Chapter Three

Code-Switching as Transfer: An Empirical Study

Part I

Methodology
CODE-SWITCHING AS TRANSFER: AN EMPIRICAL STUDY

PART I

METHODOLOGY

3.1 INTRODUCTION

This chapter aims to introduce an important outcome of language contact phenomenon, code-switching, as a communication strategy of transfer. Odlin (1989) clearly states that “code-switching is similar to conscious negative transfer” (Odlin 1989:146) which itself arises from the dissimilarities in the interacting languages. Hoffman (1991:110) defines code-switching as “the alternate use of two (or more-OVD) languages within the same utterance or during the same conversation” (Dulm, 2007: 9). The contents of the chapter are divided into five sections. First section deals with the important research works done in the intriguing field of code-switching till date in a chronological order. Then the researcher will discuss about the various types of code-switching. It will be seen subsequently that different researchers have classified code-switching differently based on their context of classification. As this research deals with the effect of social variables on code-switching, the researcher will discuss mainly the sociolinguistic studies on code-switching. This research also deals with ‘motivations for code-switching’ as one of its prime objectives; a section will be dedicated to participant-dependent motivating factors of code-switching. Likewise functions of code-switching will also be discussed from different perspectives. Some pages will be invested on clarification of some overlapping terminologies related to language contact phenomena as well because these terms often create confusion for beginners if not understood properly. Last section deals with code-switching in Indian context, particularly between the native language Hindi and the other dominating language English (or Indian English). Also a detailed discussion will be done about the Indianised English or Hinglish, so that repercussions of code-switching in Indian context can be better understood.

3.2 AIM AND RESEARCH QUESTIONS

The aim of this comparative work is -
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1. To study the influence of age, sex, level of education and medium of instruction at school level on the use of code switching in terms of extent, type and direction i.e. whether from the target language to the mother tongue or vice versa.

2. To study the use of code-switching by Urdu/Hindi speakers in their speech and in writing on the same topic, first in their mother tongue (L1) and then in English (L2).

3. To find the motivation/reason behind this phenomenon.

RESEARCH QUESTIONS

This study addresses four major research questions in order to investigate the impact of the above mentioned sociolinguistic factors, i.e. age, sex, level of education and medium of instruction at school level on code-switching-

- Do different age groups and different generation use code-switching differently?
- Is there a difference in the way males and females use code-switching?
- Is the use of code-switching influenced by the level of education?
- Does the medium of instruction at school level, whether L1 or L2, affect the use of code-switching?

3.3 SIGNIFICANCE OF THE STUDY

Significance of the study

Nowadays, globalization and modernization along with the advent of TV channels have led to the emergence of a new kind of language which is neither Hindi nor English but can be called Hinglish. Grammar which was hitherto considered as the backbone of a language is being neglected now. Language alternation has special significance in the Indian context considering the variety of language distribution throughout the country. In a country like India where there are a total of 122 languages, 234 mother tongues and a total of 22 official languages (census, 2011), it is not difficult to understand why multilingualism is widely prevalent here. Bilingual processes such as code-mixing and code-switching are the most commonly noticed instances of code alternation. These processes are included in the cluster term code-switching, in the general context of bilingualism.
Purists consider this phenomenon as having negative influence on our culture. Especially they consider this as a threat to our national language Hindi. But majority of researchers believes that the phenomenon of language switch is a welcome change since it brings Indians closer to English (Kumar 1986). No one can dispute the fact that English is widely acknowledged language and that is why it is considered as a language of prosperity and prestige. The two main local languages of British times in India were Sanskrit and Persian. These two languages were deeply embedded in traditions, religion, and day to day life. When the economy went gradually into the hands of British, these languages began to interact with English. Though there was initially a long-standing debate about the obvious danger of extinction, the educated people of that time relied on English as a superior language. The clear dominance of English in urban societies, corporate institutions, premier educational institutes and even in Indian Judiciary compels anyone with a rational approach to accept the authority of English. But this dominance of English has encouraged us to use it indiscriminately in our local language. Particularly the younger generation is more prone to this phenomenon.

This thesis intends to identify the target group, categorised on the basis of age, sex, level of education and medium of instruction at school level, which uses code-switching more frequently and also the reason for doing this. We also intend to do a comparative study based on the above mentioned socio linguistic variables.

Although a lot of work has been done on code-switching before but almost all of them were based on interview or other communicative task and thus their main focus seems to be on conversational switching. A comparative work on code-switching has never been performed on this topic before in Aligarh. This study consists of L1 and L2 based written and oral tasks and it intends to compare the extent, type and direction of code-switching between these four task groups. This approach allows us to do a comparative study on code-switching as a communicative strategy of transfer. By studying the influence of age, sex, level of education and medium of instruction at school level on the use of code-switching, this research also seeks to explain the pervasiveness of code switching in our society. Moreover, the inclusion of less educated and illiterate subjects lends a broader perspective and enhances the scope of this study.
3.4 BACKGROUND TO CODE SWITCHING

3.4.1 DEFINITIONS AND CHARACTERISTICS OF CODE SWITCHING

Bilingualism and even multilingualism are widely prevalent phenomena nowadays. In today’s world of globalization and modernization it is very hard to believe that there are countries with population that speaks one language only. Even in a country like Thailand where majority of the population speaks their official language, Thai, we come across a lot of multilinguals. One of the most important reasons for this is the intermingling of cultures and individuals from different countries, as Thailand is a tourism hot spot. In a country like India which is culturally so rich, it can be easily anticipated why multilingualism is widely prevalent here.

From our everyday life and even by our personal experiences, we know that a multilingual or bilingual chooses between code/language systems, predominantly at an unconscious level, according to circumstances. The back and forth switching between the two languages does not occur randomly most of the time. The most important rational factor for this would be the comprehensibility of the person being addressed. Due to various other reasons “people, then, are usually required to select a particular code whenever they choose to speak, and they may also decide to switch from one code to another or to mix codes even within sometimes very short utterances and thereby create a new code in a process known as code-switching” (Wardhaugh, 1986: 101). A very important aspect is to understand the reason and motivation behind code-switching. It can arise “from individual choice or be used as a major identity marker for a group of speakers who must deal with more than one language in their common pursuits” (ibid).

