CHAPTER II

REVIEW OF THE RELATED LITERATURE

Introduction

In the 1950s and 1960s, there was great development in second/foreign language teaching. The Audio-Lingual approach was the most popular approach to second language teaching, which was based on structuralist and behaviourist theories. It was after the publication of Skinner's *Verbal Behaviour* (1957) that structuralism in linguistics and behaviourism in psychology became the dominant principles of second language learning and research in this field. Skinner viewed first language acquisition essentially as the formation of new habits acquired through repetition and strengthened by the reinforcement of correct responses. According to his stimulus-response theory, language acquisition was not viewed as an active mental process but as a passive mechanical one. Behaviourist psychologists along with structural linguists believed that native language habits that are acquired during childhood as a part of the maturational process interfere with the acquisition of second language habits that are usually quite different from the habits of the mother tongue.

According to the recent developments in the field of language acquisition and ESL/EFL theories (discussed in detail in this chapter) the importance of psychological and biological factors, such as age or cognition, become clearer. With reference to these theories, it can be said that, age is one of the most important factors in learning a language, for it is holistically connected with a child's psychological development. The present research will consider this factor as the main background for the present problem.

The whole issue of the proficiency of Iranian students in English has persuaded the present researcher to consider differences due to age in the Iranian EFL classrooms. In order to explain the significance of the present study and to achieve
realistic results, it is worthwhile to review the opinions and theories that have been presented so far and also the results of the research that have been done in this field.

**Age Factor**

The answer to the question of the influence of the age in second/foreign language acquisition depends very much on different factors such as the country, the culture, the school, the type of students the school may have, the principal’s convictions, motivation and legal requirements. It can work both ways. For example, in Iran, some private schools actually prefer more mature teachers, especially if their clientele is mainly from high-class families. Others consider – rightly or wrongly – that younger teachers are more dynamic. Some schools are so desperate for teachers of English that age is irrelevant. And some schools such as government schools pay no attention to this matter and just to follow the pre-planned curriculum.

The biological aspects of language learning have been under consideration since the 1960s. Works by Penfield and Roberts (1959) and by Lenneberge (1960, 1967, and 1969) resulted in the notion of an age limitation on language acquisition. Researchers began to consider occasional references to biological-based decline in language acquisition ability toward puberty (Jones, 1969: 12-25; Lakoff, 1969: 117-140; Scovel, 1969: 245-253). Lenneberg (1960: 97-112) mentions a limited period for L1 acquisition that is from the second to twelfth year of age. He takes children as biologically the prime learners of their native tongues. Considering the special state of children’s receptivity that extends to non-native languages as well, Lenneberg (1967; in Azabdaftari, 1995: 3) states that the drop in acquisitional efficiency around age ten affects the ability to learn any natural language completely.

*Cerebral dominance or lateralization*, the development of the specialization of the functions in the left and right sides of the brain, begins in childhood and is completed at puberty. Lenneberg (ibid) presents the hypothesis that the potential for language function is in both hemispheres in very young children. During the child’s growth, the left hemisphere takes the responsibility for language until around puberty. The temporal aspects of lateralization have been challenged. Some researchers believe in lateralization by five (Krashen & Harshman, 1972: 13-21; Krashen, 1973:63-74). Others believe in lateralization by zero (by birth or even before). According to
Krashen (1982; in Azabdaftari, ibid: 4), lateralization and second language acquisition are completely though not directly related and the development of cerebral lateralization is probably not responsible for changes in second language acquisition ability associated with puberty.

In the case of second/foreign language learning, much evidence indicates that the earlier the start, the more successful the result will be, at least as far as pronunciation is concerned. Some research shows that starting a study of L2 while the L1 still has not been mastered will interfere with acquiring the L1. According to different theories, adults should be able to learn an L2 faster than children because of their advanced intellectual skills. Studies in syntactic morphemes show that L2 learning also includes stages or orders of acquisition. Children’s language production earlier imitates adult speech. Their grammar input seems to be based only on the information coming from parents and other children. The output, what the child says, is often very different from the input.

According to the interdependency theory or the sequential model, prior literacy experience in L1 makes L2 learning easier. The level of proficiency that is needed in L1 before L2 study can safely be undertaken is not clear. Some linguists believe that children should reach the proficiency level in L1 before attempting to become literate in L2, because if L1 cognitive development is interrupted during second language learning, the result may be decreased levels of L2 proficiency. Hoffman (1991) views the interdependency hypothesis as follows:

[The interdependency hypothesis] provides the rationale for the kind of bilingual education that advocates the use of the child’s mother tongue during the early stages of education, adding the second language only when she has developed higher-order cognitive and linguistic skills in the first (128).

On the other hand, some adults, who start L2 study after any kind of conflict with an emerging L1, fail to improve until a level of mastery at stage of interlanguage. One symptom of this failure is fossilization, when errors become difficult to correct. Overall, while looking for the best ways to learn a second or foreign language, it should be kept in mind that learning any language, first or second, is a difficult process.

It has been hypothesized that adults are not able to acquire a language in the way that children do, that is, by mere exposure to it. Language then is learned by
conscious effort; a much more difficult task though it cannot be said to be an impossible task because, as Epstein, Flynn and Martohardjono (1996) believe, “Whatever biological determinants there are of behaviours/capacities, they are unlikely to become totally unavailable after a certain age” (612).

In a skill like mimicry, adults may show an advantage over children; Stapp (1999: 10) suggests in a study of monolingual L1 Japanese adolescents who mimic English pronunciation of /r/ and /l/ better than younger children. However, most evidence indicates that younger L2 learners eventually overtake older L2 learners in pronunciation ability. Pronunciation is an observable stage of learning language. Since mastering L2 pronunciation after puberty is difficult and since pronunciation in learning L1 is very important, it is suggested that it should be practised more in L2 studies, along with other elements of prosody such as stress, rhythm and timing (Klinger, 2001).

Although there is not any rigid and strict reason for biological factors (age) as a base for the observed child-adult differences in second/foreign language learning, it is not possible to examine and study these differences without paying attention to these factors. Yaghoubi (1997) has worked on the age factor and foreign language learning by Iranian English language learners. He has chosen eighty children and adults to examine the differences between them. He has concluded that;

Younger foreign language learners are better in any case. ... Younger foreign language learners may have special opportunities, which keep them higher in the scale of foreign language learners, compared with the older ones. Younger learners, having more plasticity in the language faculty of their brain, easily handle the foreign language, so that they get to higher positions in fluency of the target language (83).

The results of his research support the idea that younger foreign language learners are less culturally bound to their mother tongue or first language, as opposed to the older ones that are most firmly bound to it. Maybe it is because of the certain social condition of Iran, which differs from almost all other countries. Yaghoubi (ibid) has found that Iranian children are more powerful imitators. It means that they are less inhibited and more open, so they can successfully imitate whatever they note in the foreign language, even those items in the foreign language that are rarely produced by the adult learners. The superiority of Iranian children over adults is proved not only in
informal, but also in formal settings, i.e. Iranian children are better foreign language
learners, regardless of the setting.

Saeidi (1997) explored the effect of activity-based approaches on the
development of language proficiency, especially in young Iranian learners. She has
studied the effect of these approaches in comparison with the language-based
approaches. She believes that children make mistakes without the fear of failure. This
is not true when adults are under consideration. Children speak freely and without any
shame or embarrassment in the classroom especially when an activity is going on but
adults seem to be restricted and speak waveringly. (147)

Considering the present paradigm of English teaching in Iran that the question
can be raised that why isn’t English teaching to Iranian children elaborate a little
beginning stage and so on from the pre-school level itself?

**Critical Period Hypothesis**

Lenneberg (1967: 176) believes in the existence of a critical period for the
acquisition of L1 extending from about two years of age to the close of puberty.
According to Azabdaftari (ibid: 5), this notion can be explained through two versions
that is the strong version and the weak version. In its strong version, L1 acquisition is
impossible past the critical point. In other words, the age barrier is absolute. In its
weak version, the age bar is not absolute and it is possible for an adult to acquire a
foreign language, but not to the extent of being able to pass for a native speaker.

Penfield (1953), as a neurophysiologist, believes that biologically, the best
time for second language acquisition are the early years before puberty. He found
that, in the case of brain damage in the speech area of the cerebral cortex, children
with brain tumour and surgical intervention recover speech better than adolescents or
adults. According to some of the scientists, such as Penfield and Roberts (ibid), the
best time for language acquisition is the first ten years of life. During this time, the
brain retains plasticity, but with the beginning of puberty, this plasticity begins to
disappear because of the lateralization of language function in the left hemisphere of
the brain. However, the physiological and neuropsychological studies generally
cannot support the critical period hypothesis, for the lateralization is established long
before puberty and may even be as early as the third year.
The critical period hypothesis concerns specifically L1 acquisition, however, Lenneberg (ibid) did address himself to L2 acquisition.

