CHAPTER I

INTRODUCTION
I. INTRODUCTION

A little over half a century, the phenomenon of bilingualism has been puzzling the researchers. In the early 1920's the quest began with the fundamental question: Is bilingualism desirable? No definite answer to this question has yet emerged, which is evident in McLaughlin's (1977) statement that "findings in regard to the consequences of bilingualism can at best be described as inconclusive". Of late the issue of bilingualism has taken a multidisciplinary character in that attempts are made to explicate which psychological, sociological, linguistic, and educational characteristics of the bilingual setting determine whether bilingualism will be a source of enrichment and diversity and hence desirable or a source of frustration and confusion and thus to be avoided.

The meaning of bilingualism as reported in several literature is one of the major source of confusion in bilingual research. To define bilingualism as an ability to use more than one language is deceptively simple and has caused a lot of confusion in bilingual research. There are diverse definitions of bilingualism ranging from Bloomfield's (1933) claim that bilinguals possess native like ability in both their languages to Weinreich's (1953) definition of bilingualism as the practice of alternately
using two languages. However, the best way to deal with these variations is to recognize that bilingualism is not an all-or-none property; it is an individual characteristic which may exist to degrees varying from minimal competency to complete mastery of more than one language.

Although, no comprehensive system has yet been developed to conceptualize bilingual competence, some clarifications have been brought to the issue by the introduction of the term 'balanced bilinguals' (Lambert, Havelka & Gardener, 1959), referring to those having full or equally balanced competence in both their languages. The entire base of current research in bilingualism has been broadened and subdivided. Instead of viewing bilingualism as an unitary and global concept, researchers have tried to see distinctions within the bilingual population itself, by introducing concepts such as additive and substractive forms of bilingualism, compound and coordinate bilingualism and above all by differentiating bilingualism from the phenomenon of biculturalism. These and many other related concepts tended to be ignored in the early literature on bilingualism which mostly centered on examining the intellectual consequences of becoming a bilingual.

During the period ranging from 1920 to 1960, many researchers speculated that bilingualism caused language
handicaps and cognitive confusion among children (Manuel & Wright, 1929; Mitchell, 1937; Rigg, 1928; Ronjat, 1913; Saer, 1923; Seidl, 1937; Smith, 1923) while a few others (Anastasi & de Jesus, 1953; Arsenian, 1937; Carrow, 1957; Darcy, 1953; Sanchez, 1934; Stark, 1940) pointed out that bilingual and unilingual children were performing at almost an equal level, particularly on nonverbal measures of intelligence. Some of these studies also reported that bilingual children suffered social and emotional conflicts more frequently than unilingual children. According to Arsenian (1937), sixty percent of the early studies reported bilingualism as an intellectual handicap, thirty percent reported that this handicap did exist in a minor form and only ten percent of the studies found no ill effects of bilingualism.

Most of the early studies could be characterized by pitfalls in methodology, inadequacies in the sample size and testing devices and above all by a lack of scientific concern. Virtually all of the early research involved minority students who were in the process of replacing their first language with the majority language usually with strong encouragement from the school. Thus, they acquired the second language at the cost of their first one which was later termed by Lambert (1975) as a phenomenon of 'subtractive' form of bilingualism.

The real optimistic trend in bilingual research
tended to emerge with the investigation of Peal and Lambert in 1962 on Canadian bilingual children. Far from being a negative force in child's personal and academic development, bilingualism was shown to positively affect both intellectual and linguistic processes. Research evidence in confirmation of the findings of Peal and Lambert started flowing from different parts of the globe, from Singapore (Torrance, Cowan, Wu & Allioti, 1970), Switzerland (Balkan, 1970), South Africa (Ianco-Worrall, 1972), Israel (Ben-zeev, 1972), New-York (Ben-zeev, 1972), and Canada (Cummins & Gulutsan, 1974). All these studies reported that bilingual children were superior to their unilingual counterparts on measures of intelligence, cognitive flexibility, creativity and divergent thought.

Most of these studies in bilingualism have investigated aspects of children's metalinguistic development which may be described as children's explicit knowledge about the structures and functions of language. Indeed, it is argued that the relationship that bilingualism has with intellectual functioning is possibly mediated by children's sensitivity to formal aspects, structures and functions of language (Ben-zeev, 1972; Bialystok, 1984; Bialystok & Ryan, 1985; Cummins, 1979, 1985; Ianco-Worrall, 1972; McLaughlin, 1984). Bilingualism was found to foster certain degree of
metalinguistic competence by orienting children to the analytical and more objective aspects of language.