Before Wardhaugh (2006), Poplack (1980: 583) defined code-switching as “the alternation of languages within a single discourse, sentence or constituent” (Kazuko, 1996:56). According to Hudson (1996), code switching is the “inevitable consequence of bilingualism, as anyone who speaks more than one language chooses between them according to circumstances” (Hudson, 1996: 51).
Although the definitions mentioned till now are simplistic and flexible but some complicated and rigid definitions have also surfaced. For e.g. Annamalai (1989) observed, “switching is normally done for the duration of a unit discourse” (Walwadkar, 2013: 46). And Halliday (1978:65) defines it as “code-shift actualized as a process within the individual: the speaker moves from one code to another and back, more or less rapidly, in course of a single sentence” (ibid). Muskyen (2000) categorised intra-sentential code-switching as code-mixing and defined code-switching as “rapid succession of several languages in a single speech event” (Muskyen, 2000:1). Distinction between these definitions raged further debate. In order to avoid confusion we will go with Wardhaugh’s definition (2006) and use the cluster term code-switching to include other related terminologies associated with language contact. Regarding the characteristics of code switching, numerous studies has been done till now and most authors (Huerta 1978; Poplack 1980; Gumperz 1982; Bentahila and Davies 1983) concur on some basic features of code-switching (as cited in Odlin 1989:146)-

1. Code-switching is often intentional and can serve a variety of purposes.
2. Code-switching is similar to conscious negative transfer, but is more augmentative than compensatory.
3. Unconscious transfer seems to be rare in the switches of highly proficient bilinguals.
4. The most fluent bilinguals seem to have the greatest repertory of switching skills.

Although we are of the opinion that important terms like code-mixing and borrowing should be discussed separately, but for the purpose of efficacy of data interpretation and for the reason, that we cannot debate, discuss and rule out possibilities on every instance of code alteration found in our corpus, we will use the umbrella term ‘code-switching’.

### 3.4.1 PREVIOUS RESEARCH ON CODE SWITCHING

It is unanimously accepted that the phenomenon of code-switching originated with the conception of language contact which led to bilingualism and is considered the most common and pervasive transfer strategy. Texts discussing code-switching between Hebrew and Catalan in 14\textsuperscript{th} and 15\textsuperscript{th} centuries are documented. The earliest reported instance of code-switching was found between English and Spanish in early 20\textsuperscript{th}
century. Previous research literature testifies that the earliest definition of code-switching was given by Weinreich in 1953 when he described bilingualism as “the practice of alternately using two languages.” (Mahootian, 2006: 511). Haugen (1953), Hasselmo (1961), Clyne (1972) and Weinreich (1953) were the pioneers in the early studies of code-switching in context of language contact and bilingualism. In 1956, Haugen came forward with the concept of interference as “overlapping of two languages” (Dulm, 2007:11) which was more clearly defined by Weinreich (1963:1) as “instances of deviation from the norms of either language which occur in the speech of bilinguals as a result of their familiarity with more than one language” (ibid). According to Odlin(1989) Weinreich (1953/1968) used “the term interference to cover any case of transfer” (Odlin 1989:12) and “refers to both kinds of transfers (and also to code-switching)” (Odlin 1989:24). Both types of transfer refer here to borrowings and substratum transfers, which we will discuss afterwards. The first detailed and well acknowledged study on the role of social factors on code-switching was done by Blom and Gumperz (1972). They based their study between two varieties of Norwegian used in Hemnesberget: Ranamal, a local dialect and Bokmal, the standard variety. They observed that Ranamal is used in local activities and relationships whereas Bokmal is used in official settings. So, former enjoyed a casual application whereas latter had more formal function in society. They went on to suggest that speakers’ code choices are “patterned and predictable on the basis of certain features of the local social system” (Blom and Gumperz, 1972:409) as cited in (Dulm, 2007:13). Blom and Gumperz (1972) also classified code switching based on their research into metaphorical switching and situational switching. On the similar line of work, researchers went ahead to suggest that code-switching is a behavioural strategy, based on their study of Spanish-English code-switching. In 1973 Giles et.al, came forward with ‘Speech Accommodation Theory’ that considers how speakers alter their speech according to their audience (Gross, 2006). In other words, speaker’s need to align or deviate from a group conversation will eventually dictate their choice of language. This model can also be used to explain motivations behind code-switching.

According to Poplack (1980) code-switching can take different forms in different communities. She discussed the place of code-switching as a language contact phenomenon (transfer, borrowing) in the verbal repertoires of the communities
claiming that, “distinctions cannot be drawn on purely formal, structural, linguistic
grounds but must be analysed in terms of their distribution in the community and with
respect to the use members make of different forms to signal social, discourse or
referential meaning” (Heller 1988). In yet another important account, Gumperz (1982)
introduced the term ‘conversational code-switching’ and also discussed code
switching with the perspective of distinguishing between situational and metaphorical
varieties. Based on the conversational perspective, Gumperz (1982) suggested that
code-switching is “an element in a socially agreed matrix of contextualization cues
and conventions used by speakers to alert addressees, in the course of ongoing
interaction, to the social and situational context of the conversation” (Lee, 2010:2).
He also highlighted the structural aspect of code-switching by defining it “as the
juxtaposition within the same speech exchange of passages of speech belonging to
two different grammatical systems or subsystems” (Mahootian, 2006: 511). Gumperz
proposed a functional framework of code switching based on his interactional
analysis. He also identified six functions of code-switching which according to him
have important discourse implications for bilinguals because they are privileged with
a greater degree of freedom to make linguistic choices during interactions.

Other researchers too made significant contribution to the sociolinguistic aspects of
situational and metaphorical types similar to Gumperz (1982), and added one more
category of contextual code-switching. More emphasis was laid on code switching as
an interactional strategy (Dulm, 2007). Important work on Indian English was done
by Kachru in the same decade. Kachru (1978, 1983) focussed mainly on social
motivation for code-switching between English and Indian languages. His was a path
breaking work in Indian context which paved way and ignited a lot of researchers to
carry forward the work on Indian English. Whereas Heller (1988) worked on
various other language contact phenomena and also proposed various social functions
of code-switching (Dulm, 2007).

Carol Myers Scottan (1983) carried out field research in East Africa and based on her
findings proposed the widely acclaimed Markedness Model. It was designed to
explain the socio pragmatic motivations for code-switching (Gross, 2006). This model
bears resemblance to the previously discussed Speech Accommodation Theory (Giles,
1973) and Gumperz’s approach to conversational code-switching (1982) in a way that it conceptualises speaker as a decision maker who makes certain decision regarding code choice with the intention to make an interaction most efficient and to draw the outcomes in their own favour. But unlike the above models which assign external factors like addressee and social settings as the primary motivating factor for code-switching, the markedness model is “primarily a speaker-centered approach to communication” (Gross, 2006: 510). She based her arguments on a ‘markedness metric’, a model which enables speakers to discriminate code choices as marked (unexpected) or unmarked (conventional) with regards to the norms of their speech community (Lee, 2010). In order to develop her markedness model, Myers-Scotton proposed the concept of ‘Rights and Obligation Sets’ (R O Sets) in the ‘Negotiation Principle Model’. The negotiation principle entails that “speakers choose the form of their utterances in accordance with the sets of rights and obligations (R O Sets) which they wish to be in force in a particular communicative exchange” (Myers-Scotton, 1993a: 113; Myers-Scotton, 1998: 21) as cited in (Dulm, 2007:14). The RO sets consist of interlocutors expectations from each other and are constituted by the norms of the community which the participants share. For e.g. RO sets for an Urdu classroom is to speak in Urdu as the preferred language choice. Usually unmarked choices are considered conventional whereas marked ones are rare as they are considered deviation from the expected norm. Based on this Markedness Model, Myers-Scotton proposed that code-switching is a “meta-message of conversational moves” and “functions to negotiate speaker’s perceptions of themselves and their relations with others”. (Myers-Scotton, 1993: 111) as cited in (Lee, 2010: 3).