A person can learn to communicate in a foreign language at the age of forty. This does not trouble our basic hypothesis on age limitations because we may assume that the cerebral organization for language as such has taken place during “childhood” and since natural languages tend to resemble one another in many fundamental aspects, the matrix for language skill is present (176).

Many studies have shown that the course of second/foreign language acquisition is similar to first language acquisition in terms of the learning strategies employed (Cook, 1973: 13-28; Ervin-Tripp, 1974: 111-127), in terms of the order in which rules and structures are acquired (Dulay & Burt, 1974: 37-53; Fathman, 1975: 245-253) and in terms of errors made (Taylor, 1975: 73-107). Lenneberg (ibid: 176) has advanced two auxiliary theories to account for L2 acquisition. His resonance or automatic acquisition theory takes interest in the exposure to language and social settings. A mature individual reacts as a resonator to environmental stimuli. The matrix theory, the second one, states that while acquiring L1, a biological matrix is created that makes L2 acquisition possible. After puberty, because of absence of automatic learning, L2 acquisition becomes conscious and needs labored effort.

Steinberg (1982:178) worked upon the optimal age for second language learning. He analyzes Lenneberg’s critical period hypothesis in a different way and explains his point of view as follows:

That Lenneberg’s explanation and justification for his puberty critical age hypothesis is invalid does not, it should be noted, invalidate his claim that puberty is a critical age. Moreover, evidence could be discovered which would support puberty as being a critical age for language learning to occur. Lenneberg could be right but for the wrong reasons. (179)

Steinberg believes that two main factors affect the process of learning a second language. The first factor is the intellectual, memory and motor skill abilities of the learner and the second is the type of learning situation that is, natural or classroom. He has tabulated his point of view as follows:
Table 2-1
Optimal learning age predictions based on essential learning abilities and situational requirements.

<table>
<thead>
<tr>
<th>Abilities: Level of Functioning</th>
<th>Younger children &lt; 6</th>
<th>Older children 6-9</th>
<th>10 – 13</th>
<th>Adults - over 13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inductive Processing</td>
<td>Optimal</td>
<td>Optimal</td>
<td>Optimal</td>
<td>Optimal</td>
</tr>
<tr>
<td>Explicative Processing</td>
<td>Inadequate</td>
<td>Somewhat Adequate</td>
<td>Adequate</td>
<td>Optimal</td>
</tr>
<tr>
<td>Memory</td>
<td>Optimal</td>
<td>Optimal</td>
<td>Decline Adequate</td>
<td>More Decline Adequate</td>
</tr>
<tr>
<td>Motor Skills</td>
<td>Optimal</td>
<td>Optimal</td>
<td>Decline Adequate</td>
<td>More Decline Somewhat Adequate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Situations</th>
<th>High</th>
<th>Medium</th>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural: Social Interaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classroom: Skills and Adjustment</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Predictions</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Situation</td>
<td>1 – Younger children will do best.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 – Older children will do better than adults.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classroom Situation</td>
<td>1 – Older children will do best.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 – Adults will do better than younger children.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[Taken from Steinberg (1982: 180)]

There is no doubt, on one hand, that the relevance of the critical period hypothesis is considerable for both second/foreign language acquisition and teaching. If this theory is accepted completely, different methods of instruction for children and adults will have to be employed. However, on the other hand, the biological evidence is not conclusive. The difficulty and less effectiveness of second/foreign language acquisition after the age of puberty are supported by some empirical studies and by everyday observations.
Neural Plasticity and Language Acquisition

The existence of a critical period for language acquisition is suggested by many types of evidence. For example, the seeds of brain lateralization are evident in the fetal stage, where the future language areas in the left hemisphere are already larger than the synthesis areas in the right hemisphere (Springer and Deutsch 1985; Trevarthen 1987: 101-110). Many researchers have reported the distinction of phonemes from any number of languages by infants even at the age of 2-3 months. Infants are extraordinarily sensitive to language sounds very early in life, well before language outset (Eimas 1975: 341-347; Kuhl 1980: 41-66, 1981: 340-349, and 1985: 231-262; Werker and Tees 1984: 49-63). As the infant grows up, the mentioned potency and ability wanes even in childhood. Adults and even adolescents experience difficulty distinguishing unfamiliar phonemes in a foreign language.

Through several studies on language deficiency and much other substantial documentation, a critical period for language development has been proved. Social isolation and neglect in early childhood (Candland 1993; Curtiss 1977), delayed exposure to sign language for congenitally deaf children (Newport 1984: 1-22) and incomplete L1 acquisition has been described for cases of brain damage (Ager, Ernhart, Martier, Greene, and Sokol 1990: 937-945; Lenneberg 1967; Vargha-Khadem et al., 1997: 159-182).

While discussing language acquisition and cognitive system, all the changes in the condition of the neural system occur as a result of the diverse maturational schedules of the participating cognitive components. For instance, different types of memory are essential in the language acquisition process, which develop in close connection with the other brain systems. Some of the studies have indicated that second language acquisition is not subject to maturational constraints. Supporters of this view argue that a native-like level of L2 acquisition is possible at any time in life because neural plasticity is a permanent characteristic of the brain (Bongaerts, van Summeren, Planken, and Schils 1998: 447-465; Flege 1987: 447-465; Jacobs 1988: 303-337; Klein 1986; Neufeld 1980: 285-298). Some other researchers believe that adults actually have an advantage in L2 acquisition over children because they have superior cognitive skills, which are placed in the initial stages of language acquisition (Rod Ellis 1985; Genesee 1988: 81-112; Walsh and Diller 1981: 3-21). Considering
ultimate proficiency as the real issue in second language acquisition, it is important to understand the nature of neural plasticity serving various types of learning. Adult language learners may possess some type of advantage but their ultimate proficiency is not statistically equal to that of young learners.

It is difficult to reach the complete development in first language acquisition at ages five and six, on the other hand it is the ideal time for the achievement of native-like second language acquisition (Johnson and Newport 1989: 60-99; Long 1990: 251-285; Patkowski 1990: 73-89; Scovel 1988; and Seliger 1978: 11-19).

The type of neural plasticity that at this age facilitates second language seems at least partially associated with the skills involving motor coordination. Phonology and syntax share with certain types of musical, dance and sports training the requirement of early instruction for optimal potential development. The plasticity associated with finely coordinated motor skills diminishes with maturity. It is likely that this Plasticity constraint is responsible for the common experience of foreign accent and the incomplete mastery of the syntax of a second language when learning begins in adolescence or adulthood. (Stapp, ibid: 7)

The rapid progress in the field of neurolinguistics has resulted in interesting outcomes. Krashen (1981) states, “the current scene in neurolinguistics is somewhat unsettled, but recent years have seen a number of exciting discoveries and rapid progress. Some crucial issues have not been decided, but there are some conclusions we can conservatively draw” (81) His conclusions are as follow:

1. While child-adult differences in second language acquisition potential do exist, the evidence for a biological barrier to successful adult acquisition is lacking. On the contrary, there is abundant reason to maintain that adults are still able to acquire language naturally to a great extent.

2. There is some evidence for right hemisphere participation in early stages of first and second language acquisition, suggesting a further L1-L2 parallel. (81)

He believes that his conclusions do not lead to any methodological breakthroughs or any neurolinguistic method. “They are, however, quite consistent
with current approaches to second language instruction, approaches developed by concerned teachers independent of theory, that emphasize meaningful and communicative activities that take advantage of the adults’ ability to acquire language” (81).

**The Language Learner**

Considering the developments in the field of second language acquisition research in recent years through the efforts of Chomsky and others, acquiring a language is closely related to a child’s cognitive and social development. That is to say, a child who is acquiring a language has not a completely developed cognitive structure in his mind and also, he is not a full-fledged member of the society in which he is growing up; i.e. his social identity is not fixed. As mentioned earlier, Chomsky and some other researchers believe in the language acquisition device that is, the capacity to acquire one’s first language. They claim that every normal child is born with an LAD, which includes basic knowledge about the structure of language or linguistic competence. So, he acquires a language subconsciously and not through the use of his logical sense. Ochs (1988) states:

Primary or first language acquisition naturally goes hand in hand with cognitive and social development. Language, cognition and social awareness develop concurrently in preschool and young school children. Indeed, language is an important medium through which social and cognitive development naturally proceeds (77).