Recently attempts are made to clarify the notion of metalinguistic development in terms of two underlying dimensions, namely children's analysed knowledge of language and their control over language (Bialystok, 1984; Bialystok & Ryan, 1985). A number of studies reported by Bialystok (1984) found that while bilingualism would enhance children's control over and ability to manipulate language, its relationship with their analysed knowledge of language remains uncertain. In general, it is not surprising that bilingual children are more competent in certain aspects of linguistic and metalinguistic processing. Being exposed to and in gaining control over two language systems, the bilingual child has had to decipher much more language input than the unilingual child who has been exposed to only one language system. Thus, the bilingual child has considerably more practice in analyzing meanings than the unilingual child.

One of the most practical consequences of bilingualism is in the area of educational achievement. As mentioned earlier, bilingualism positively affects both intellectual and linguistic processes, which are regarded as the two most essential components of school-related achievement. Being able to express the same thought in different language, the bilingual child views each language as one particular system among many, and thus fosters in him
higher level of competence for abstraction, generalization and discrimination. The bilingual skills thus appear to be more consonant with intellectual skills necessary for school achievement. The conclusion that emerges from research on academic, linguistic and intellectual effects of bilingualism was stated more recently by Cummins (1985) as follows:

The development of additive bilingual and biliteracy skills entails no negative consequences for children's academic, linguistic and intellectual development. On the contrary, although not conclusive, the evidence points in the direction of subtle metalinguistic, academic and intellectual benefits for bilingual children. (p. 10)

The current research in the area indicate that bilingualism of all forms and across all social contexts may not produce the same pattern of results. Most of the disagreements in the research findings from the early to the later phases of research arose partly because of difference in the criterion of sample selection. Studies during the early period were not very clear with respect to the linguistic competence possessed by the bilinguals. More recent studies in the area dealt with bilingual children who, for most part, were developing what has been termed by Lambert (1975) as additive form of bilingualism. In other words, they were adding a second language
to their repertory of linguistic skills at no cost to the development of their first language. Consequently their degree of fluency and literacy in both the languages was relatively high to secure them the intellectual benefits of bilingualism. These children mostly came either from majority language groups whose first language was strongly reinforced in the community (e.g., English-speakers in French immersion programs) or from minority groups whose first languages were reinforced by bilingual programs in the school. Minority children who lacked this community and educational support tended to develop a substractive form of bilingualism in which their first language skills were replaced by the acquisition of a second language. The intellectual benefits of becoming a bilingual was not available to these children. The pattern of findings thus suggests that there may be a threshold level of proficiency which the students must attain in both the languages in order to reap the intellectual advantages of bilingualism and biliteracy (Cummins, 1979).

Many of the effects commonly associated with bilingualism may actually reflect what has been termed as compound-coordinate bilingualism (Ervin & Osgood, 1954a; Weinreich, 1953) referring to the degree of overlap in the semantic systems of the two languages. The compound bilinguals are considered to have two
distinct modes of expression for a single underlying semantic network, while the coordinates have two separate semantic systems. This distinction is related to the acquisitional context of the two languages, since individuals acquiring both the languages early in childhood are more likely to develop compound bilingualism, while those doing so after the vital formative years practise a coordinate system (Breadsmore, 1974). In brief, the exact nature and degree of bilingualism, the psychological and linguistic relationship between the two languages and the condition of language acquisition are all important parameters regulating the effects of bilingualism.

Cultural variations or duality among bilingual subjects represent a major source of difficulty in bilingual research. In many studies, the effects of bilingualism have been confounded with the cultural differences among the bilingual and the unilingual groups. The bilingual groups usually come from a cultural setting different from that of the unilinguals. In Canada, for example, the French-Canadians who speak both French and English have a different socio-political and cultural history compared to the average English-speaking Canadians. Similarly, in U.S.A., the migrants from Italy, Spain and other European countries are compelled to learn English besides their mother tongue and their economic condition
and social status are different from the average American unilinguals. Hence, many of the effects commonly associated with bilingualism, may, actually reflect the result of such concomitant biculturalism. Under such circumstances, it is difficult to support any conclusion regarding the effects of bilingualism because such effects are contaminated by other socio-cultural differences among the bilingual and unilingual groups.

Considering the special difficulties of doing research in naturalistic settings, bilingualism-biculturalism interaction may not be viewed as a serious impediment in bilingual research; it is rather a candid representation of reality. On the other hand, the diverse consequences of bilingualism can be understood by accumulating evidences from different settings, from those where bilingualism and biculturalism occur together and also from those where they occur separately.