Based on the framework of conversational analysis, two researchers particularly tried to shed light on code-switching research. One of them, Auer (1984,1995) criticised Gumperz’s interactional paradigm and proposed that “speakers do not produce their utterances based on the given situation as Gumperz suggested, but rather creates situation through interactions” (Lee, 2010:3). Another study by Li and Milroy (1995) took the concept of conversational code-switching further by their research on Chinese-English speakers. They based their research on Auer’s sequential approach and interestingly their findings concurred with Myers-Scottens’ markedness theory as the Chinese-English bilinguals exhibited the awareness of RO sets (Lee, 2010).
Clyne (2003) studied code-switching in the context of language contact phenomena such as language shift and convergence (Dulm, 2007). Recent research on code-switching acknowledges its significance in situations where bilinguals communicate using a “unique language system” in accordance with their cultural norms. Researchers such as Kachru (1985, 1990, 2003), Baumgardener (1998), Myers-Scotton (1993), Seligsen (1988), Baker (2008) and DeHouwer (2008) consider it a “natural language change that occurs due to the constant political, cultural and social assimilations and shifts in the world” (Jalal, 2010:2).

3.4.3. TYPOLOGY OF CODE-SWITCHING

From grammatical point of view two main types of code-switching can be identified. “Switching between languages at sentence or clause boundaries is called inter-sentential code-switching” (Mahootian, 2006:512). For e.g.

1) Yeh un dino ki baat hai *when I was young.*

Whereas “switching within a clause involving a phrase, a single word or across morpheme boundaries are intra-sentential switching” (ibid). For e.g.

2) Let’s have some *samosas*

3) Hum log to *time-pass* kar rahe the.

A third, less acknowledged type called Tag switching is also proposed by some researchers. This type of switching involves the insertion of a tag (e.g. I mean, you know, right? isn’t it? Okay etc) from one language into an utterance of another language (Mahootian, 2006). For e.g.

4) today that team played extremely well, *nahi?*

5) Well....mujhe nahin maloom kya kehna hai.

Some authors like Hudson (1996) and Mahootian (2006) consider code mixing as also a type of code-switching. Code-mixing is often included in the intra-sentential variety of code-switching. This aspect regarding the confusion of various terminologies will be discussed later.
Blom and Gumperz (1972) distinguished two types of code-switching, situational and metaphorical (Dulm, 2007). Often in a community people tend to converse in a specific language in informal places like their home or with their family members whereas in formal situations like at work place they tend to converse either in a different language or a different dialect of the same language which they were using at home. For e.g. here in Aligarh, a Muslim family will use Urdu for casual conversation within family members but when they go to their work place like taking a lecture at Aligarh Muslim University, they will speak in English, as it is the official language of the University. Thus arises a situation where speaker switches between languages whenever the external situation changes. Normally no change in topic is involved.

Another possibility is that a bilingual speaker may use his choice of language to define a situation, instead of letting the situation define the language choice. This kind of circumstance is mostly associated with a change of topic. The speaker decides to ignore the external situation and instead focuses on the requirements of the audience (Hudson, 1996).

Thus situational code-switching occurs when “the language used change according to the situations in which the conversants find themselves: they speak one language in one situation and another in a different one. No topic change is involved” (Wardhaugh, 2006:104). Whereas “when a change of topic requires a change in the language used, we have metaphorical code switching” (ibid). This classification has social and linguistic significance as a particular choice of code signifies a certain social value to it.

Code-switching can also be classified into three categories as suggested by Muysken (2000) with an original classification for intra-sentential code-mixing. Since we rarely find any instance of inter-sentential code-switching in our corpus at the sentence boundary and also the objective of this research is to compare the effects of socio-cultural factors on code switching and not to distinguish between code mixing and switching, the researcher applied the classification suggested by Muysken (2000) to her corpus.

Furthermore as “Some researchers have used the term code mixing (also ‘codemixing’ and ‘code-mixing’) to refer specifically to intra-sentential switching,
and code switching to refer to inter-sentential switching. In most current literature, however, the term ‘code mixing’ is used interchangeably with ‘code-switching’, with both terms referring to both types of language mixing” (Mahootian, 2006:512). It further justifies the researcher’s inclusion of Muysken’s classification.

According to Muysken (2000), intra-sentential code-mixing is divided into three types:

I. **Insertion** is switching “of material (lexical items or entire constituents) from one language into a structure from the other language” i.e. “insertion of an alien lexical or phrasal category into a given structure” (Muysken, 2000:3).

> What can be inserted and what cannot is a language dependent question. In some languages mostly adverbial phrases are inserted whereas in others single nouns are most commonly inserted. In Hindi/Urdu- English code switching, bare noun insertion is very common. Often, English noun is inserted in its plural form for e.g.

7) *Aaj humne sabke liye ek party arrange ki hai.*

8) *Chalo aaj shopping mall chalte hain.*

Both 7 and 8 are examples of insertions but in 8, ‘shopping mall’ forms one constituent and is considered as single insertion, whereas ‘party arrange’ in 7 cannot be considered as a single unit insertion. They are two separate units inserted in tandem.

II. **Alternation** is switching “between structures from languages” i.e. “half way through the sentence, one language is replaced by the other” (Muysken, 2000:5) i.e. the two languages alternate. Another feature is that the two languages “remain relatively separate”, for example, when the switch is at the periphery of the clause (Muysken, 2000:121) as cited in (Dulm, 2007:30).

9) *Pata nahi yaar, why is it so difficult to understand girls?*
As is apparent in the above example, sentence starts with Hindi and ends in English. There is a “true switch from one language to another, involving both grammar and lexicon” (ibid).

**III. Congruent lexicalization** is switching of “material from different lexical inventions into a shared grammatical structure”. i.e. “there is a largely (but not necessarily completely) shared structure, lexicalized by elements from either language” (ibid). According to Muysken (2000:132,152), ‘congruent lexicalization’ “occurs where the two languages share the grammatical structure of the sentence, either partially or fully” and it includes “instances of switching back and forth between the two languages, and is most common between ‘related languages’” (Muysken, 2000: 132,152) as cited in (Dulm, 2007: 30,31).