An adult has a fixed social identity, has a reason for everything that he is going to do and most important of all, possesses a complete and well-developed cognitive structure. It is obvious that he will learn another language consciously and will review the new phenomenon logically. Azabdaftari (ibid) states “the adult’s conscious grammar of L2 plus his L1 learning experience, indeed enable him to learn the L2 in a different way, more specifically, without acquired competence” (8).
Several studies have shown that children acquire and use a second language better than adults. Lenneberg (ibid), Penfield and Roberts (ibid) believe that, because they possess more flexible brains, children are superior to adults in learning a second language. According to Lenneberg (ibid), there is a critical period for the acquisition of L1 extending from eighteen months of age to puberty. He addresses the issue of L2 acquisition. His resonance or automatic acquisition theory states that first and second language acquisition before puberty starts through exposure and a certain social setting. He believes in a biological matrix, which makes L2 acquisition possible. This matrix is created by the interaction of L1 acquisition with the innate mechanism. Some of the researchers do not agree with this idea conclusively (Ur, 1996; Singleton, 1989; Long, ibid). Seliger (ibid: 11-19) believes in the existence of many critical periods lasting probably throughout one’s lifetime. He believes that these periods are successive and probably overlapping.

Some researchers such as Jones (ibid: 13) believe that the complexity of an adult’s world causes difficulty in his unconscious habit formation. According to Gleitman and Gleitman (1970: 56), it is easier for children to learn a new language, for the language system of their peers is simpler than that to which adults are exposed. Krashen, Long and Scarcella (1979: 573-582) take a younger-is-better position and argue that the earlier children begin to learn a second language, the better. Hedayati (1999: 57) claims that starting to learn a foreign language at the age of 8-9 does not fail to catch the teachable moment and on the other hand, gives the students time to establish their mother tongue skills.

Singleton (ibid: cited in Sun-Hee, 2003: 2) believes that although adults usually show some initial advantages over children, in natural situations those who are exposed to a second language in childhood overtake those whose exposure begins in adulthood. Cook (1992: cited in Hedayati, ibid: 55) states that adults start more quickly and then slow down while children progress conversely and start more slowly but finish up at a higher level. He tries to answer the question that whether the use of teaching methods is needed to be varied according to the age of the learners or not. He states that different ages require particular methods. For example, teenagers may
avoid any techniques that expose them in public such as role-playing and simulation. Or adults will not have good feeling when they are in a play-like situation and prefer a formal style of teaching. Chastain (1988) claims that:

The advantage children have is due to their greater flexibility – psychologically, socially and cognitively. They are not so firmly established in their language, personality and social frame of reference as to inhibit their willingness to become part of another language, culture or social group (129).

Table 2-2
Assumptions about Age and Language Learning

<table>
<thead>
<tr>
<th>Assumptions about Age and Language Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Younger children learn languages better than older ones; children learn better than adults.</td>
</tr>
<tr>
<td>2 – Foreign language learning in school should be started at as early an age as possible.</td>
</tr>
<tr>
<td>3 – Children and adults learn languages basically the same way.</td>
</tr>
<tr>
<td>4 – Adults have a longer concentration span than children.</td>
</tr>
<tr>
<td>5 – It is easier to interest and motivate children than adults.</td>
</tr>
</tbody>
</table>

[Taken from Ur (ibid: 286)]

Table 2-2 indicates the assumptions about age and language learning presented by Ur (1996).

Strevens (1977: 19) considers special ways of teaching for different age groups. He believes that different age groups learn a second/foreign language in a different way, that is, the age factor establishes different kinds of learning. He has divided language learners into three age groups, child, adolescent and adult, and mentions different characteristics for their language learning. He has listed these characteristics in a table. The child and adult characteristics have been selected and summarized in the following table.
Table 2-3
Characteristics of Child and Adult Learners

<table>
<thead>
<tr>
<th>Children</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>They tend to learn easily and unconsciously.</td>
<td>Their enthusiasm is tempered by their reasons for learning.</td>
</tr>
<tr>
<td>They have a short attention.</td>
<td>They can make a conscious effort to put up with fatigue and boredom for the sake of an ultimate goal.</td>
</tr>
<tr>
<td>They are easily bored and almost as easily re-animated.</td>
<td>They imitate sounds less well.</td>
</tr>
<tr>
<td>They mimic easily and make unfamiliar sounds with enjoyment and without embarrassment.</td>
<td>They have “learned how to learn”, and can employ techniques such as guessing and analogy more freely than the young child.</td>
</tr>
<tr>
<td>They are relatively untroubled by making errors in public.</td>
<td>They are often hide-bound by the methods according to which they were themselves taught when at school.</td>
</tr>
<tr>
<td>They cannot seriously see their learning in terms of eventual usefulness.</td>
<td></td>
</tr>
</tbody>
</table>

Source: Summarized from Strevens (1977: 19-20)

Many large-scale L2 studies have focused on the importance of the relationship between early acquisition and ultimate mastery of the L2 phonological system. The subjects of these studies were immigrants with different first language backgrounds. According to these studies, second language acquisition in childhood is one of the main factors that help the learner to achieve ultimate native-like pronunciation. Among these studies, Asher and Garcia (1969: 334-341), Fathman (ibid: 245-253), Seliger (ibid), Tahta, Wood and Lowenthal (1981a: 265-272), Oyama (1982:261-283) and Patkowski (1982:52-63) can be mentioned. Some other studies have proved that adults and older children are superior in pronunciation in the beginning and are ultimately more successful in acquiring a second language (Ekstrand 1976: 179-198; Fathman, ibid; and Snow and Hoefnagel-Hohle 1978: 333-334). Some researchers believe that it is difficult for adults to attain a native-like accent of a second language and it is estimated that only 6-8 percent of these learners
are able to acquire it (Seliger, Krashen and Ladefoged 1975: 20-22). Other researchers believe that it is almost impossible to gain a native-like accent in a second language unless exposure to the target second language happens early in childhood (Long, ibid; Scovel, ibid).

The results of research on long-range acquisition correspond with the principles of neural plasticity. Nevertheless, several studies have shown that children have an advantage in pronunciation at the onset of learning a second language. This is due to their superiority in imitation tasks. Cochrane and Sachs (1979: 145-149), who compared seven-year-old Spanish learners with adults found the children superior in the beginning. In a study by Cochrane (1980: 331-360), the ability of Japanese children (8-13) is compared with adults (21-45 years old) to mimic the English /r/ and /l/, which are difficult to pronounce for Japanese, in nonsense words, short English phrases and spontaneous descriptions. The result of this study proved that children have an impressive advantage over the adults even at the earliest stages. Fifty percent of the children were rated as native but no adult could demonstrate such results.

Tahta, Wood and Lowenthal (1981b: 363-372) have investigated 231 English speaking children aged 5-15. This work was one of the largest mimicry studies in which subjects imitated French and American words and phrases without any previous practice. The researchers emphasize the effect of the learner's first language and explain that “… the ability to mimic single words and intonation patterns was best in the age 5-7 group, and … the ability declined over the older ages (ages 8-11, 12-15)” (qtd. in Stapp, ibid: 5). In the conclusion of this study, they argue that there is no interference of mother tongue, if second language acquisition starts by age 6. The degree of this interference, in the second language accent, increases regularly and gradually after this age.

The result of a research by Snow and Hoefnagel-Hohle (ibid) in which language use and language knowledge were studied showed remarkable differences among children, adolescents and adults. They examined several language tasks.
X = the group that performed the best at the beginning of the year (rate of learning)
Y = the group that performed the best at the end of the year (eventual attainment)

Table 2-4
Comparison of language learning at different ages

<table>
<thead>
<tr>
<th>task</th>
<th>child</th>
<th>adolescent</th>
<th>Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pronunciation</td>
<td>Y</td>
<td>Y</td>
<td>X</td>
</tr>
<tr>
<td>Auditory discrimination</td>
<td>XY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morphology</td>
<td>XY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sentence repetition</td>
<td>XY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sentence translation</td>
<td>*</td>
<td>XY</td>
<td></td>
</tr>
<tr>
<td>Sentence judgment</td>
<td>*</td>
<td>XY</td>
<td></td>
</tr>
<tr>
<td>Peabody picture vocabulary test</td>
<td>XY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Story comprehension</td>
<td>Y</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Storytelling</td>
<td>Y</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

* These tests were too difficult for child learners.

[Taken from Lightbown and Spada (1999, 66)]

The most remarkable thing in their research is that even three-year-old children were included in their research as well as adolescents and adults. They divided the learners into several age groups. Lightbown and Spada (1999: 66) divided the samples of their study into three groups and showed their findings in a table (table 2-4).

