture
2. Urban planning
3. Transportation
4. Electronics
5. Computer
6. Automobile
7. Environment
8. Refrigeration and air conditioning

### **1.1.3.1 Architecture**

The word 'architecture' came from Latin *architectura* and that from Greek *ἀρχιτέκτων* (*architektu*), "master builder" from the domination of *ἀρχι-* (*archi-*), 'chief' or 'leader' and *τέκτων* (*tekton*), a 'builder' or 'carpenter'. While the primary application of the word architecture pertains to build environment. By extension the term has come to denote the art and discipline of creating an actual (or inferring and implied or apparent) plan of any complex object or system.

As a process, architecture is the activity of designing and constructing building and other physical structures by a person or a machine primarily to provide socially purposeful shelter. It includes the design of the total built environment, from the macro level of how a building integrates with its surrounding man made landscape to the micro level of architecture or construction details and sometimes furniture. Briefly, architecture is the activity of designing any kind of system.

Usually, it is based on drawings; architecture defines the structure and/or behaviour of a building or any other kind of system that has been constructed. Texts on architecture began to be written in the classical period. These became

canons to be followed in important works, especially religious architecture. Some examples of canons are found in the writing of *Kao Gong Ji* of ancient China and *Vaastu Shastra* of ancient India. The architecture of different parts of Asia develop along different lines to that of Europe, Buddhist, Hindu and Sikh architecture each having different characteristics. Buddhist architecture, in particular, showed great regional diversity. In many Asian countries a pantheistic religion lead to architectural forms that were designed specifically to enhance the natural landscape.

The Taj Mahal in India, is a UNESCO world heritage site and was cited as "the jewel of Muslim art in India and one of the universally admired masterpieces of the world's heritage.

Language used in this sector is a register which is different from other fields. Engineering is a discipline in the applied science. It has different faculties. The language is a bit different in every faculty. For example, in the field of architecture, it has its own specific vocabularies such as antique, master plan survey area, landscape planning, design of low cost housing, oval house, infrastructure development, etc. Mostly, words are illustrated by picture designing. Generally, the specific terminology, phrase illustrations and unique way of presentation makes the engineering language different from the language used in other fields.

## **1.2 Review of the Related Literature**

In this vast and ever growing area of language, few descriptive research studies have been carried out. Some of them are as follows:

Baral (1999) conducted a research on "Language Used in the Field of Tourism" to analyze language functions, sentence patters and vocabulary items commonly used in the field of tourism. He derived the conclusion that

maximum use of abbreviation and borrowed words were used in tourism and the communicative functions such as greeting, farewell welcoming, introducing are most frequently used in the field of tourism. Similarly, Baral (2003) carried out a research entitled "Language Used in Scientific Texts" to find out the language used in terms of voice, tense, aspect, word class and the use of technical and non-technical words. He derived the conclusion that there was more frequent use of non-past tense, simple aspect and use of more technical and major word class than others.

In the same way, Tiwari (2007) studied "The Language Used in Economic Journals" to analyze the language used in terms of tense, voice, sentence type and also compare native and non native use of language. He found that the complex sentences and non past tense were more frequently used in native texts. But he did not talk about contracted form and subject proximity.

Likewise, Sapkota (2008) carried out a research entitled "Language used in Human Right Journals" to find out tense, sentence types and special vocabularies. He derived the conclusion that complex sentences were maximally used. In case of tense, voice and aspect, the past tense, the passive voice and the perfective aspects were mostly used. Noun occupied the highest position and any adverbs were not found but he did not talk about the sentence length, mood and abbreviation used in the journals.

Similarly, Atreya (2008) studied "English used in Medicine Marketing." The objective of his study was to find out the sentence patterns and language functions used in medicine marketing. He found that simple sentence pattern S-P-DO, S-P-C, S-P-A and communicative functions such as imparting and seeking factual information, expressing and finding out intellectual attitudes were most frequently used in medicine marketing. In the same way, Lamsal (2009) carried out research entitled, "Language Used in Forestry Journals". The

main purpose of this study was to find out the language used in terms of voice, tense, sentence types and special vocabularies. She derived the conclusion that active voice, complex sentence and non-past tense were used more frequently. In case of special vocabulary, nouns were used more frequently than others. But she did not talk about aspects.

So far as the above research works are related to different fields of language, no study has been carried out in the field of engineering. Therefore, the present researcher was interested to study the language used in engineering journals in terms of tense, aspect, voice, sentence type and specific vocabularies.

### **1.3 Objectives of the Study**

The objectives of the present study were as follows:

1. To analyze the language used in engineering journal in terms of:
  - a) tense
  - b) aspect
  - c) voice
  - d) sentence type
  - e) specific vocabularies
2. To compare the language used in native and non-native engineering journals on the basis of sentence types, tenses, aspects, voices and special vocabularies.
3. To suggest some pedagogical implications.

### **1.4 Significance of the Study**

This study will be useful to explore the general reflection of the languages used in the field of engineering. It will also be useful for those people who want to do research on English for specific purposes in near future.

Similarly, it will be useful for those teachers and students who are teaching and learning engineering course. It is also helpful to the students of language and linguistics, mass communication and so on. Different linguistic schools, colleges, institutions and other people who are directly or indirectly involved in the field of English language teaching can be benefited from this study.