10) Weet jij *whaar* Jenny is?

‘Do you know where Jenney is’? (Dutch: waar Jenny is) (English/Dutch; Crama and Van Geldern, 1984) as cited in (Muysken, 2000:5)

In example 10 structurally where Jenny is could be in English as well as in pronunciation. Such a finding mandates that the two languages concerned should be close with many cognates. English/Dutch, Frisian/Dutch and English/Spanish are such examples.

Structurally the three types can be represented as follows.

**Figure 1 illustrates insertion**

![Figure 1](image_url)
‘a’ represents lexical item of 1st language A.

‘b’ represents lexical item of 2nd language B.

‘b’ has been inserted by the speaker in his utterance between lexical items of language A. According to Muysken ‘insertion’ is characterised by the insertion of a constituent from language B into a construction in language A, where A is the matrix language.

**Figure 2 illustrates alternation**

![Diagram of alternation](image)

(Muysken, 2000:7)

In figure 2, “a constituent from language A (with words from the same language) is followed by a constituent from language B (with words from that language)” (ibid)

**Figure 3 illustrates congruent lexicalization**

![Diagram of congruent lexicalization](image)

(Muysken, 2000:8)

In figure 3, “the grammatical structure is shared by languages A and B and words from both the languages a and b are inserted more or less randomly” (ibid).

**Table 3.1: Summary of types of code-switching**

<table>
<thead>
<tr>
<th>Code-switching types</th>
<th>Linguistic factors favouring this type</th>
<th>Extralinguistic factors favouring this type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion</td>
<td>Typological distance</td>
<td>Colonial settings; recent migrant communities; asymmetry in speaker’s proficiency of two languages.</td>
</tr>
<tr>
<td>Alternation</td>
<td>Typological distance</td>
<td>Stable bilingual communities;</td>
</tr>
</tbody>
</table>
Chapter 3

| Congruent lexicalization | Typologically similar languages | Two languages have roughly equal prestige; no tradition of overt language separation |


3.4.4 FUNCTIONS AND FACTORS OF CODE-SWITCHING

3.4.4.1 FUNCTIONS OF CODE-SWITCHING


1. Quotation— to distinguish between direct speech and quotation or reported speech, when the speaker switches into that person’s language whom he is quoting.
2. Addressee specification— speaker may code-switch in order to “direct a message to one of several addressees” (ibid).
3. To mark an interjection.
4. To reemphasize, reiterate or clarify a message.
5. To add more information to qualify a message.
6. Personalization versus objectification.

Grosjean (1982) proposed additional discourse functions of code-switching. These are (as cited in Mahootian, 2006:516):

1. Marking group identity.
2. Emphasizing solidarity.
3. Excluding others from a conversation.
4. Raising the status of the speaker.
5. Adding authority or expertise to a message.

Myers Scotton (1988:3) suggested that the socio-psychological functions of code-switching are universal i.e. they are applicable everywhere. She proposed the markedness model of code-switching to “explain the socio-psychological motivations behind code-switching” (Mahootian, 2006:516). Appel and Muysken (1987) proposed five functions of code-switching, first, referential function by compensating for speakers lack of command on the language. Second, directive function by including or
excluding the listener. Third, expressive function, fourth, phatic function indicating a
tonal change in a conversation. And fifth, metalinguistic function. Myers Scotton and
Appel and Muysken formulated the functions of code-switching in such a way that it
paves a way to understand the motivations behind it.

Lastly we will focus on the views on Hindi/Urdu-English code-switching, the topic of
present research, by analysing the work of Kumar (1986) on the same. According to
him in Indian context Hindi/Urdu-English code-switching basically serves two
functions (Kumar, 1986:202).

a) Social function- in Indian multilingual setting, English is considered more
prestigious than all the other official languages including Hindi. So, speakers
tend to code-switch in English from their native language. This can be
understood by the example of a young boy talking to a girl.

‘Aap kahan ja rahi hain, can I drop you somewhere?’

In the above example the boy is clearly trying to impress the girl by code
switching to English in the second part of the sentence ‘Can I drop you
somewhere’ where he could have easily used the Hindi equivalent ‘mai apko
kahin chor sakta hun?’

b) Stylistic function- this variety can be commonly seen in the poetry songs
employed by our film industry. For e.g.

Koi hero yahan, koi zero yahan

Koi star hai, koi bekar hai

It is worth noticing that the words hero, zero, star are not inserted randomly.
They are inserted strategically to have desired poetic effect. Their Urdu
equivalents would not have served the purpose. So, the writer switched from
Urdu to English.

3.4.4.2 REASONS AND MOTIVATION FOR CODE-SWITCHING

Motivation for code-switching

Grosjean (1982) suggested some reasons for code-switching. According to him
bilinguals switch code when they-
- Cannot find proper words or expression.
- When there is no appropriate translation for the language being used.
- To reach their interlocutor.
- According to situation.
- To convey message.
- To express emotion, for e.g. when they are tired, lazy or angry.
- To quote what someone has said.
- To specify the addressee.
- To qualify what has been said.
- To refer to a past event.

(Kim, 2006: 47)

On brief analysis of the above list and comparing it with ‘functions of code-switching’ discussed previously, it becomes clear that functions and motivations of code-switching overlaps considerably. Researchers believe that “the motivation for code-switching have often been treated simply as lists of possible functions for code-switching.” (Gross, 2006: 508). According to Bhatia and Ritchie (2004) bilinguals code-switch depending on whom they are talking to. Bilingual’s unconscious agreement and disagreement on the choice of language depends upon the relationship and roles that interlocutors share with each other (Kim, 2006). According to them, the pattern of code-switching or mixing is affected both qualitatively and quantitatively by social variables such as class, religion, gender and age. Some reasons for switching are intricately related to the message which one intends to convey. Message associated factors which generate code-switching are “quotations, reiteration, topic comment/ relative clauses hedging, interjections and idioms and deep rooted cultural wisdom” (Kim, 2006: 49). Also in hedging, i.e. when bilinguals do not want to give a clear answer, then they tend to code-switch. Other factors for code-switching include language attitudes, dominance and sense of security (Bhatia and Ritchie, 2004) as cited in (Kim, 2006).

More recently Bullock and Toribio (2009) have specified factors or reasons that prompt speakers to code-switch. Like previous researchers, they too emphasized on social roles and relationships among participants as a major determining factor for code-switching. They further classified social and participant related factors into i) language mismatch and ii) identity related issues (Mahsain, 2014:42). Social factors
are also associated with certain situational factors which are related to age, gender, class, education and religion (ibid). Similar to Grosjean (1982) and Bhatia and Ritchie (2004), they too took into consideration message intrinsic factors. People also code switch often to fill a linguistic gap, i.e. when they are unable to recall a word from their L1 or L2. An additional factor mentioned is ‘accommodation’ which is applied when a “speaker uses a neutral language to divest him/herself of any identity” (Mahsain, 2014: 44), i.e. the speaker tries to conceal his/her identity in order to escape from unforeseen awkwardness of a situation or conversation.