Being able to mimic foreign words or phrases is probably because of other factors. This ability can be simply an innate skill or, as some experiments have indicated, due to a personality factor such as motivation or external factors such as the variables of the setting in which the learning process occurs. Studies that have been carried out by some scholars such as Bongaerts, van Summeren, Planken and Schils (ibid: 447-465) and White and Genesee (1996: 233-265), support this point of view.
A close and detailed observation was made by the present researcher on his own three-year old daughter, Ensieyeh. She was from a Turkish (Azerbaijanian) speaking Iranian family. Ensieyeh was only seventeen months old when she came to India. She had started to speak when she was one year old and was able to pronounce an amount of limited words and phrases in her mother tongue, that is, Turkish. Living with the other Iranian families that were from other parts of Iran, created the opportunity for her to acquire Farsi (Persian), which is the official language of her country. After living in India together with Iranian and Indian children for a period of two years, she was able to communicate in Turkish with her parents, in Farsi with Iranians, in English and even in Hindi with her Indian friends. The remarkable and surprising point is that she never spoke in any language except Turkish to her parents even when they tried to encourage or force her to speak in another language. That is, she spoke only in Turkish with her parents, only in Farsi with the Iranian children and only in English or Hindi with her Indian peers. She not only acquired more than one language without any effort but also was able to distinguish between different languages. This case was the same for other Iranian children. Although Ensiey or her Iranian peers did not acquire these languages completely, the ability for distinguishing different languages in these children is of great importance and noticeable.

The result of this observation can be considered as a fact that, if the Iranian children were exposed to other languages, they will be able to acquire them and communicate in these languages easily. This fact has not been observed about the Iranian adults or adolescents who begin to learn a foreign language (English) at the age of twelve. The above-mentioned observation can be considered as an evidence for the superiority of children (at least Iranians) over adults in mimicry skill and acquiring one or even more languages other than their mother tongue.

Adults as Language Learners

It is not surprising that adults are obviously better than children at language skills, as they have had many years of practice and improvement. The pragmatic and general cognitive skills of adults are more developed and sophisticated than those of children. It means that, they know more things, they know how to do things better and...
they know how to go about trying to do things. Adults usually have a good understanding of their L1.

Some of the research findings show that adults are better performers of a second language than children and some long-term studies claim to counter the sensitive period, showing old performers superior. Experimental research has consistently demonstrated that adolescents and adults perform better in a second language than young children do under controlled conditions (Asher and Price 1967: cited in McLaughlin, 1992: 2).

Krashen et al. (1972), in their review of research findings of long-term studies attempt to prove that the available literature on age and language is consistent with three generalization: 1) adults proceed through early stages of syntactic and morphological development faster than children (where time and exposure are held constant); 2) older children acquire faster than younger children (the time variable and exposure are held constant); and 3) acquirers who begin natural exposure to second language during childhood generally achieve higher L2 proficiency than those beginning as adults (cited in Azabdaftari ibid: 6).

A study of 17,000 British children learning French in a school context, done by Stern, Burstall and Harley in 1975 (cited in McLaughlin, ibid: 3), indicates that those who had begun French instruction at age eleven performed better in tests of second language proficiency than those who had begun at age eight. This study, which has been the largest single study of children learning a second language in a formal classroom setting, showed that older children are better second language learners than younger ones. Other studies such as Swedish children learning French (Buehler 1972: cited in McLaughlin, 1992: 3) and Danish children learning English (Florander & Jansen 1968: cited in McLaughlin, ibid: 4) have indicated the same results (cited in McLaughlin, ibid: 3-4).

According to Rivers (1987: 445-450), teenagers, apparently, could apply more developed intellectual abilities to the learning of the second language. She describes studies of young teenagers who learned L2 better than pre-teen children in both formal school-learning situations and in informal, naturalistic situations where they had no specific instruction in language. Cummins and Nakajima (1987) who studied
the L2 skills of 273 Japanese children in grades two to eight in Toronto, found that the older the students were when they arrived in Canada, the better their English reading and, to a lesser degree, their writing skills. McLaughlin (ibid: 3) in her educational practice report claims that learning a second language may be more difficult, as young children do not have access to the memory techniques and other strategies of acquiring vocabulary and the grammatical rules of a language like other more experienced learners.

Some researchers raise some arguments that are frequently used against teaching foreign languages in elementary schools. Van Els et al (1984) cites some of them as follows:

... apart from the curriculum being too full as it is, introducing a foreign language would mean a drastic change in the character of the primary school, ... FLT [foreign language teaching] could have a negative influence on achievement in other subjects, especially the mother tongue, ... FLES [foreign languages in the elementary school] shows meagre results and that there, the benefits do not outweigh the costs. (172)

Of course these researchers conclude that in some countries, where qualified teachers and suitable teaching materials are available and there is a proper link between primary school and later school years, the result of FLES can be worthwhile.

Neufeld (1978: 163-174 and 1979: 227-241) has conducted a rather unusual research. His subjects, who were talented bilingual adults, were allowed to practice reading aloud and to record short passages many times. They could do this job as many times as they wanted. Their pronunciation was already good. The result of his experiments is also rather strange. Neufeld (ibid) hypothesized that all adults could acquire native-like pronunciation in a second language if they receive the same practice. He also claimed that neural plasticity was permanent. Neufeld rejected the notion of a sensitive period for acquiring a second language. The findings of his study received great endorsement in different fields. Klein (ibid), for instance, indicates:

[The] biological explanation [for difficulty in L2 acquisition after puberty] can be replaced, or supplemented, by arguments of a social nature. It may well be, for example, that the adult is much less willing to give up his well-established social identity. Even in the case of phonology-including intonation-where adult second language learners
often seem to encounter special difficulties, investigations by Neufeld (1979) have shown that suitably motivated adults are capable of mastering to perfection the pronunciation of the (for them) most exotic languages, as revealed by the fact that native speakers could not recognize any "foreign accent" in their speech. This shows that ideal second language acquisition is biologically feasible even after the age of puberty (10).

Flege's (ibid) experiment demonstrated a similar result. In his work, older children and adults demonstrated an initial superiority to young children. Flege (ibid, 162-177) rejected both the notion of critical period and the effect of neural plasticity in acquiring a second language over a certain span of time. He believes that the acquisition of a second language is potentially possible at any time. Another exhaustive study by Jacobs (ibid) supported the same notion of potentiality in adult second language learners. Jacobs maintains, "different neural structures can give rise to equivalent behavior" (326). Walsh and Diller (1981; in Diller, 3-21) also supported the superiority of adults in acquiring the skills of a second language. They believed that older learners were more efficient than children in acquiring grammar and lexicon, and were better than them in receptive skills such as reading but not in pronunciation.

As mentioned above, in some experiments adult learners have performed better in imitation tasks than young learners. Lowenthal and Bull (1984: 95-98) have undertaken the same research as Tahta et al's (mentioned in previous section) using a different presentation strategy. Their subjects, 39 English L1 learners ages 7-15, like those in the Tahta et al study, mimicked recorded words and phrases in American. Not like the previous experiment, Lowenthal and Bull didn't handle the presentation of target items to the subject. There was no special condition to encourage the subjects and the instructions and modelling of Armenian tokens were presented on audiotape and all subjects were required to repeat what they heard. The result showed that the adult learners were better than the others. They claimed that the superior performance of adults or older learners is due to the experimental conditions themselves. They stated that the manipulation of testing conditions could substantially affect the performance of young children.
In conclusion, it can be claimed that studies demonstrating equal or superior ability in acquiring the skills of a second language or at least mimicking its words or phrases in older learners, is strongly related to factors such as the length of practice sessions, motivation, environmental factors and so on.

In witness of the above-mentioned research findings that indicated the superiority of children over adults or vice versa, the present research will investigate this matter in Iran and will study the differences between these two groups of foreign language learners. It should be mentioned again that the condition of English language teaching in Iran is completely different from many of the other countries where English is a foreign language. The important fact is that majority of these studies resulted in some kind of child-adult differences in acquiring a second/foreign language at least in some areas of the target language. In case of any difference observed at the end of the present research, it will be of great help to give profitable suggestions to improve the quality of the present language teaching curriculum in Iran. To be aware of the effects of the age factor on this process will be useful for the authorities to design the proper curriculum for teaching English as a foreign language to Iranian children, especially when the particular condition of English teaching process in this country is under consideration.