### **1.5 Definitions of the Specific Terms**

- a. **Simple Sentence:** A simple sentence contains at least one subject and one verb and can stand alone as an independent clause.
- b. **Compound Sentence:** A compound sentence consists of two or more clauses of equal grammatical importance and a coordinating conjunction connects the two clauses into one sentence.
- c. **Complex Sentence:** It refers to a sentence having at least one independent clause and one or more dependent clauses linked by some subordinators.
- d. **Tense:** Tense denotes to the time markers in the form of the verb and by the use of adverbs. English has two tense systems viz. past and non past. Generally, past tense shows the past time whereas non-past tense shows the present as well as future time.
- e. **Aspect:** It signifies the manner in which the verbal action is experienced or regarded as completed or on progress. It deals with the states of affair whether in simple, progressive perfective or perfect progressive state.
- f. **Voice:** Voice refers to the ways in which a language expresses the relationship between verb and noun phrases which are associated with it. There are two types of voice; active and passive in English. Active voice in which the subject of a clause is most often the agent, or doer of some action and passive voice in which the subject is affected by the action of the verb.



- g. **Native Journal:** Native journals refer to the journals which are published from the place/countries where the English language is spoken as a mother tongue or as a first language. In this section, English engineering journals which are published from London are called native journals.
- h. **Non-native Journal:** Non-native journals are those journals which are published from the place/country where the English language is spoken as a second language or only for communication and business purpose. Here, engineering journals which are published from Nepal and India are called non-native journals.

## **CHAPTER - TWO**

### **METHODOLOGY**

To fulfill the objectives of the purposed study, the following methodology was adopted.

#### **2.1 Sources of Data**

##### **2.1.1 Secondary Sources**

There are two types of sources viz. Primary and Secondary. However, for this study, the researcher used only the secondary sources to collect the data. The sources were as follows:

- a. VAASTU, an annual journal of architecture vol. 6 published by Department of Architecture, IOE, Pulchowk Campus, Lalitpur.
- b. VAASTU, an annual journal of architecture vol. 7 published by Department of Architecture IOE, Pulchowk Campus, Lalitpur.
- c. ARCHITECTURE-DESIGN, a journal of Indian architecture, published by India
- d. ARCHITECTURAL RECORD, architectural journal published by Oxford University Press, London.

#### **2.2 Sampling Procedure**

The researcher applied judgmental or purposive non-random sampling procedure to collect the required data. It is one of the most useful non probability sampling procedures. For this study, the researcher collected thirty two articles taking eight from each above mentioned journals.

## **2.3 Tools for Data Collection**

The main tool for data collection and analysis was observation. The researcher selected eight articles from each journal for the study. Then, she read and re-read the texts to get the required information for the study.

## **2.4 Process of Data Collection**

The researcher collected the above mentioned journals and observed different articles purposively to get the required information. After that, she wrote down the data systematically under different headings such as tense (past and non past) voice (active and passive), sentence types (simple, compound and complex) aspect (simple, progressive, perfect and perfect progressive) and listed the special vocabularies used in the engineering journals.

## **2.5 Limitations of the Study**

The limitations of the study are as given below:

- a. The study was limited to only the language used in architectural engineering journals.
- b. The study was limited to the analysis of the following categories: voice, tense, aspect, sentence type and specific terms.
- c. The study was limited to thirty two articles of four selected journals. The selected journals were as follows:
  - ) VAASTU, an annual journal of architecture vol. 6 published by Department of Architecture, IOE, Pulchowk Campus, Lalitpur.
  - ) VAASTU, an annual journal of architecture vol. 7 published by Department of Architecture IOE, Pulchowk Campus, Lalitpur.
  - ) ARCHITECTURE-DESIGN, a journal of Indian architecture, published by India
  - ) ARCHITECTURAL RECORD, architectural journal published by Oxford University Press, London.

## **CHAPTER - THREE**

### **ANALYSIS AND INTERPRETATION**

This chapter provides the analysis and interpretation of the language used in architectural engineering journals in terms of the previously mentioned aspects viz. sentence types, tenses, aspects, voices and special vocabularies. In the process of analysis and interpretation, firstly the analysis of the texts of each engineering journal was done and then the comparison of all journals was done. Finally, the specification of vocabularies in terms of word class and frequency is shown. Different tables and figures were given. As a result, the analysis and interpretation is very comprehensive.

#### **3.1 Sentence Types Used in Engineering Journals**

Regarding sentence structures, there are three types of sentences viz. Simple, Compound and Complex sentences. In the use of sentence structure, it has been found that there is slight difference between the native and non-native engineering journals.

##### **3.1.1 Analysis of Sentence Types Used in VS (6)**

The language used in VS (6) has been analyzed to find out the sentence types in the texts of VAASTU. The study has revealed the following frequency of occurrences of sentence types from the judgmentally selected texts of the engineering journal VS (6).

**Table No. 1**  
**Sentence Types in the Texts of VS (6)**

| Sentence types | Freq. | Per.   |
|----------------|-------|--------|
| SS             | 311   | 36.24  |
| CS             | 88    | 10.26  |
| CXS            | 459   | 53.50  |
| Total          | 858   | 100.00 |

The above table shows that CXS was found to have the highest frequency of all, covering 53.50 percent in the engineering journal VS(6). The CXS occupied more than half of the total sentences (i.e. 459 out of 858) with first position. Similarly, SS were used less frequently with 36.25 percent which is more than one third of the total sentences. In the same way, CS occupied the last position covering 10.26 percent which had the lowest frequency in the texts of VS(6).

following are some examples of SS, CS and CXS respectively used in VS (6).

- a. The size of the house depends upon the size of the family.
- b. All designers can be decorators but all decorators can not be designers.
- c. The old concept of carpenter or a shopkeeper supervising a client the arrangement of furniture as if they were design professional is not seen that much in practice even in a third country like Nepal.