Another important aspect added is that in all cases of code-switching, it is not mandatory that there is always a motivation or reason behind it. This idea was put forth by Scotton (1976) and Heller (1988) also. Bullock and Toribio (2010:11) very explicitly proposes

“it merits pointing out that not all language alternations in bilingual speech do signal a particular communicative intent or purpose: for many bilinguals, code-switching merely represents another way of speaking: that is, some bilinguals code-switch simply because they can and often times may not be aware that they have done so” (Mahsain, 2014: 44).

Recently, Rihane (2013) shed some more light on this topic. According to him speakers may switch code “to show solidarity with a social group, to distinguish oneself, to participate in social encounters, to discuss a certain topic, to express feeling and affection or to impress and persuade the audience” (Rihane, 2013: 5).


i) When there is no appropriate word in Hindi.

ii) To speed up communication.

iii) When the speaker is short of words.

iv) To have a wider scope of expression.
v) Unintentionally as a part of speaking habit.

In their research, they concluded that speakers came up with nine reasons for code-switching. They were ease of use, comment, referential function, topic shift, dispreference, personalization, emphasis, no substitute word, name entity and clarification. The most common reason they found was ease of use and least common were topic shift and personalization.

### 3.4.5 SOME OVERLAPPING CONTACT PHENOMENA

Code-mixing, code-switching and borrowing are the three most commonly discussed language contact phenomena in literature. As in this research, the author chose to focus on code-switching and its social factors, so in this section she will try to clear the ambiguity regarding code-switching and its various important congeners.

#### 3.4.5.1 DIFFERENT VIEWS ON CODE-SWITCHING AND CODE-MIXING

According to the available literature on code-switching and code-mixing, researchers maintain three different schools of thoughts in demarcating code-switching from code-mixing. Whereas Poplack (1980), Kachru (1983), Annamali (1989), maintain that there is a clear cut demarcation between the two phenomena, Hamers and Blanc (1990), Hudson (1996), Bokamba (1990), Muysken (2000) treat these two as a subset phenomena, one encompassing the other. Scotton (1992), Wardhaugh (2006), Mahootian (2006), Kumar (1986) are of the opinion that there is no distinction between them. These different views will be discussed in detail.

#### 3.4.5.2 MAINTAINING A DISTINCTION

Maintaining that code-switching is a more complex and broader term than code-mixing, Kachru (1983:193) states, “There is a distinction between CM and CS, though they have been treated as the language contact phenomenon. The CS entails the ability to switch from code A to code B. The alteration of codes is determined by the function, the situation and the participants. It refers to categorization of one’s verbal repertoire in terms of functions and roles. The CM, on the other hand entails transferring linguistic units from one code into another”

(Walwadkar, 2013:43)
Bokamba (1989) was of the opinion that the two phenomena should be distinguished on the ground that code-switching does not necessarily involve interaction of the grammatical system of the language involved whereas code-mixing does. He also emphasized that the grammatical constraints necessitate that only highly proficient speakers can engage in productive code-mixing.

3.4.5.3 MAINTAINING CODE-MIXING AS A SUBTYPE OF CODE-SWITCHING

Hamers and Blanc (2000: 260) define “code-mixing as a type of insertional code-switching, where a constituent from language A is embedded into an utterance in language B, and where language B is clearly the dominant language (Dulm, 2007:10-11).

Similar conceptualization of putting code-mixing as a subcategory of code-switching and promoting code-switching as a broader category is popular in literature. Similar to Hamers and Blanc (2000), Hudson (1996) is of the opinion that code-mixing is actually a conversational aspect of code-switching. According to him,

“In code-switching the point at which the languages change corresponds to a point where the situation changes, either on its own or precisely because the language changes. There are other cases, however, where a fluent bilingual talking to another fluent bilingual changes language without any change at all in the situation. This kind of alteration is called code-mixing (or conversational code switching) (Hudson, 1996: 53). Some authors discuss the term ‘mixing’ altogether. Beardsome (1991:12) rejects the term code-mixing “since it appears to be the least favoured designation and the most unclear for referring to any form of non-monoglot norm-based speech patterns.” (Fakeye, 2012:150).

Bokamba (1990) although maintains that there should be a distinct line between code-mixing and code-switching but also explicitly mentions that “code-mixing goes beyond the mixing on the level of a single lexeme and is only used for intra-sentential code-switching” (Sabec:4). On a similar ground Muysken (2000) postulated that code-mixing does not involve inter-sentential mixing and states that code-mixing “refers to all cases where lexical items and grammatical features from two languages appear in one sentence” (Muysken, 2000:1). According to him code-switching refers
to “rapid succession of several languages in a single speech event” (ibid). He went on to classify intra-sentential code-mixing into insertion, alternation and congruent lexicalization, which were discussed earlier. Alternation “is similar to inter-sentential code-switching” (Mahsain, 2014:42) and “insertion is similar to intra-sentential code-switching” (ibid). Whereas other authors have categorized code-mixing as a subtype of CS, Muysken is of the idea that code-mixing is a broader term which can include code-switching. Of course this idea of Muysken excludes inter-sentential mixing.

3.4.5.4 AGAINST MAINTAINING DISTINCTION

Some researchers prefer the term ‘code-mixing’ to refer specifically to intra-sentential switching and code-switching to refer to inter-sentential switching. However in current literature both the terms code-mixing and code-switching are used interchangeably (Mahootian, 2006). This notion has long been prevalent. McClaughin (1984) used the term code-mixing to refer to other related language contact phenomena like borrowing, interference, transfer or switching. (Fakeye, 2012: 150).

In context of Hindi-English code-switching, Kumar (1986) mentions “there is no reason why code-mixing and code-switching should be distinguished. These processes are so intermingled and the differences are so subtle that it becomes quite problematic for the linguist to provide explicit definitions for them” (Kumar, 1986: 195).

Wardhaugh (2006) too used both the terms synonymously. He states, “Code-switching (also called code-mixing) can occur in conversation between speaker’s turns or within a single speaker’s turn. In the latter case it can occur between sentences (inter-sententially or within a single sentence (intra-sententially)” (Wardhaugh, 2006: 101).