**The Socioeconomic Factors**

Other factors that should be considered in this work are socioeconomic factors. Those Iranians who want to learn English earlier have to attend private classes and institutes. This may be expensive for some families and not all of them can afford it. It is obvious that in order to study the nature of these learners' foreign language acquisition, the researcher must be aware of the economic status of the family.

Another important factor that must be considered is the amount of foreign language input that all the learners receive and are exposed to out of the classrooms. The amount of this input in countries like Iran is much less than in other countries. For, there are very few English programmes on TV, cinemas and radio, very few newspapers and magazines in English, and overall, the role of mass media in Iran in preparing a suitable English input for the learners is almost nothing. It is obvious that, because of financial problems, the lower class of any society such as Iran has not the
opportunity to use modern technical instruments such as CD players, video-cassette players and so on.

There is some evidence that social class alone affects children’s vocabulary development, depressing the scores of children from lower social classes (Morisset et al., 1990). In the large-scale study by Fenson et al. (1994), they found a small but significant positive correlation between social class and productive vocabulary. (Bialystock, 2001: 222)

Any work and research on the English language teaching/learning process in Iran, where it is not the language of communication, needs the precise study of these factors and the like. It will be worthwhile to take a brief look at the statistics that show the present economic status of Iranian people. Table 2-5 shows the population of Iran in 2004 that has been estimated by Statistical Center of Iran. The urban and rural populations have been shown in separate columns. Table 2-6 shows the estimated population of Iran and the number of Iranian families in 2003.

Table 2-5
Estimated Population of Iran - 2004

<table>
<thead>
<tr>
<th>TOTAL</th>
<th>URBAN</th>
<th>RURAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>67477500</td>
<td>44771946</td>
<td>22705554</td>
</tr>
</tbody>
</table>

[Source: Statistical Centre of Iran]

Table 2-6
Estimated Population of Iran and Number of Families - 2003

<table>
<thead>
<tr>
<th>POPULATION</th>
<th>FAMILIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>66480000</td>
<td>13761000</td>
</tr>
</tbody>
</table>

[Source: Statistical Centre of Iran]
The most important statistics that can be of much use for this work is the average of the income and the expenditures of each family in Iran. Table 2-7 shows the average annual income of rural and urban families in Iran in 2001 and 2002 and Table 2-8 shows the average annual expenditure of each Iranian family. (US$1 = 8500 Rials = 45 Rupees)

Table 2-7
Average Annual Income of an Iranian Family

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>URBAN</td>
<td>25831527 (Rls)</td>
<td>33104868 (Rls)</td>
</tr>
<tr>
<td>RURAL</td>
<td>15200149 (Rls)</td>
<td>19002610 (Rls)</td>
</tr>
</tbody>
</table>

[Source: Statistical Centre of Iran]

Table 2-8
Average Annual Expenditure of an Iranian Family

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>URBAN</td>
<td>28020000 (Rls)</td>
<td>34971000 (Rls)</td>
</tr>
<tr>
<td>RURAL</td>
<td>17233000 (Rls)</td>
<td>21395000 (Rls)</td>
</tr>
</tbody>
</table>

[Source: Statistical Centre of Iran]

Comparing the information given in tables 2-7 and 2-8, one can see that the expense of every Iranian family, whether urban or rural, is higher than its income. It means that, in spite of the economic status of the country that has been reported repeatedly, people seem to have problems in earning their living. But as mentioned in the first chapter of this work, private English language classes are crowded with students (mostly children). This is probably because of the awareness that people have about the importance of this international language.

In order to determine the economic status of samples, Iranian families are divided into three levels, poor, average and rich. According to the data derived from the Statistical Yearbook Data of the Statistical Centre of Iran, the average monthly income of every Iranian urban family is approximately 2760000 Rials (yearly =
33104868 Rials). Only the urban families will be considered because the samples will be chosen from the private institutes in Tabriz, the capital of the East Azerbaijan province. The method and process of determining the economic status of the samples and their families will be discussed in detail in Chapter III (Methodology).

It is believed that children from educated families participate more actively in additional programmes and activities during their education. Another important characteristic of these children is having more language learning facilities than the others. Because of involvement with books and other educational facilities, it is assumed that the amount of English language input for children in educated families is more than the illiterate or less-educated families. While the samples will be selected from private institutes, it will be useful to review the information about the educational condition of Iranian families. Table 2-9 reflects the number of students at all educational levels of the Ministry of Education in the academic year 2002-03. Table 2-10 illustrates the population and number of literate people, by sex and age groups.

Table 2-9
Number of Students of all Educational Levels:
Academic Year 2002-03

<table>
<thead>
<tr>
<th>STUDENTS</th>
<th>Both Sexes</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>17196588</td>
<td>8963332</td>
<td>8233256</td>
</tr>
</tbody>
</table>

[Sources: Statistical Centre of Iran (1- Ministry of Education. 2- Organization for the Education of Special Children)]
Table 2-10
Population and Number of Literate People (1000 persons)

<table>
<thead>
<tr>
<th>Sex and age group</th>
<th>1991 Census</th>
<th></th>
<th>1996 Census</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Population</td>
<td>Literate</td>
<td>Population</td>
<td>Literate</td>
</tr>
<tr>
<td>Both sexes</td>
<td>45856</td>
<td>33966</td>
<td>52295</td>
<td>41582</td>
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<tr>
<td>6-9 years</td>
<td>7195</td>
<td>6635</td>
<td>6891</td>
<td>6361</td>
</tr>
<tr>
<td>10-14 years</td>
<td>7547</td>
<td>7056</td>
<td>9081</td>
<td>8740</td>
</tr>
<tr>
<td>15-19 years</td>
<td>5909</td>
<td>5275</td>
<td>7116</td>
<td>6718</td>
</tr>
<tr>
<td>20-24 years</td>
<td>4947</td>
<td>4128</td>
<td>5222</td>
<td>4739</td>
</tr>
<tr>
<td>25-29 years</td>
<td>4005</td>
<td>3079</td>
<td>4709</td>
<td>4067</td>
</tr>
<tr>
<td>30-34 years</td>
<td>3504</td>
<td>2419</td>
<td>3980</td>
<td>3222</td>
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<td>35-39 years</td>
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<td>1782</td>
<td>3572</td>
<td>2614</td>
</tr>
<tr>
<td>40-44 years</td>
<td>2038</td>
<td>1094</td>
<td>2812</td>
<td>1844</td>
</tr>
<tr>
<td>45-49 years</td>
<td>1579</td>
<td>733</td>
<td>2013</td>
<td>1127</td>
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<tr>
<td>50-54 years</td>
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<td>572</td>
<td>1529</td>
<td>719</td>
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<td>55-59 years</td>
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<td>434</td>
<td>1367</td>
<td>502</td>
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<tr>
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<td>2595</td>
<td>538</td>
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<td>23</td>
<td>26</td>
<td>15</td>
</tr>
<tr>
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<td>26534</td>
<td>22465</td>
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<tr>
<td>6-9 years</td>
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<td>3454</td>
<td>3510</td>
<td>3291</td>
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<tr>
<td>10-14 years</td>
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<td>3746</td>
<td>4622</td>
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<td>1818</td>
<td>1501</td>
</tr>
<tr>
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<td>702</td>
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<td>45-49 years</td>
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<td>717</td>
<td>360</td>
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<td></td>
<td>723</td>
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<td>1382</td>
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<td>2656</td>
<td>2320</td>
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<td>2343</td>
<td>1895</td>
</tr>
<tr>
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<td>1967</td>
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</tr>
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<td>35-39 years</td>
<td>1404</td>
<td>683</td>
<td>1754</td>
<td>1113</td>
</tr>
<tr>
<td>40-44 years</td>
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<td>735</td>
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<tr>
<td>45-49 years</td>
<td>780</td>
<td>244</td>
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<td>425</td>
</tr>
<tr>
<td>50-54 years</td>
<td>750</td>
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<td>760</td>
<td>242</td>
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<td>580</td>
<td>77</td>
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<td>65 years and over</td>
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<td>1213</td>
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<tr>
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<td>22</td>
<td>10</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

[Source: Statistical Centre of Iran]

The information about the educational condition of the subjects and their families will be discussed in detail in chapter IV (Data Analysis).