### **3.1.2 Analysis of Sentence Types in VS (7)**

Here, the language used in VS (7) of architectural engineering journal has been analyzed to find out the use of sentence types. The study found the following frequency of occurrences of sentence types from the eight judgmentally selected texts of VS (7).

**Table No. 2**  
**Sentence Types in the Texts of VS (7)**

| Sentence types | Freq. | Per.   |
|----------------|-------|--------|
| SS             | 233   | 39.15  |
| CS             | 66    | 11.22  |
| CXS            | 289   | 49.63  |
| Total          | 588   | 100.00 |

This table clearly shows that CXS had the highest frequency covering 49.63 percent which is almost half of the total sentences. Similarly, SS covered 39.15 percent which is more than one third of the total sentences and CS covered 11.2 percent which were the least used sentences in the journal. Some examples of SS, CS and CXS respectively used in the texts of VS (7) are given below:

- a. Housing is a physical facility.
- b. The Rana Tharus present themselves with their own identity and they proudly claim Royal blood from the rulers of Rajasthan.
- c. However, increasing population pressures rapidly changing socio-economic conditions, inability of urban infrastructure to keep up with the urban growth and often uncoordinated and unplanned urban expansion has posed a number of urban environmental challenges.

### **3.1.3 Analysis of Sentence Types Used in the Journal of AD**

Here, the language used in AD of eight purposively selected texts has been analyzed to find out the use of sentence types. The researcher observed three hundred and thirteen sentences altogether. The study has found the following frequency of occurrences of sentence types used in the texts of AD.

**Table No. 3**

#### **Sentence Types in the Texts of AD**

| Sentence types | Freq. | Per.   |
|----------------|-------|--------|
| SS             | 88    | 28.12  |
| CS             | 37    | 11.82  |
| CXS            | 188   | 60.06  |
| Total          | 313   | 100.00 |

This table shows that CXS was found to have been used with the highest frequency covering 60.06 percent which is more than half of the total

sentences. Similarly, SS and CS were used less frequently than CXS covering 18.12 percent and 11.82 percent respectively.

following are the examples of SS, CS and CXS respectively used in the texts of AD:

- a. This has a direct impact on the imagery for architecture of institutions
- b. This region is notorious for heavy snowfall and a murky sky during winters.
- c. It only shows that the days of discussing architecture in over simplified terms like the light ventilation circulation etc. are probably over and what one needs to understand are the subtleties of one's intention behind the art of architecture.

### **3.1.4 Analysis of Sentence Types Used in AR**

The language used in AR of eight purposively selected texts has been taken for analysis. The researcher observed four hundred one sentences altogether to find out the frequency of occurrences of sentence types in AR. The study found the following frequency of occurrences of sentence types in AR.

**Table No. 4**  
**Sentence Types in the Texts of AR**

| Sentence types | Freq. | Per.   |
|----------------|-------|--------|
| SS             | 92    | 22.94  |
| CS             | 43    | 10.73  |
| CXS            | 266   | 66.33  |
| Total          | 401   | 100.00 |

The table shows that CXS was found to have been used with the highest frequency in the texts of AR covering 66.33 percent (i.e. 266 out 401), which is

more than half of the total sentences. In comparison, CXS, SS and CS were used less frequently. The SS covered 22.94 percent (i.e. 92 out of 401), which is more than two fifth of the total, CS was used with the least frequency covering only 10.72 percent in the texts of AR.

following are some examples of SS, CS and CXS respectively from the texts of AR:

- a. It's impossible to create a timeless building.
- b. This ultra contemporary project is much smaller but it is equally ambitious.
- c. For the architectural tourist, the epicenter of attraction these days is a street called Montesano and the neighborhood.

### **3.1.5 Analysis of Tense Used in VS (6)**

The researcher observed eight hundred fifty seven sentences to find out of tenses used in engineering journal of VS (6). The study found the following frequency of tenses used in it:

**Table No. 5**

**Tense Used in the Engineering Journal of Vs (6)**

| Tense    | Freq. | Per.   |
|----------|-------|--------|
| Past     | 237   | 27.54  |
| Non-past | 621   | 72.46  |
| Total    | 858   | 100.00 |

From this table, it is clear that non-past was used more frequently than past in the journal of VS (6). Out of 858 total sentences, 621 were found in non-past covering 72.46 percent which is more than two third of the total sentences.



Only two hundred thirty seven sentences were found in past which covered 27.54 percent which was less than one third in totality.

Some examples of the use of tense, past (a-b) and non-past (c-d) in the journal of VS (6) are as follows:

- a. The wing was lifted into place by a specially made crane, which had a capacity of 24 00 tons
- b. As more and more people become economical, stable, more children started attending schools; naturally the number of schools had to increase to cater to the growing demand.
- c. Every race and population group of Nepal has its own type of architecture.
- d. There are various public schools in the valley, most of which are made about six decades back.

### **3.1.6 Analysis of Tense Used in VS (7)**

The researcher observed five hundred eighty-eight sentences to find the frequency of tenses used in the engineering journal of VS (7). The study found the following frequency of occurrences of tenses used in it.

**Table No. 6**  
**The Tense Used in the Texts of VS (7)**

| Tense    | Freq. | Per.   |
|----------|-------|--------|
| Past     | 113   | 19.39  |
| Non-past | 475   | 80.71  |
| Total    | 588   | 100.00 |

This table shows that non-past tense was found to have been used with high frequency. The non-past tense covered 80.71 percent (i.e. 475 out of 588),

which is more than four-fifth of the total sentences. Similarly, past tense was used less frequently in the VS (7). It covered only 19.78 percent which is less than one-fifth of the whole portion. Some examples of the tense past (a-b) and non-past (c-d), in the VS (7) are given below:

- a. Earth was a major element of architecture up to the industrial revolution.
- b. The Kathmandu valley was included or UNESCO's prestigious world heritage list in 1879 for its outstanding universal value.
- c. The state party has started collecting detailed documentation for an inventory of the buildings.
- d. Earth construction does not need good mud.