3.4.5.5 CODE-MIXING, CODE-SWITCHING AND BORROWING

Another process apart from code-mixing and code-switching by which different languages get mixed up with each other is borrowing. Borrowing, although related to code-mixing and code-switching, is often considered different from them. Kamwangamalu (1992) notes, “structurally, unlike code-mixing and code-switching, borrowing entails integration of linguistic units from one language into the linguistic system of other language. The linguistic units thus integrated become part of the linguistic system of the borrowing language they take on its phonological,
morphological and syntactic characteristics and enter into its lexicon (e.g. Gumperz, 1982). Functionally, unlike code-mixing and code-switching, borrowing sometimes occurs to fill lexical gaps in the lexicon of the borrowing language.” (Walwadkar, 2013:48). Another distinguished feature is that Borrowing may be found in the speech of both monolingual and bilinguals/multilinguals whereas code-switching and code-mixing is feasible in cases of bilinguals and multilinguals only. He compiled the works of Kachru (1978), Sridhar and Sridhar (1980), Gumperz (1982) and Poplack (1990) and summarized a table comparing the phenomena.

Table 3.2: Salient Features of CM, CS and Borrowing

<table>
<thead>
<tr>
<th>Salient features</th>
<th>CM</th>
<th>CS</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linguistic units involved are essentially sentences</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Require speakers to share the same code repertoire</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sometimes occur to fill lexical gaps in L1</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Require/ imply changes (e.g. of topic, setting, participants) in the speech situation</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Occur to mark confidentially or an aside for explanation</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Sometimes occur to mark eliteness and /or modernness</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Presuppose bilingual competence of the speaker but not necessarily of the hearer</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Entails integration (phonological, syntactic, and lexical) of L2 material in L1</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Treated as part of L1.</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Lexicon L1 equivalent exits.</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Wide diffusion in the community</td>
<td>n.a</td>
<td>n.a</td>
<td>+</td>
</tr>
<tr>
<td>Accepted as one’s own L1 items</td>
<td>n.a</td>
<td>n.a</td>
<td>+</td>
</tr>
</tbody>
</table>

(Kamwangamalu, 1992: 174 as cited in Walwadkar, 2013:48)

Hudson (1996) differentiates borrowing from code-mixing and code-switching. He states “Whereas Code-Switching and Code-Mixing involved mixing language in speech; Borrowing involves mixing the systems themselves because an item is borrowed from one language to become part of other language. For example - words
for foods, plants, instructions, music and so on which most people can recognize as borrowings (or Loan –Words)” (Hudson, 1996: 55).

According to Hudson (1996), there is a continuum in borrowing and it is a gradual process. At one end of the scale there is a completely unassimilated word from the guest/donor language which is known as ‘loan word’ and at the other end are ‘loan translations’. “When speakers adapt material already present in their language for the objects and concepts belonging to the donor language, the process is called loan shift or literal translation. Typically a loan translation is created by literally translating elements from the donor language into compound words in the borrowing language.” (Fasold, 2006: 294) Examples of loan words are pundit, yoga and guru which are borrowed by recipient language English from donor language Hindi. Vice versa breakfast, lunch and dinner are loan words from English to Hindi (Fasold, 2006). And English word ‘almighty’ is a loan translation of Latin omnipotens (omni- ‘all’ + potens-‘powerful’).

Thus the criteria for distinguishing borrowing from code-switching are related to the recognition of the usage on a community wide basis and intranslatability (Kazuko, 1996: 53). Quite evidently borrowing is differentiated from code-mixing and code-switching on many grounds. However some researchers (Poplack, 1980) include them into code-switching when they preserve the phonological patterns of the source language.

**3.4.5.6 CODE-SWITCHING AND BORROWING AS TRANSFER**

Language mixing may be considered to be one type of transfer (Odlin1989). Weinreich’s work on bilingualism shows that the effects of cross-linguistic influence vary according to the social context of the language contact situation and include borrowing transfer and substratum transfer. Borrowing transfer refers to "the influence of a second language has on a previously acquired language (which is typically one's native language)" (Odlin 1989:12). A case of borrowing transfer is documented in Dyirbal, an aboriginal language in northeastern Australia. It has undergone attrition as a consequence of the exposure to English (Odlin 1989:12). Another example of borrowing transfer includes a variety of Swiss Romansh influenced by German, varieties of Greek influenced by Turkish and Norwegian influenced by American English (Odlin 1989:12).
Substratum transfer refers to "the influence of a source language (typically, the native language of a learner) on the acquisition of a target language, the ‘second’ language regardless of how many languages the learner already knows" (Odlin 1989:12). Substratum transfer (or simply transfer) is commonly observed in second language learner contexts. Some cases of substratum transfer include Quechuan Spanish (Odlin 1989) and the influence of Arabic and Turkish on the Dutch spoken by immigrant workers in Holland (Jansen, Lalleman, and Muysken 1981) (Odlin 1989:13).

Above discussion justifies the approach of present research to not indulge in distinguishing between various language contact phenomena specifically code-mixing, code-switching and borrowing which are at the same time communication strategies of transfer also. Instead we will use the cluster term ‘code-switching’ which includes all the related terminologies for the sake of the aim of this research work.

3.4.6 CODE-SWITCHING IN INDIAN CONTEXT

The role of English in India

Following independence, English was given the status of associate official language in the Constitution and also it was promoted as a language to be actively taught to students in schools. This created a favourable condition for the language to flourish in this part of the subcontinent. In addition to that, globalizing pressures in recent decades is chiefly responsible for the special status English enjoys in Indian society today and its ongoing rivalry with the local vernaculars, particularly Hindi (Dua, 1993). English is used very liberally at various levels of government: bills or amendments to be introduced into either house of parliament or a state legislature, all acts passed by these bodies and all ordinances promulgated by the president or a state governor, and all orders, rules, regulations and by laws issued by parliament or a state legislature are always in English (Parasher, 1991). English has been equally visible in the education sector in India. Srivastava and Sharma (1991, p. 189) point out that:

The higher we move in education, the fewer are the languages employed as media of instruction, so much so that for higher education and technical training the only medium left for use is English (Si, 2010: 390).
Such forces have aided the transition of English from the status of a foreign language to that of a second language for many Indians. The evidence for this statement lies in assertions such as the following:

(i) English covers in India more than 1/4th of the entire bilingual population (25.7%) while the 12 other major languages share the rest of the bilingual population, and (ii) in spite of the fact that English is used by less than 3% of the entire population as a necessary means of communication, it is a language that carries power and prestige, for this 3% section of the population is the most important section of Indian society. (Srivastava & Sharma, 1991, p. 190) as cited in (Si, 2010: 390).

In addition, the leading role of English in the country’s print and electronic media, as well as in the publishing sector (Parasher, 1991) bestows upon it a prestige, particularly in urban centres, not enjoyed by any other language.