The literature on bilingualism suggests a few general directions in bilingual research. In many cases, the characteristics of the bilingual population differ from one study to another and some times generate findings which may be nonreplicable. In order to meaningfully examine and interpret the cognitive consequences of bilingualism, the unilingual and bilingual groups should be drawn, as far as possible, from relatively homogenous socio-demographic background, and the nature of
Bilingualism studied be clearly mentioned. It is true that evidence should be gathered from different cultural and naturalistic settings for shedding light on the diverse aspects of bilingualism. However, instead of acquiring isolated pieces of evidence, the groups of bilinguals and unilinguals from any specified culture should be examined on a large battery of psychological and educational measures so that we can tap the wider range of bilinguals' intellectual functioning and understand the nature of relationship among many different and distinct aspects of cognition as a function of increasing bilingual experience.

Bilingualism is not a static condition. It changes throughout the period of acquisition of bilingual competence and even afterwards. Depending upon the changing requirements of the social and educational contexts in which both languages are used, there may be significant changes in the effects of bilingualism, throughout the lifespan. This consideration highlights the importance of examining bilingual competence from a developmental frame of reference. The present study has been planned to examine the intellectual consequences of bilingualism keeping in view some of the important points raised above.

To understand bilingual competence within the framework of an information-processing approach (Das, Kirby &
Jarman, 1979) is an additional significant step taken in the present study. The two coding processes of interest in this study are simultaneous and successive syntheses which derive their connotation from the information-integration model advanced by Das, Kirby & Jarman (1975, 1979) on the basis of the clinical work by Luria (1976). The two coding processes are viewed as two habitual modes of processing information and their characteristics are described in detail by Das, Kirby and Jarman (1975, 1979).

In brief, simultaneous synthesis involves the integration of individual stimuli arriving at the brain into simultaneous and primarily spatial groups and is required in the formation of any holistic gestalt or in the discovery of the relationships among two or more objects. Although simultaneous processing has spatial overtones, it is involved in several types of linguistic processing tasks which require understanding of logico-grammatical relations (e.g., "father's brother"), comparative constructions (e.g., "taller than"), and spatial prepositional constructions (e.g., above, below, etc.). Successive processing, in contrast integrates individual stimuli into temporally organized successive series and is evidenced, for example in skilled movement, rote memory and narrative speech. The model developed by Das, Kirby and Jarman has been used in recent studies to investigate the cognitive processing in reading disabled
children (Leong, 1976), to explore its usefulness as a basis for remediating reading difficulties (Krywaniuk & Das, 1976) and further to examine the relationship of simultaneous and successive processing with various aspects of linguistic functioning (Cummins & Das, 1977, 1978; Cummins & Mulcahy, 1980; Das, Cummins, Kirby & Jarman, 1979). In many studies factor analysis of different cognitive, linguistic and memory tasks have indicated that the constructs of simultaneous and successive processing can be used to conceptualize the performance characteristics of many different clinical and cultural groups e.g., retarded, learning disabled, native Indian, East Indian as well as normal children. These studies, in general, reveal that although different cultural groups employ similar modes of processing information, differences may exist between groups in preference for and proficiency in a particular mode of processing.

According to Luria both modes of processing are involved in the individual's linguistic functioning. Successive processes are clearly important because of the sequential nature of language and speech and has been found by Cummins and Das (1977) to be significantly related to children's ability to analyse linguistic form of propositions, especially involving ambiguities in surface and deep structures. Simultaneous processing
however comes into play in understanding complex conceptual-linguistic relationships as is evidenced from its high degree of relationship with verbal reasoning (Cummins & Das, 1977, 1978). It would therefore be expected that bilinguals having developed certain degree of linguistic and metalinguistic competence would show their preference for simultaneous than successive processing. Furthermore, the pattern of relationships those two coding processes would have with other cognitive measures employed in this study is worth exploring partly because of a concern for examining the changing nature of relationship as a function of bilingual experience. On the whole, the adoption of a process-oriented approach, as is done here, is hoped to supplement the earlier research findings slightly changing the nature of emphasis adhered to in this field of research uptill now.

With the growing of a world civilization, bilingualism or for that matter multilingualism is becoming a fact of life. A majority of the world population are coming out as bilinguals by mere exigencies of life. The social and psychological significance of this complex phenomenon is yet to be fully understood. Admitting that bilingualism shares an interactive relationship with many other factors in the naturalistic setting that exist to varying degrees in different cultures, researchers have
tried to examine its diverse aspects by accumulating evidence from different social, cultural and environmental settings.

Bilingualism, thus has become a topic of concern for researchers in different parts of the world, from Canada to Malaysia, and Ireland to South Africa (Hornby, 1977). But nowhere else does the problem assume such great social significance as in India where there are many official languages, and many more dialects and subdialects spoken by a large number of people sharing a relatively homogeneous culture. Surprisingly, compared to a large body of research evidence gathered from different parts of the world, the issue has not received much attention in India, which is inherently a multi-lingual society.