### 3.1.7 Analysis of Tense Used in AD

The language used in AD has been studied to find out the use of tenses in the texts of AD. The researcher observed three hundred and thirteen sentences from the judgmentally selected texts used in the architectural journal of AD. From the careful study and observation, the researcher found the following frequency of occurrences of tenses.

**Table No.7**

**Tense Used in the Texts of AD**

| Tense    | Freq. | Per.   |
|----------|-------|--------|
| Past     | 97    | 30.99  |
| Non-past | 216   | 69.01  |
| Total    | 313   | 100.00 |

This table shows that non-past tense in the engineering journal of AD was found to have been used more frequently than the past tense. The non-past was found to be used more than two-third of the total sentences. It covered 69.01

percent (i.e. 216 out of 313). Similarly, the past tense covered only 30.99 percent, which is less than one-third of the total sentences. So, non-past was used more frequently than the past tense.

Some examples of past tense (a-b) and non-past (c-d) in the journal of AD are as follows:

- a. This arrangement resulted in a spatial variety graded with ordered unity of all disciplines and functions
- b. Lorch was also an important commercial centre.
- c. This has a direct impact on the imagery of architecture of institution.
- d. Religious architecture is rarely adventurous vis a vis its traditional imagery.

### 3.1.8 Analysis of Tense Used in AR

The researcher observed four hundred and one sentences to find the frequency of tenses used in the texts of AR and found the following frequencies of the tense used in it.

**Table No. 8**

**Tense Used in the Texts of AR**

| Tense    | Freq. | Per.   |
|----------|-------|--------|
| Past     | 139   | 34.66  |
| Non-past | 262   | 65.34  |
| Total    | 401   | 100.00 |

This table shows that non-past tense was found with high frequency. The non-past tense covered 65.34 percent (i.e. 262 out of 401), which is almost two-third of the total sentences. Similarly the past tense covered only 34.66 percent (i.e. 139 out of 401), which is more than one-third of the whole portion.

Some examples of past (a-b) and non-past (c-d) found in the texts of AR are given below:

- a. The architects demonstrated to the client that the existing shop buildings could be reused and converted to cover parking.
- b. They challenged archimania to figure out how to do it.
- c. A city is like a museum, and what's interesting is you can find the thinking and feelings of a generation.
- d. The south-facing wall does not see the sky.

### **3.1.9 Voice Used in the Engineering Journal of VS (6)**

The researcher observed eight hundred fifty eight sentences altogether from judgmentally selected texts to find out the frequency of occurrences. From the careful observation of the selected texts the following frequency of occurrences was found:

**Table No. 9**  
**Voice Used in the Texts of VS (6)**

| Voice   | Freq. | Per.  |
|---------|-------|-------|
| Active  | 663   | 77.27 |
| Passive | 195   | 22.73 |
| Total   | 858   | 100   |

The above mentioned table shows that the active voice was found to have been used more frequently than passive voice in VS (6). The active voice covered 77.27 percent (i.e. 663 out of 858), which is more than two-third of the total sentences. Regarding the passive voice, it covered only 22.73 percent (i.e. 195 out of 858).

following are the examples of voices, active (a-b) and passive (c-d) used in VS (6):

- a. New technologies appear day by day in Nepal.
- b. The Users see lots of dowry associated in arrange marriage in form of ornamental cornices, window, molding and bands, all made of wood.
- c. Only 4 percent of Kathmandu valley's population, own vehicles (10 percent) own motorcycles indicating that travel is dominated by waling for short trips and by public transport for larger distance.
- d. The two performance halls are equipped with air conditioning out- lets below the seats.

### 3.1.10 Analysis of Voice Used in VS (7)

The researcher observed five hundred eighty-eight sentences altogether from eight judgmentally selected texts to find out the voice used in vs (7). From the careful study and observation, the researcher found the following frequency of occurrences.

**Table No. 10**  
**Voice Used in the Texts of VS (7)**

| Voice   | Freq. | Per.   |
|---------|-------|--------|
| Active  | 388   | 65.99  |
| Passive | 200   | 34.01  |
| Total   | 588   | 100.00 |

The table shows that active voice was found to have been used more frequently than passive voice. The active voice covered 65.99 percent (i.e. 388 out of 588), which is almost two-third of the total sentences. Similarly, passive voice in VS (7) covered 34.01percent (i.e. 200 out of 588) which is more than one-

third of the total sentences. The examples of voices, active (a-b) and passive (c-d) are given below:

- a. Pruscha came to the valley on a UNDP assignment to produce the first urban development plan for the valley in thesis late 60's.
- b. The bold expression of the building lies in the imposing blank from façade with no openings, except for the entry.
- c. The main shrine is guarded by two lions which vary in size.
- d. The bricks of the wall near the plinth are sagged dull to the loads and vibration caused by the vehicles.

### **3.1.11 Analysis of Voice Used in AD**

The researcher observed three hundred and thirteen sentences altogether from eight judgmentally selected texts to find out the frequency of occurrences of voice used in AD. From the careful study and analysis of the selected texts, the researcher found the following findings:

**Table No. 11**

#### **Voice Used in the Texts of AD**

| Voice   | Freq. | Per.   |
|---------|-------|--------|
| Active  | 238   | 76.4   |
| Passive | 75    | 23.96  |
| Total   | 313   | 100.00 |

The study found that there was more use of active voice than passive voice. The active voice in AD covered 76.04 percent (i.e. 238 out of 313), which is more than third-fourth of the total sentences but the passive voice was used less frequently which covered only 23.96 percent (i.e. 75 out of 313) which is less than one-fourth of the total sentences.