**Code-switching with English in the Indian situation**

Interactions involving the use of lexical items originally from two or more ‘codes’ (dialects, variants or languages) are commonplace in India; such code-switching has been variously described in the literature. Gumperz (1961), for instance, mentions that the use of English phrases in Hindi discourse is the sign of an ‘educated speaker’. While making a clear distinction between code-switching and code-mixing, Kachru (1978) explains that the former (switching from standard Hindi into the dialect Awadhi, for instance):

“. . . may be used to express extreme anger, disapproval, in-group membership, asides, or solidarity. Code-switching in such contexts is a marker of an attitude, intensity of emotions, or various types of identities”. (Kachru, 1978, p. 108) as cited in (Si, 2010: 390).

Code-mixing with English, on the other hand, is a ‘socially accepted marker of education and what may be termed “westernization” in India. It also identifies membership in a particular social class’. Kachru (1978, p. 109) cites the following example from a collection of Hindi short stories published in 1975:

*Tum nahi janti*, he is Chairman Mr. Mehta’s best friend, *yahan do char din ko hi aye hain. Maine socha*, I should not miss the opportunity.
‘Don’t you know, he is Chairman Mr. Mehta’s best friend, he’s only here for a couple of days. I thought, I should not miss the opportunity.’ (Si, 2010: 391)

In this example, the clause ‘I should not miss the opportunity’ is uttered in English, even though it could just as easily have been rendered in Hindi (especially since it is preceded by the discourse marker maine socha ‘I thought’). This speaker is therefore not using English to fill lexical gaps in Hindi; the intention is rather to extend her register and style ranges (Kachru, 1978). Other reasons that have been put forward for code-mixing in India include:

- Register identification (e.g. administrative, political and technical registers), style identification (‘sanskritized’, ‘persianized’ or ‘englishized’ Hindi) and elucidation/interpretation (e.g. through the use of words like mane (Persian), arthat (Sanskrit) for ‘meaning’) (Kachru, 1978).

- Neutralization: English lexical items are often perceived as being attitudinally and contextually neutral, and may be used to conceal social or regional identity (cited in Kachru, 1978).

- A range of discourse-related functions, including repeating, emphasizing, heightening contrast, creating surprise, making parenthetical remarks, teasing, challenging or reporting others’ speech (Gupta, 1991).

- Reasons, suggested by speakers, such as: ‘if I do not get the appropriate word in Hindi’, ‘easy to communicate’, ‘when we are short of words’, ‘to speed up communication’, ‘habit’, ‘unintentional’, ‘makes me feel comfortable’, ‘interesting and funny’, ‘scope of expression’ and ‘cos it gives me a feeling of Indianism’ (Eilert, 2006). (Si, 2010: 391)

Some researchers have attempted to describe Hindi–English code-switching by means of formal grammatical tools, with the aim of positing general constraints on the possible types of CS, and on the contexts in which they can occur (e.g. Bhatt, 1997; Kumar, 1986; Malik, 1994; Romaine, 1995, pp. 131–141; Singh, 1995, 1998). However, this subject lies beyond the scope of the present study, and is not discussed further.
3.4.7 CODE-SWITCHING AS A TRANSFER STRATEGY

We have already discussed that code switching, according to some researchers is a phenomenon which occurs at the subconscious level (Wardhaugh, 2006), i.e. people who code-switch may not be aware of the mixing of language most of the time. Although we cannot control what is happening unconsciously, but it has been well documented in literature that code-switching is not a random phenomenon. It is bound by a strict set of rules (Myers Scotton 1993, Gumperz, 1972) and is mediated according to those rules. Based on this background, it is important to explore what role does code-switching play in our day to day conversation. Code switching is regarded as most important and most common transfer strategy used in communication. This section explores and will eventually try to lead to the conclusion that code-switching is a versatile set of strategic tool to meet the complex communicative demands of the interlocutors and in the process establish it as an effective strategy. As Gumperz quotes

“code-switching occurs in conditions of change, where group boundaries are diffuse, norms and standards of evaluation vary, and where speaker’s ethnic identities and social backgrounds are not matters of common agreement. Yet, if it is true that code switching styles serve as functioning communicative systems, if members can agree on interpretations of switching in context and on categorizing others on the basis of their switching, there must be some regularities and shared perceptions on which these judgements can be based.” (Gumperz, 1982:70) as cited in (Gheitanchaian and Rezaei, 2008:75).

Bilinguals or multilinguals i.e. speakers of more than one language can effectively code-switch or mix during communication. This switching is most of the time very easy for them and they do so effortlessly if they are proficient in both the languages and one can easily observe that this switching increases the efficiency of their conversation rather than impeding it in any way. For e.g. one of our subjects in her written task performing in her L1 i.e. Hindi writes,

11. ‘jab tak husbands apne working wives ki mehnat ko seriously nahi lenge....’

‘Jab tak ye pati log apne kaam karne wali patniyon ki mehnat ko gambhirta se nahi lenge....’
It is evident in the above example that the writer prefers using ‘husbands’ to refer to the plural Hindi ‘ye pati log’ and ‘working wives’ in place of ‘kaam karne wali patniyon’. These two instances of code alteration were done for the ease of conversation and to maximise the output by minimum possible effort. The third substitution of ‘seriously’ for ‘gambhirta’ may be intended to just emphasize the writers’ opinion. This proves our point that code-switching functions as a communicative transfer strategy tool.

From a grammatical point of view, example 11 is constituted almost entirely of Hindi lexical items and English words are inserted in it to make the conversation more efficient and effective. As the recipient or host language is Hindi and donor or guest language is English, the grammatical rules of Hindi will be applied here. Each noun phrase like ‘Husbands’ and ‘working wives’ is followed by post-positions ‘apne’ and ‘ki’ respectively, as required by Hindi grammar.

In addition to Gumperz’s work, Poplack (1980), Bialystok (1983), Faerch and Kasper (1983), Tarone (1983), Myers Scotton (1993), Milroy and Muysken (1995), and Romaine (1995) came forward in support of the notion that bilingual speakers use code switching as a linguistic strategy to achieve communicative goals and thus prove that Code-switching is not an outcome of language deficit as favoured by many researchers previously (Weinrich, 1953). Poplack (1980: 581) states that

“CS proceeds from that area of the bilingual’s grammar where the surface structures of L1 and L2 overlap, and that CS, rather than representing debasement of linguistic skill, is actually a sensitive measurement of bilingual ability” (Das, 2012:4).

Similarly, Bialystok (1983) emphasized on communication strategies of language switching, foreignizing native language and transliteration employed by non native speakers. According to her,

“the best strategies “are those which are based in the target language and take account of the specific features of the intended concept” and that “the best strategy users are those who have adequate formal proficiency in the target language and are able to modify their strategy selection to account for the nature of the specific concept to be conveyed” (Bialystok 1983: 116) as cited in (Das, 2012:4).
As has already been discussed, Faerch and Kasper (1983) mentioned about the production difficulties that a learner may face while communicating in target language, which will lead him to apply either avoidance or reduction strategy or achievement strategy (1983:36). Faerch and Kasper included code switching as one of the achievement strategies, along with interlingual transfer and interlanguage based strategies, cooperative and non-linguistic strategies.