**Second/foreign Language Learning Theories**

**EFL versus ESL**

English is a foreign language in Iran and the present research will study the child-adult differences in learning this language, so it is necessary to have a brief review of a foreign language and how it differs from a second language. Popularly, both foreign and second languages refer to any language that is not a person’s first or native language. In English speaking countries such as United States, it is a difficult job to look for a root for TEFL (teaching English as a foreign language), for it does
not have a social history but an applied linguistic one. However, TESL (teaching English as a second language) is a different matter in this country. It is a part of social history. However, according to many linguists there are major differences in the learning aims, teaching methods and achievement levels involved. Theoretically, EFL (English as a foreign language) is for non-native speakers learning English in a non-English-speaking environment, typically in their own countries. ESL (English as a second language) is for non-native speakers learning English in an English-speaking environment, typically students on a language holiday or immigrants in an English-speaking country. There are some theoretical differences in the way that English is taught and acquired in these different situations, though with the growth of technology and communication many of these differences are becoming increasingly academic. In practice, many teachers make little distinction between the two terms, or are even aware of the distinction. It might be said that by and large British teachers, for example, instinctively use the term EFL, while American teachers instinctively use the term ESL. David Crystal (1997), in *The Cambridge Encyclopaedia of Language* explains the distinction between FL (foreign language) and SL (second language) as follows:

A foreign language (FL)… is a non-native language taught in school that has no status as a routine medium of communication in that country. A second language (SL) is a non-native language that is widely used for purposes of communication, usually as a medium of education, government, or business (372).

Richards, Platt and Platt (1992) in *Dictionary of Language Teaching & Applied Linguistics* write that these two terms are often used to mean the same in North American applied linguistic usage but there has been made a distinction between them in British usage.

A foreign language is a language which is taught as a school subject but which is not used as a medium of instruction in school nor as a language of communication within a country … A second language is a language which is not a native language in a country but which is widely used as a medium of communication and which is usually used alongside another language or languages (142-143).

A great many theories regarding language development in human beings have generally arisen out of major disciplines such as psychology and linguistics.
Psychology and linguistics thought have profoundly influenced each other and the outcome of language acquisition theories alike. English is now taught under a variety of conditions and for different purposes all over the world. Thus a number of terms have been created to account for the uniqueness of and differences among these programs. To date, ELT (English language teaching), EFL (English as a foreign language), ESL (English as a second language) and ESOL (English for the speakers of other languages) are among the most common ones. However, these terms are often overlapping in definition and neither EFL nor ESL seems adequate to fully describe the present state of English language usage.

There are clear distinctions among the programs. While in an EFL situation English is found only as a school subject, it is the medium of instruction or the lingua franca of the community in the ESL situation. In this aspect, EIL is seen to be the same as ESL except that in the second language situation the English used as the lingua franca is only sometimes a local educated variety of English whereas in the international situation the English used would most frequently be the local educated variety. The distinction here seems hazy in the Iranian ELT context. English is not the medium of instruction (except for limited classroom instruction in English major courses) and there is no English medium college in the country. Nor is it the nation’s lingua franca. And a local educated variety has not yet developed. However, the social practice of English in Iran, though it has not reached its EIL destination, is not limited to the school practice. Actually, it has enjoyed an increasing extension.

**Figure 2-1:** The old distinction in English instruction (adapted from L. E. Smith 1983: 1-8)
Figure 2-2: The new distinction in English instruction

English

Native English (native speakers talking to other native speakers of the same country)

English as an International/International Language

English as an International Language

American English
Australian English
British English
Canadian English
Hong Kong English
Indian English
Singaporean English

English as an Intranational Language

American English
Australian English
British English
Chinese English
Filipino English
Hong Kong English
Indian English
Japanese English
Korean English
Singaporean English
Thai English etc.

Since all language learners in the EFL and ESL category are non-natives, the heading student population may not appear fruitful in the investigation of ELT model in Iran. At least, it cannot draw a clear distinction between EFL/ESL considerations.

Nurture versus Nature

Language acquisition theories have basically centered around the nurture and nature distinction or on empiricism and nativism. According to empiricism, all knowledge comes from experience, ultimately from our interaction with the environment through the reasoning or senses. In contrast with empiricism, nativism
holds that at least some knowledge is not acquired through interaction with the environment, but is genetically transmitted and innate. It is, however, important to note that neither nurturists (environmentalists) disagree thoroughly with the nativist ideas nor do nativists with the nurturist idea. Only the stress they lay on the environmental and innate factors is relatively little or more. The following is the most important language acquisition theories resulting from the two opposing views mentioned above. Most of the theories of language acquisition may be considered in both first language and second/foreign language learning.

**Zone of Proximal Development**

Vygotsky (1962) studied conscious human behaviour and investigated the role that language plays in human behaviour. His point of view is that social interaction plays an important role in the learning process. He emphasizes the role of *shared language*, which refers to social interaction in the development of thought and language. It can be best elucidated through the notion of the *zone of proximal development*. He believes that two developmental levels determine the learning process: egocentricity and interaction. The zone of proximal development refers to the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in cooperation with more capable friends of the child. Vygotsky’s (ibid: 46) emphasis is on the significance of egocentric speech in the development of thought and language. He suggests that egocentric speech is social and helps children interact with others. He believes that children use less egocentric language when they are alone. It means that speech is influenced by the presence of other people. It is true that society and other people are important factors helping children to acquire language, but it seems that Vygotsky (ibid: 43) overemphasizes the function of egocentric speech in the development of language. The egocentric speech is not the self actually.

In conclusion, Vygotsky considers child language development (acquisition) as the result of social interaction. He contends that language is the key to all development and words play a central part not only in the development of thought but in the growth of cognition as a whole.
Piaget’s View of Language Acquisition

In the field of first and second language acquisition studies, Piaget’s (1959) ideas have been influential. As a biologist and psychologist, he studied the overall behavioural development in the human infant. But his theory of development in children has striking implications as regards language acquisition. One of those psychologists who view language acquisition as a case of general human learning, he does not suggest, however, that development is not innate, but only that there is no specific language module. According to Piaget, language acquisition development results mainly from external factors or social interaction. Piaget (cited in Brown, 1987: 47) outlined the course of intellectual development as follows:

The sensorimotor stage from ages 0 to 2 (understanding the environment)

The preoperational stage from ages 2 to 7 (understanding the symbols)

The concrete operational stage from ages 7 to 11 (mental tasks and language use)

The formal operational stage from the age 11 onwards (dealing with abstraction). (47)

Piaget, unlike Vygotsky, believes that egocentric speech on its own serves no function in language development.

Vygotsky considers the language development as the result of social interaction and Piaget views it as a case of general human learning that is not innate at all. In both cases, it is essential to take into account the present inappropriate condition of English in Iran. The only solution for the problem of paucity of input for Iranian students is to create an indispensable situation for them. Depriving them of the opportunity of learning English from childhood is neither wise nor desirable.

Behaviourism and Structuralism

The late nineteenth and early part of the twentieth century is a revolutionary period for psychology, for during this time it established itself as a science, separate from philosophy and physiology. The states of the mind became the main field of study for linguists, which later gave rise to behaviourism. It was the dominant
paradigm in educational psychology for half the century, posing general laws of 
learning applicable to any learner, to rats as well as humans, to adults and babies. It is 
optimistic and democratic, in that anyone can learn anything, given enough time and 
the right drills. It was believed that learning in animals and simple learning in humans 
was the same. The behaviourist theories of this early period later grew into the 
stimulus-response theories of learning. One of the best-known attempts to construct a 
behaviourist model of linguistic behaviour is embodied in B.S. Skinner’s (1957) 
classic, *Verbal Behaviour*. Behaviourists think of psychology to be as scientific as 
physics or chemistry. They believe in the objective study of language. They reject 
cognitive processing in human learning and do not differentiate between stimulus, 
response, reinforcement, and language learning. According to Skinner, different 
stimuli produce different unpredictable responses from a learner. The association of a 
particular response with a particular stimulus constructs a habit. As some behaviorist 
psychologists believe, such as Watson (1914) or Skinner (ibid) habits have two 
characteristics; they are observable and automatic. Watson denied the existence of 
internal mental processes. The regular linking of a particular stimulus with a 
particular response led to the formation of a habit and it can be said that the learning 
of a habit can occur through imitation. At that time, the theories of habit formation 
were the theories of learning and were applied to language learning as well.

According to the contrastive analysis hypothesis, which was based on 
behaviourist and structuralist theories, the differences between languages can be used 
to reveal and predict all errors and the data obtained can be used in second/foreign 
language teaching for promoting a better acquisition environment. Araghi (1997) 
studied the errors in EFL classrooms that Iranian university students had committed in 
their classroom compositions and final examination papers. Considering all possible 
sources of the errors, he states that the reason for a majority of these errors is the 
interference of the students’ mother tongue Farsi (Persian). Lightbown and Spada 
(1993) note that: “... there is little doubt that a learner’s first language influences the 
acquisition of the second language. [But] ... the influence is not simply a matter of 
habit, but rather a systematic attempt by the learner to use knowledge already 
acquired in learning a new language (25). Therefore, it is not true to say that mother 
tongue interference explains the difficulties that an L2 learner may face. It is true that 
there might be some influences resulting from L1, but research (Rod Ellis, 1985: 29)
has shown that not all errors predicted by the contrastive analysis hypothesis are actually made.