Some examples of active voice (a-b) and passive (c-d) are as follows:

- a. The design of this campus is an attempt to understand and recreate the spite of ayurveda which is not only a science but a way of life itself.
- b. The programme includes a large computer room on the first level and a multi- propose hall on the fourth level with adjoining terraces of existing buildings on either sides.
- c. The campus is housed in a large 49 acres site on the Delhi-Hisar road.
- d. The circulation pattern of the campus is intended to be mostly pedestrian

### **3.1.12 Analysis of Voice Used in AR**

The researcher observed four hundred and one sentences altogether from eight purposively selected texts to find out the voice used in the engineering journal of AR. From the analysis of the selected texts of AR, the following frequency of occurrences of voices was found

**Table No. 12**  
**Voice Used in the Texts of AR**

| Voice   | Freq. | Per.   |
|---------|-------|--------|
| Active  | 325   | 81.05  |
| Passive | 76    | 18.95  |
| Total   | 401   | 100.00 |

It is clear from the above table that the active voice was used more frequently than the passive voice. The active voice covered 81.05 percent (i.e. 325 out of 401) which is more than four-fifth of the total sentences. Regarding the passive voice, it covered only 18.95 percent (i.e. 76 out of 401), which is less than one-fifth of the total portion. So, passive voice was used less frequently than that of active voice.

following are the examples of active (a-b) and passive (c-d) used in AR:

- a. Several car companies have lately built structures to cement their reputations as innovation leaders.
- b. The glass latticework took five months to assemble.
- c. The platforms are suspended from the structure's concrete slabs and form a red-colored still must near the back of the space.
- d. Because of the new building's gateway location it was designed to be an identifiable marker for the area.

### **3.1.13 Analysis of Aspects Used in the Engineering Journal of VS (6)**

The language used in the VS (6) was analyzed to find the use of aspects. For the study, the researcher observed eight hundred fifty eight sentences altogether from the selected texts used in VS (6) and the following frequency of the occurrence of aspects was found.

**Table No. 13**

**The Aspects Used in the Texts of VS (6)**

| Aspect        | Freq. | Per.   |
|---------------|-------|--------|
| Simple        | 717   | 83.56  |
| Prog.         | 39    | 4.55   |
| Perfect       | 92    | 10.72  |
| Perfect Prog. | 10    | 1.17   |
| Total         | 858   | 100.00 |

The researcher found that simple aspect was found to be used more frequently than other aspects. Simple aspect covered 83.56 percent (i.e. 717 out of 858) which is more than four-fifth of the total portion. Regarding progressive aspect, it covered only 4.55 percent (i.e. 39 out of 858). Similarly, perfect aspect



covered 10.72 percent (i.e. 92 out of 858). In the same way, perfect progressive aspect was found to be used with the least frequency covering only 1.17 percent (i.e. 10 out of 858) in the journal of VS (6).

Some examples of aspects, simple, progressive, perfect and perfect progressive respectively are given below:

- a. This bahal/ monastery built in 1380 Bs is considered to be amongst the oldest ones built in the Kathmandu valley.
- b. New buildings are springing up outside the walled towns and exposing life to insecurity and cold wind.
- c. Increasing concentration of population in urban areas has created new problems due to internal migration, rapid urbanization and increasing population.
- d. Like other aspects of life and artifacts of living buildings and vernacular architecture in rural Nepal has been changing rapidly.

### **3.1.14 Analysis of Aspects Used in the Journal VS (7)**

With careful study and observation the researcher presented the frequency of occurrences of the aspects used in the journal of VS (7) in the following table. During the observation, the researcher observed five hundred eighty eight sentences from the selected texts of VS (7).

**Table No. 14**  
**The Aspects Used in the Texts of VS (7)**

| Aspect        | Freq. | Per.   |
|---------------|-------|--------|
| Simple        | 506   | 86.5   |
| Prog.         | 28    | 4.76   |
| Perfect       | 49    | 8.33   |
| Perfect Prog. | 5     | 0.85   |
| Total         | 588   | 100.00 |

The above table shows that simple aspect was used more frequently than other aspects. Simple aspect covered 86.05 percent (i.e. 506 out of 588) which is more than four-fifth of the total sentences whereas progressive aspect covered 4.76 percent (i.e. 28 out of 588) but perfect aspect was used more frequently than progressive aspect. It covered 8.33 percent and perfect progressive aspect was found to have the least frequency of all in VS (7) covering only 0.85 percent.

Some examples of simple, progressive, perfect and perfect progressive aspects respectively are given below:

- a. Musya Bahal is one of the eighty Bahals known to exist in Kathmandu.
- b. We are creating rooms or the spaces that suit to requirements.
- c. The Mithila house form has been planned to suit the socio-cultures requirements of its people.
- d. Supply and service cable lines have been haphazardly disturbing the scenario.

### 3.1.15 Analysis of Aspects Used in the Journal of AD

The researcher analyzed three hundred and thirteen sentences from eight selected texts of AD to find the frequency of aspect. After the careful observation the researcher found the following frequency of occurrences of aspects.