In this present research, we have focused on Tarone’s approach of communication strategy in which she classified it into paraphrase, transfer and avoidance (Tarone, 1980: 429). According to her language switch is an important transfer communication strategy. Her classical criteria of defining communication strategy have already been discussed in chapter one.

In 2008, Gheitanchian and Rezaei explored code-switching as a communication strategy in Turkish-Persian speakers and concluded that code-switching “functions not only as a filler to cover the language deficiencies in expressing meanings but also as a means to transfer a range of social, cultural facts in various settings” (2008:79).

Recently Das (2012) gave various examples in Bengali-English speech data and justifies code switching as an effective strategic tool and mentions its effectiveness in terms of the various functions that it serves in a conversation. According to him, code-switching is a

i) Strategy to minimise and emphasize social differences among the interlocutors.
ii) Strategy to signal language preference.
iii) Strategy to obviate difficulties.
iv) Strategy to frame discourse.
v) Strategy to contrast personalization and objectification.
vi) Strategy to convey cultural specific message.
vii) Strategy to dramatize key words.
viii) Strategy to lower language barriers.
ix) Strategy to maintain the appropriateness of context.
x) Strategy to reiterate messages.

(Das, 2012: 6-16)
Above compilation seems very much relevant to the present research since it incorporates the motivational, functional and strategic aspects of code-switching which is one of the primary goals of this research.

3.5 MATERIALS AND METHODS

3.5.1 STUDY POPULATION: The study was conducted in the Department of English, Faculty of Arts, Aligarh Muslim University, Aligarh. For this study, subjects were recruited from various educational institutions and resident hostels of A.M.U. (after taking consent from the concerned authorities), urban localities and slum areas of Aligarh. Informed consent was taken from all the subjects before participating in the study.

3.5.2 Inclusion criteria for subjects

Those subjects were included in the study who-

1. have either Hindi or Urdu as their L1.
2. have English as their L2.
3. have minimum class X as their educational qualification.
4. have the basic skills to converse and write in English as judged by the interviewer.

3.5.3 Exclusion criteria for subjects

Those subjects were excluded from the study who-

1. have any other language apart from Hindi or Urdu as their mother tongue.
2. have stayed in an English speaking country for more than a year.

3.5.4 Rationale of language selection

This study was conducted in A.M.U. and in urban localities which are in vicinity to it. The official language of this university is English and urban Aligarh in and around A.M.U. is predominated by population inheriting Urdu or Hindi as their mother tongue. Thus, the choice of comparing English as L2 with Urdu/Hindi as L1 seems very rational for this particular study. For the sake of avoiding confusion, it should be clearly mentioned that because of the similarity in the two languages Urdu and Hindi,
both are taken as L1, irrespective of the mother tongue specified by the subjects individually.

A total of 60 educated subjects were chosen by the researcher based on the above inclusion and exclusion criteria. Another 10 illiterate subjects were chosen for data collection. 10 more subjects, who were not found to have the basic skills to either speak or write in English as judged by the interviewer, but were proficient in their L1, were also selected for data collection. Thus, subjects were recruited in three groups: educated group of 60 subjects, lesser educated group of 10 subjects and 10 illiterate subjects.

3.5.5 Research Instruments

To observe the occurrence of transfer in L1 and L2 of the subjects, the researcher prepared a task-based questionnaire consisting of three types of tasks: Narrative, Descriptive and Argumentative. Each task consisted of five topics out of which the subjects could choose to perform. Each subject was asked to attempt any one of the tasks in both the languages i.e. first in their mother tongue and then in English. The same procedure was carried out orally with the help of a voice recorder.

3.5.6 Research Procedure

Above mentioned tasks were performed by the researcher on the subjects individually, preferably in isolation, to make the subjects more comfortable. Before initiating the procedure, the researcher made a brief conversation with the subjects individually to judge their command on English as their second language and recruit them accordingly. Subjects were recruited in three groups: educated group of 60 subjects, lesser educated group of 10 subjects and 10 illiterate subjects. Our chief study population was the educated group of 60 subjects for which inclusion and exclusion criteria have been specified. Other two groups were included to increase the strength of the empirical study. A brief interview was performed on each subject in which they were enquired about their age, sex, level of education, medium of instruction at school level and mother tongue. They were given proper instructions regarding the tasks assigned. A little brainstorming about oral and writing skills were done to encourage the subjects perform the tasks. With the help of the questionnaire, writing task was conducted. They were asked to write about the chosen topic in Hindi or Urdu first, and then in English. Subjects were specifically instructed during the brainstorming
phase that they must not translate deliberately while performing the written tasks in their L1 and L2. After completion of written work the subjects were asked to speak on the written topic, first in their mother tongue and then in English subsequently. Their voice was recorded with the help of a voice recorder. Again they were instructed that while speaking they must not refer to their written data deliberately.

While collecting data from the illiterate subjects, only oral task in their L1 was performed, whereas in cases of those subjects who performed only in their L1, both oral and written data were collected in the above mentioned sequence.

The collected data was analysed for instances of code-switching as transfer, either from L1 to L2 or L2 to L1. Oral data was transcribed from the recordings and both written and oral transcribed data was analysed manually, appropriate statistics was applied and result was drawn.

3.5.7 Distribution of subjects

Subjects were divided into three categories, each of 20 subjects according to their age groups, i.e. 15-30 yrs, 31-45yrs and 46yrs and above. This stratification is done so that we can compare older with the middle and younger generation. Further division of the study population was done according to other four independent variables i.e. age, sex, level of education and medium of instruction at school level. Apart from these 60 subjects, 10 illiterate and 10 L2 not attempted group of subjects were categorised.

3.5.8 STATISTICAL ANALYSIS

All statistical analysis was done by using SPSS software version 17. Continuous variables were expressed as mean ± standard deviation. The study consists of four dependent variables and five independent variables. Analysis of variance (ANOVA) was applied to check for significant differences between quantitative variables. Post Hoc test was applied to differentiate between each variable after performing ANOVA. T-test was performed to check for significant difference between two quantitative variables. Test of proportion was also applied. Descriptive statistics were applied for quantitative data. All p values were two tailed and values of p < 0.05 were considered statistically significant.
3.6 CONCLUSION

This chapter presents an overview of code-switching and justifies its selection as the topic of this research. It also re-establishes the purpose and significance of the study. After this background, important tools and techniques applied are discussed in detail. Following this, analysis and subsequently discussion on the results obtained by applying the above mentioned methodology, will be presented in subsequent chapters.