Behaviourism was passively accepted by the influential Bloomfield structuralist school of linguistics and produced some well-known applications in the field of second/foreign language teaching – for instance, the Audio-lingual Method or the Army Method. This theory sees the language learner as a tabula rasa with no built-in knowledge. The theory and the resulting teaching methods failed due to the fact that imitation and simple stimulus-response connections only cannot explain acquisition and provide a sound basis for language teaching methodology.

There are private and government institutes in Iran that are still using methods such as the audio-lingual to teach English to their learners. They are seen as successful in their job not because of applying the best and the most appropriate method but because of the lack of public knowledge in the field. In comparison with some of the government schools where unskilled teachers are employed and the grammar translation method is still in use, these institutes are considered as suitable places to learn English. But when the quality of language learning and the fluency of the learners in the taught language is under question the success of these institutes becomes dubious.

Mentalism and Cognitivism

In 1958, with the publication of Noam Chomsky’s (1957) *Syntactic Structures*, followed by Aspects of the Theory of Syntax, structural linguistics was replaced by Transformational Generative Grammar and soon, behaviorist psychology was replaced by *Cognitive Code-Learning Theory*. Chomsky (cited in Azabdaftari, ibid: 1) upset the prevailing belief that language is learned by imitating, memorizing, and being rewarded for correct linguistic responses. Araghi describes his arguments as follows:

He [Chomsky] argued that the structural description is too superficial, and language learners would not conform to the behaviourist stereotypes. He attacks behaviourism on the question of how the mind is able to transfer what is learnt in one stimulus-response sequence to other novel situations. He concludes that generalization does not work
because it simply cannot explain how from a finite range of experiences, the human mind is able to cope with an infinite range of possible situations. His conclusion is that thinking must be rule governed. Mentalists believe that mind is not a blank state, but that mind has an active role in language processing and language learning.

Chomsky (1969: cited in Elliot, 1981: 7), who tries to construct a theory of language, claims that language acquisition is primarily the result of mental mechanisms that are specifically linguistic. He emphasizes the contribution of the learner, rather than of the environment.

In the 1960s and 1970s, Chomsky (1959, 1965 and 1979) proposed language acquisition device (LAD), as a theoretical construct. This device accepts the primary linguistic data as input and a grammar of the language from which the data is drawn as output. In other words, it was offered as an explanation for the development of a child’s competence. Chomsky (ibid) believes that a child is born with an LAD. His basic argument centres on the innate language acquisition device, which allows children to acquire the complex language system in a relatively short time. According to the innatist hypothesis held by some philosophers and linguists every human being is born with innate structures in the mind from which knowledge develops, rather than from the environment. He claims that the growth of the body of knowledge about the structure of language or linguistic competence is the hidden cause of a child’s ability to speak and understand the native language.

Chomsky (ibid) emphasizes the importance of linguistic creativity and says that a child, acquiring the first language, is able to produce novel sentences, which have not been heard before. These novel sentences are grammatical and the child is able to distinguish them from ungrammatical ones. This idea makes a distinction between learning in general and language learning. On the whole, one can say that human beings are endowed with a language device. It rejects the behaviourist theory which explains the learning of a language as the formation of new habits like other kinds of learning such as learning how to swim, how to drive a car, and so on. Lenneberge (cited in Brown, 1987: 19), in his attempt to explain language development in the child, assumed that language is a species-specific behaviour and it is biologically determined. Another important point as regards the innatist account is that nativists do not deny the importance of environmental stimuli, but they say
language acquisition cannot be accounted for on the basis of environmental factors only. There must be some innate guide to achieve this end.

Chomsky (1980) links language structure to the nature of human cognitive process. According to cognitive strategy (cognitive style), different second or foreign language learners may prefer different solutions to learning problems. Some of them may remember things if they are associated with things. Some can remember things when they write down words. Some may find explanations for grammatical rules necessary; others may not need explanations. So, cognitivism, the currently dominant paradigm pays attention to differences among learners (see Chomsky, 1971, 1972, 1986a, 1986b, 1991 and 1995). It is humanistic, but perhaps realistically pessimistic in that it allows that some individuals will not succeed. In cognitive methodologies, classes are learner-centred; learners are active participants in learning, not passive recipients of knowledge. As much as these methodologies may be opposed to each other philosophically, teachers typically use techniques based on both regularly. According to Klein (ibid: 4), a speaker must have acquired the cognitive categories such as time, space, modality, causality, etc., which underlie the various expressive means of natural language. Whereas this condition is usually met in second language acquisition, it is not necessarily so in first language acquisition.

Generally, cognitive theory is based on the work of psychologists. Piaget's work can be regarded as a starting point for cognitivist ideas. He believes that students can learn things when they are developmentally ready to do so. According to the cognitive psychologist, meaning, knowing and understanding are the most important items in the language learning process. They believe that meaning plays an important role in human learning and learning is a meaningful process of "relating new events or items to already existing cognitive concepts" (Brown, ibid: 47). Learning involves internal representations that guide performance. In the case of language acquisition, these representations are based on the language system and involve procedures for selecting appropriate vocabulary, grammatical rules and pragmatic conventions governing language use. Cognitive psychologists see second language acquisition, on the other hand, as the "building up of knowledge systems that can eventually be called automatically for speaking and understanding" (Lightbown and Spada, 1993: 25). Language learning, in this sense, has some Gestalt characteristics in that language learning is a holistic process and not analyzable as stimulus-response associations. Language learners pay attention to any aspect of the
language that they are attempting to understand and produce. Then, step-by-step, they become competent enough to use certain parts of their knowledge through experience and practice.

In short, the cognitivists claim that language acquisition can be automatically attained. However, it is not clear how it will be automatized.

**Universal Grammar and SLA/FLL**

During the recent years, Universal Grammar (UG), as one of the language acquisition theories, has gained wider acceptance than the others. Clearly, any newborn baby is capable of acquiring any human language. Obviously the reason for this is that the innate structures of language must be common to all languages. Chomsky calls this universal grammar (1981, lecturs). “All known formal operations in the grammar of English, or of any other language, are structure-dependent” (Chomsky, 1971: 30). UG is more of an L1 acquisition theory than L2. According to UG, the logical problem of language acquisition is that language learning would be impossible without “universal language-specific knowledge” (Cook, 1991: 153; Bloor & Bloor, 1995: 244). The main reason behind this argument is the input data. Cook (ibid) defines language input as follows:

... Language input is the evidence out of which the learner constructs knowledge of language – what goes into the brain. Such evidence can be either positive or negative. ... The positive evidence of the position of words in a few sentences the learner hears is sufficient to show him the rules of a language (154).

The view supports the idea that the external input per se may not account for acquisition. Chomsky (cited in Kiymazarsalan, 2002, part III: 3) believes that the input is poor and deficient in two ways; 1) it is degenerated, for it is damaged by performance features such as slips or hesitations. The input cannot be an adequate base for language learning; 2) the input does not normally contain negative evidence, the knowledge from which the learner could exercise what is not possible in a given language.

L2 learners, who happen to be generally cognitively mature adults, frequently fail to achieve native-like proficiency. Therefore, the following questions can arise.
Why can’t adults who have already acquired an LI, acquire an L2 thoroughly? Don’t they receive any help from UG? Or, if they do, then how much of UG is an accessible in SLA? Accordingly, the following conclusions are reached:

1. L2 acquisition is just like L1 acquisition and LAD is involved.
2. L2 learners use their general learning capacity.
3. Only that part of UG, which has been used in L1 acquisition, is used in L2 acquisition.

Proponents of UG believe that both children and adults utilize similar universal principles when acquiring a language and LAD is still involved. MacLaughlin (1987) explains this view as follows:

Advocates of UG approach working on second-language learning ... argue that there is no reason to assume that language faculty atrophies with age. Most second-language researchers who adopt the UG perspective assume that the principles and parameters of UG are still accessible to the adult learners (96).

It is quite interesting that even the fervent advocates of UG turn out to be hard-line reductionists, when it comes to the role of UG in SLA. Chomsky, too, in his earlier theorizing speculated that innate linguistic knowledge is not accessible to L2 learners. Still, for many UG theorists, the innate mechanism for language acquisition atrophies especially after puberty which is generally assumed to be the critical period for natural language acquisition (Gregg, 1984; Bley-Vroman, 1988; Clashen and Muysken, 1989).