**Table No. 15**

**The Aspects Used in the Texts of AD**

| Aspect        | Freq. | Per.   |
|---------------|-------|--------|
| Simple        | 259   | 82.43  |
| Prog.         | 14    | 4.47   |
| Perfect       | 38    | 12.14  |
| Perfect Prog. | 3     | 0.96   |
| Total         | 313   | 100.00 |

The study found that there was maximum use of simple aspect covering 82.43 percent (i.e. 259 out of 313) which is more than four- fifth of the total sentences. Regarding the progressive and perfective aspects, the latter was used more frequently than the former covering 12.14 percent (i.e. 38 out of 313). Similarly, perfect progressive aspect was used less frequently than the other aspects covering only 0.96 percent.

Some examples of simple, progressive, perfective and perfect progressive aspects respectively are given below:

- a. Campus designs are those all powerful images of a place which once experienced are not easily forgotten.
- b. Huge facilities are being planned and built simultaneously or in large increments for rapid requirements architect are being challenged by new problem.
- c. The top of the building has been capped by a fiber glass vault to harmonize with the recurring elements as the architectural expressing on of the campus.
- d. A special session on 'speech' and signal processing has been organizing in honor of Dr. S. Agrawal, past president of ASI.

### **3.1.16 Analysis of Aspects Used in AR**

Here, the researcher observed four hundred and one sentences altogether to find out the frequency of aspects used in the engineering journal of AR. She found the following frequency of the occurrences of aspects in the AR

**Table No. 16**

**The Aspects Used in the Texts of AR**

| Aspect        | Freq. | Per.   |
|---------------|-------|--------|
| Simple        | 343   | 85.84  |
| Prog.         | 16    | 3.99   |
| Perfect       | 35    | 8.72   |
| Perfect Prog. | 7     | 1.75   |
| Total         | 401   | 100.00 |

It is clear from the above mentioned table that the simple aspect was found to have been used more frequently than other aspects. The simple aspect covered 85.54 percent (i.e. 343 out of 401), which is more than four-fifth of the total sentences. Perfect aspect was used more frequently than the progressive aspect covering 8.72 percent whereas progressive aspect covered only 3.99 percent. In the same way, perfect progressive aspect was found to have been used with the least frequency covering only 1.75 percent (i.e. 7 out of 401) in the engineering journal of AR.

Some examples of simple, progressive, perfect and perfect progressive aspects respectively are given below:

- a. The program required in part new construction, in part adaptive reuse of a vacant and dilapidated car dealership.
- b. The feeling of water is so overwhelming that visitors tread gingerly.
- c. Simpson door has enforced selected performance series wood French exterior doors with water Barrier technology.
- d. Designer Kelvin Kolanowski has been turning out sculptural changed been turning out sculptural change eelier, seconds and lamps for fuse lighting.

### 3.1.17 Overall Analysis of Special Vocabularies Used in the Texts of VS (6), VS (7), AD and AR

In this section, the specific vocabularies refer to the words which are used in the field of architectural engineering journals viz VS (6), VS (7), AD and AR. Here, vocabularies and their frequency used in the number of specific words in each and every sentence was listed and analyzed to find out their word-class with number of occurrences (or frequencies). Then, all selected special vocabularies are tabulated mentioning the category like noun, verb, adjective and adverb and frequency of each journal.

After the careful analysis and observations, the following frequency of occurrences of the major words was found.

**Table No. 17**

**Special Vocabularies Used in the Texts of VS (6), VS (7), AD and AR**

| Major Word Class | Name of Journals |       |        |       |       |       |       |       |       |       |
|------------------|------------------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
|                  | VS (6)           |       | V6 (7) |       | AD    |       | AR    |       | Total |       |
|                  | Freq.            | Per.  | Freq.  | Per.  | Freq. | Per.  | Freq. | Per.  | Freq. | Per.  |
| Noun             | 243              | 60.75 | 175    | 54.36 | 190   | 54.15 | 238   | 66.65 | 846   | 58.79 |
| Verb             | 165              | 39.00 | 146    | 54.34 | 161   | 45.87 | 114   | 31.95 | 585   | 40.65 |
| Adj.             | 1                | 0.25  | 1      | 0.29  | 1     | 0.28  | 5     | 1.40  | 8     | 0.56  |
| Adv.             | 0                | 0.00  | 0      | 0.00  | 0     | 0.00  | 0     | 0.00  | 0     | 0.00  |
| Total            | 400              | 100   | 322    | 100   | 351   | 100   | 357   | 100   | 1439  | 100   |

The above table shows that the nouns were used most frequently covering 58.79 percent which was more than half of the total specific words. Similarly, verbs were used less frequently than nouns covering 40.65 percent. Adjective covered only 0.56 percent which is least used in the native and non-native journals.

### **3.1.18 Analysis of Special Vocabularies Used in the Texts of VS (6)**

In the texts of Engineering Journal of VS (6), the researcher found only forty-eight specific words which are related to architecture. Among them, only one word was adjective and twenty nine were nouns and rest of others were verbs. Nouns had the highest frequency of total words. But, no specific adverbs were found in VS (6). The nouns like landscape, construction, corridor ventilation were found to have the highest frequency of 22, 20 19, and 15 respectively. Similarly, the verbs like build, construct, paint, maximize were used more frequently than the others (Appendix – II).

### **3.1.19 Analysis of Special Vocabularies Used in VS (7)**

Here, the special vocabularies used in VS (7) have been observed to find out word class and frequency in terms of noun, verb, adjective and adverb only. The total sentences that were observed are only five hundred eighty eight. The frequency of occurrences of nouns, verbs, adjectives, adverbs have been specified under the major word class through tabulation (Appendix – III).

From the analysis of special vocabularies, it was concluded that nouns had the highest frequency under major word class. Out of total forty-eight specific vocabularies thirty one were nouns, one is adjective and seventeen were verbs. However, no special adverbs were found related to engineering.

### **3.1.20 Analysis of Special Vocabularies Used in the Journal of AD**

Here, the specific vocabularies used in eight texts of AD have been observed to find out the word class and frequency in terms of Noun, Verb, Adjective and Adverb. The total observed sentences were three hundred and thirteen (Appendix – IV).

In the architectural engineering journal of AD, the researcher found only fifty four special vocabularies related to architecture. Among them, only one word was adjective thirty five were nouns and eighteen were verbs. The nouns like existing building, construction, design, ground floor had the highest frequency of 13, 11, 13, 12 and 22 respectively.

Similarly, the nouns like Graveyard, Granite Artium etc had the lowest frequency of all. There was one specific adjective (i.e. Charitable), which had also the lowest frequency with 1. But no specific adverbs were found in AD.

### **3.1.21 Analysis of Special Vocabularies Used in the Journal of AR**

The researcher observed the special vocabularies used in the journal of AR to find word class and frequency interms of noun, verb, adjective and adverb only. The researcher observed four hundred one sentences altogether. Only special words were presented (Appendix – V).

In the text of architectural engineering journal of AR, the researcher found forty nine words which are related to engineering. Among them, one is adjective which had the frequency of five, thirty-one were nouns and seventeen were verbs. Some nouns like inch, corridor, design, and construction had the higher frequency than the other. Similarly, some verbs like paint, require, accommodate, locate had the higher frequency than the other verbs. But no special adverbs were found in AR.

## **3.2 Comparisons of Sentence Types, Tenses, Voices, Aspects and Special Vocabularies in the Texts of Native and Non-native Engineering Journals**

The native and Non-native engineering journals were compared interms of sentence types, tenses, voices, aspects and special vocabularies. The comparison in total has been given below:

### 3.2.1 Comparison of Sentences Types Used in the Text of Native and Non-native Journals

**Table No. 18**  
**Comparisons of Sentence Types, Used in the Text of Native and Non-Native Engineering Journals**

| Sentence types | Native (AR) |       | Non native {VS (6) + VS (7) + AD} |       |
|----------------|-------------|-------|-----------------------------------|-------|
|                | Freq.       | Per.  | Freq.                             | per.  |
| SS             | 92          | 22.94 | 688                               | 39.12 |
| CS             | 43          | 10.73 | 191                               | 10.85 |
| CXS            | 266         | 66.33 | 880                               | 50.03 |
| Total          | 401         | 100   | 1759                              | 100   |

The table depicts that CXS is highly used in both native and non-native texts covering 66.33 percent (in native) and 50.03 percent (in native) texts. SS occupied the second position in native and non-native texts. it covered 22.94 percent in native whereas 39.12 percent in non-native texts. There is slight difference in the use of SS between the native and non-native journals. In both types of texts CS occupied the third position covering 10.73 percent (native) and 10.85 percent (non native) texts. There is no such difference in the frequency of occurrences of CS between native and non-native texts.

### 3.2.2 Comparison of Tenses in the Texts of Native and Non-Native Journals

**Table No. 19**  
**Tenses in the Texts of Native and Non-Native Journals**

| Tense    | Native |       | Non-native |       |
|----------|--------|-------|------------|-------|
|          | Freq.  | Per.  | Freq.      | Per.  |
| Past     | 139    | 34.66 | 448        | 25.47 |
| Non-Past | 262    | 65.34 | 1311       | 74.53 |
| Total    | 401    | 100   | 1759       | 100   |



The table depicts that the non-past tense was highly used in both native and non-native journals. In comparison, non-native journal had higher frequency, than native journals. In native journal, it covered 65.34 percent (i.e. 262 out of 401) and 74.53 percent in non-native journals. Regarding the past tense, it was used in with low frequency in both naïve and non- native texts but native texts had higher frequency of occurrences of past tense than the non-native texts. In native texts it covered 34.66 percent and 25.47 percent in non-native texts.

### 3.2.3 Comparison of Voice in the Texts of Native and Non-Native Journals

The voice used in the native and non- native journals has been compared. The analysis in total has been given below:

**Table No. 20**

**Voice Used in Native and Non-native Journals**

| Voice   | Native |       | Non- Native |       |
|---------|--------|-------|-------------|-------|
|         | Freq.  | Per.  | Freq.       | Per   |
| Active  | 325    | 81.35 | 1289        | 73.28 |
| Passive | 76     | 18.95 | 470         | 26.72 |
| Total   | 401    | 100   | 1759        | 100   |

The table depicts that active voice is highly used in native and non-native journal. Active voice covered 81.35 percent (i.e. 325 out of 401) in native texts and 73.28 percent (i.e. 1289 out of 1759) in native texts. Regarding the passive voice, it covered 18.95 (i.e. 76 out of 401) in native journal, and 26.72 percent (i.e. 470 out of 17 59) in non-native journals.

### 3.2.4 Comparison of Aspect in the Texts of Native and Non- Native Engineering Journals

Here, the aspects used in the native and non- native engineering journals has been compared, analyzed and interpreted. Then, the analysis in total has been given below including the comparison of aspects in the native and non- native texts of the above-mentioned journals.

**Table No. 21**

#### **Aspects Used in the Texts of Native and Non- Native Engineering Journals**

| Aspect       | Native |       | Non-native |       |
|--------------|--------|-------|------------|-------|
|              | Freq.  | Per.  | Freq.      | Per.  |
| Simple       | 343    | 85.54 | 1481       | 84.20 |
| Prog         | 16     | 3.99  | 81         | 4.60  |
| Perfect      | 35     | 8.72  | 179        | 10.18 |
| Perfect prog | 7      | 1.75  | 18         | 1.02  |
| Total        | 401    | 100   | 1759       | 100   |

This table shows that simple aspect was used with high frequency than other aspects in the texts of native and non-native journals covering 85.54 percent in (native) and 84.20 percent in (non-native) journals. There is slight difference between native and non-native texts in the use of simple aspect. Perfective aspect covered 8.72 percent in (native) and 10.18 percent in (non-native). Similarly, progressive aspect covered 3.99 percent in (native) and 4.60 percent in (non-native) texts. There is also slight difference between native and non-native journals. Perfect progressive aspect occupies the least position in both native and non-native texts i.e. 1.75 percent (native) and 1.02 percent (non-native) texts of engineering journals.

### 3.2.5 Comparison of Special Vocabularies Used in the Texts of Native and Non-Native Engineering Journals

The frequency of occurrences of special vocabularies has been presented comparatively:

**Table No. 22**

#### **Special Vocabularies Used in the Texts of Native and Non-Native Engineering Journals**

| Major Word Class | Native |       | Non-native |       |        |       |       |       |
|------------------|--------|-------|------------|-------|--------|-------|-------|-------|
|                  | AR     |       | VS (6)     |       | VS (7) |       | AD    |       |
|                  | Freq.  | Per.  | Freq.      | Per.  | Freq.  | Per.  | Freq. | Per.  |
| Noun             | 238    | 66.65 | 243        | 60.75 | 175    | 54.36 | 190   | 54.15 |
| Verb             | 114    | 31.95 | 165        | 39.00 | 146    | 45.36 | 161   | 45.86 |
| Adj.             | 5      | 1.40  | 1          | 0.25  | 1      | 0.28  | 1     | 0.29  |
| Adv.             | 0      | 0.00  | 0          | 0.00  | 0      | 0.00  | 0     | 0.00  |
| Total            | 357    | 100   | 400        | 100   | 322    | 100   | 351   | 100   |

Out of the total special vocabularies, nouns were used most frequently in the highest position in both the native and non-native journals. Verbs were used less frequently than nouns in the native and non-native journals. Adjectives were least used in the both journals but no specific adverbs were found in both the native and non-native journals.

The study also found that words like construction, corridor, drainage, sculpture and design were used repeatedly in both the native and non-native journals. In the same way, some words like construction, lobby, design, courtyard etc. were found to have been used with higher frequency in the non-native journals. In case of the native journal some words like drainage, illumination, inch, planning, etc. were used with higher frequency. Similarly, verbs like build construct, plan, design, migrate, consist and include were used repeatedly (Appendix – I).

## **CHAPTER – FOUR**

### **FINDINGS AND RECOMMENDATIONS**

#### **4.1 Findings**

On the basis of the analysis and interpretation of the data, the findings of the study can be summarized in the following points:

- a. The language used in the texts of engineering journals was found to have its own structure, technical vocabularies, unfamiliar abbreviations, different tables, charts and graphically rich texts, which make engineering language different from others.
- b. Complex sentences were used maximally in the texts of both native and non-native engineering journals covering two-third and more than half of the total sentences respectively. Simple sentences occupied the second position and compound sentences were used minimally in both the texts.
- c. In case of tense, non-past was used more frequently than the past tense covering 65.34% in native texts and 74.53% in non-native texts of engineering journals whereas past tense was used with low frequency covering only 34.66% (native) and 25.47% (non-native) texts.
- d. Regarding the use of voice, active voice was highly used covering 81.05% and 73.28% in native and non-native texts respectively whereas passive voice was used in low frequency in both the texts i.e. 18.95% in (native) and 26.72% in (non-native). There was slight difference in the use of passive voice of the selected texts.
- e. In case of aspects, simple aspect was maximally used in the texts of engineering journals. Simple aspect covered 85.54% in native journal and 84.220% in non-native journals. There was slight difference in the

use of simple aspect between the texts of native and non-native journals. Similarly, perfect aspect was frequently used than progressive aspects and perfect progressive aspect was used with the least frequency in the texts.

- f. The use of special vocabularies makes the language used in engineering journals different from others. So, the language used in it has its own register. The language used in the engineering journals is not so difficult but some technical and special words are very vague to understand for those who are unfamiliar with the language of this field. In terms of special vocabularies, one hundred and thirty two special vocabularies were found altogether.
  - i. In terms of word class, most of the words were nouns. Adjectives were also found in a limited number but the researcher could not find any special adverbs.
  - ii. It was found that 79.54% (i.e. 105 out of 132) words were nouns and 2.72% (i.e. 3 out of 132) words were adjectives and 17.42 percent (i.e. 23 out of 132) words were verbs. any special adverbs were not found.

## **4.2 Recommendations**

The recommendations of the present study are as follows:

- a. The language used in the texts of engineering journals has been found to have its own structure, technical vocabularies, different tables, charts and graphs which are very important and match to the day to day life of Nepalese society. So, we have to make them familiar to the students.
- b. The study found that most of the texts of engineering journals were written in complex sentences, simple aspect, non-past tense and active voice. Therefore, while teaching such grammatical portions to the

students, the texts of engineering journals should be adopted as teachers/students reference materials to make them familiar with the engineering related terms.

- c. The curriculum designers/planners should include some texts related to engineering to familiarize the students with the language of engineering and to make the students aware of the relation between daily life and the culture.
- d. In the same way, textbooks should be designed targeting for those who want to make their profession better under the field of engineering by writing the related texts or texts for journals, newspapers.