Learners eventually know more about the language than they could reasonably have learned if they had to depend entirely on the input they are exposed to. They infer from this that UG must be available to second language learners as well as to first language learners. Some of the theorists who hold this view claim that the nature and availability of UG in SLA is no different from that which is hypothesized to guide first language learners. Others argue that UG may be present and available to second language learners, but that its exact nature has been altered by the acquisition of other languages. (Lightbown and Spada, 1999: 37)
However, the argument in favour of UG in first language is almost equally valid for L2 learners who can attain high levels of linguistic knowledge that cannot be attributed to input or instruction alone.

Fodor (1983: 47) studied the relationship between language and mind and his view that language is a modular process has important implications for a theory of language acquisition. He claims that the brain is organized, unlike older views such as the behaviouristic view of learning and language learning, with many modules of cells for a particular ability (for example, the visual module). According to Fodor (ibid: 47), these modules operate in isolation from other modules that they are not directly connected. He called the module separateness as informational encapsulation. Each module, such as the language module, is open to a specific type of data. They are domain specific, that is, conscious knowledge cannot penetrate your visual module or language module or any other subconscious module. Chomsky and other proponents of UG theory have somewhat similar arguments in that the external input per se may not account for language acquisition and that language acquisition is genetically predetermined.

UG’s particular aim is to account for how language works. Chomsky (ibid) investigated a number of linguistic universals through studying only the core grammar of the English language. He neglected the peripheral grammar, that is, language specific rules, which cannot be generalized. He is concerned with explaining competence. Consequently, it can be said that UG has generated valuable predictions about the course of interlanguage and the influence of the first language.

Cook (ibid: 158) states that, according to UG theory, language teaching should deal with how vocabulary should be taught, not as tokens with isolated meanings but as items that play a part in the sentence saying what structures and words they may go with in the sentence. On the other hand, the evidence in support of UG is not conclusive.

According to Krashen’s filter hypothesis (1982: 202-226), children do not have the affective filter and it arises around the age of puberty. And when it arises it may stay strong indefinitely. He believes that no real change in the language acquisition device occurs at puberty. The LAD does not shut off, nor does it even degenerate.

Cook (ibid: 126) considers the relationship between input and output in second language learning and claims that L2 learners’ innate knowledge of language could be
acquired from the evidence they have encountered. The source of this knowledge must be within their minds. He believes in the establishment of innateness in second language learning in the same way as in first language acquisition.

In summary, if the language module that determines the success in L1 acquisition is proved to be accessible in L2 acquisition, L2 teaching methodologists and methods should study and account for how to trigger this language module and redesign their methodologies. Therefore, the UG theory should be studied in detail to endow researchers with a well-developed educational and pedagogical basis for mother tongue and foreign language teaching.

**The Monitor Model**

Krashen’s monitor hypothesis (monitor model) is an instance of the nativist theories. It consists of five hypotheses and has been expanded in a number of books (Krashen, 1981, 1982, 1985, etc.). It can be considered as a base for the natural approach, a comprehension-based approach to second/foreign language teaching. He argued that experimental and other data are consistent with these five hypotheses. It is not irrelevant to say that in all discussions of age differences in second/foreign language acquisitions, this hypothesis has come to be considered as one of the most ambitious theories. The five hypotheses are

**The acquisition-learning hypothesis:**

This hypothesis makes a distinction between two independent ways of ability in second languages. Krashen maintains “acquisition is a subconscious process identical in all important ways to the process children utilize in their first language” (1985: 1). He believes that adult acquirers have access to the same LAD that children use (1982: 5). On the other hand, “learning is a conscious process that results in knowing about the rules of language” (Krashen, 1985: 1). Learned competence functions as a monitor or editor while acquired competence is responsible for our production of sentences. As one produces a chain of sentences, learned competence makes corrections on them before or after their production. Learned competence can be an aid for a learner to correct his grammar when he has enough time to focus on
form. The prediction of this hypothesis is that learning the grammar rules of a second/foreign language does not result in subconscious acquisition.

In his [Krashen’s] view, we acquire as we are exposed to samples of the second language which we understand. This happens in much the same way that children pick up their first language – with no conscious attention to language form. We learn, on the other hand, via a conscious process of study and attention to form and rule learning. (Lightbown and Spada, ibid: 38)

**Natural Order Hypothesis:**

According to this hypothesis, the acquisition of grammatical structures or morphemes proceeds in a predicted progression in first language acquisition. There is a similar natural order in second/foreign language acquisition, but the implication of this order is that acquisition is subconscious and free from conscious intervention.

Krashen observes that the *natural order* is independent of the order in which rules have been learned in language classes. Most of Krashen’s original evidences for this hypothesis came from the ‘morpheme studies’, in which learners’ speech was examined for the accuracy of certain *grammatical morphemes*. While there have been many criticisms of the morpheme studies, subsequent research has confirmed that learners pass through sequences or stages in development. (Lightbown and Spada, ibid: 39)

**Input Hypothesis:**

According to this hypothesis, people acquire language best by understanding that there is little beyond their present level of competence (i + 1). This input should be relevant and not grammatically sequenced. As the matter of age difference arises, older learners progress more rapidly in the initial stages, for they obtain more comprehensible input. Older learners have gained a large body of knowledge of the world than the younger learners. Children (young learners) outperform the adults in the later stages of learning the language.
In recent years, he [Krashen] has emphasized the value of undirected pleasure reading as a source of comprehensible input. While he acknowledges that some people who are exposed to extensive comprehensible input do not achieve high levels of proficiency in the second language, he retains his conviction that input is the source of acquisition. (Lightbown and Spada, ibid: 39)

**Monitor Hypothesis:**

According to this hypothesis, there is a monitor that edits and makes alternations or corrections as they are consciously perceived. This theory underlines the distinction between guided and spontaneous language acquisition. Three conditions can be mentioned for the use of the monitor: a) the learner must have enough time, b) his focus must be on form and not on meaning and c) he must know the correct rule. This hypothesis is not a model of language acquisition, but represents important implications for language acquisition, especially when the age differences of the learners are under discussion.

It is very difficult to show evidence of ‘monitor’ use. In any given utterance, it is impossible to determine what has been produced by the acquired system and what is the result of monitor use. Krashen’s claim that language which is produced quickly and apparently spontaneously must have been acquired rather than learned leaves us with a somewhat circular definition. (Lightbown and Spada, ibid: 38-39)

**Affective Filter Hypothesis:**

This hypothesis is a reason for why children ultimately reach higher levels of attainment in language development than are achieved by those who begin to learn L2 in adulthood. Input must be achieved in low-anxiety contexts. The learner who acquires the language with a low affective filter receives more input and consequently interacts with confidence. According to this hypothesis, through adolescence the individual learner goes through the *formal operations* stage, which leads to the power of conceptualizing the thoughts of others. This filter is affective because of the impact
of some factors such as self-confidence, motivation, anxiety state and feeling of vulnerability in the language acquisition process. According to this hypothesis, children have an advantage in developing L2 because their affective filter is lower.

Krashen’s writing has been very influential in supporting communicative language teaching (CLT), particularly in North America. On the other hand, the theory has also been seriously criticized for failing to propose hypotheses which can be tested by empirical research. (Lightbown and Spada, ibid: 40)

From Krashen’s point of view about language acquisition, especially about second/foreign language learning, it is understood that there are some differences between children and adults. Considering Iranian children and adults, one should keep in mind the differences that may be observed between these two groups. According to acquisition-learning hypotheses, children find it easier to learn even a second or foreign language better than adults because they have not left the stage of unconscious language acquisition completely. So, it will be better for them to start learning English as early as possible. If they begin this process in early childhood, they will have time enough to construct their competence in a proper way and to gain the components of the new language based on a natural order. According to Krashen’s input hypothesis, young learners are superior to adults in language performance in the later stages. In the study of the differences in language acquisition by different age groups, the implications of the monitor hypothesis, mentioned by Krashen, are useful. Affective filter hypothesis claims that there are differences between children and adults and also children enjoy an advantage over adults in learning a second language. If the monitor hypothesis is correct, the result of the present work should show differences between Iranian children and adults in learning English.
Reading Comprehension in EFL Classrooms

Introduction

As mentioned before, English is a foreign language in Iran. So, the students who want to learn English will have to read to learn it, for a few years, unless they can move into an English speaking environment. In the literate world it is hard to mention any skilled work that does not require the reading ability. Quick, efficient and imaginative reading is considered as the core of the syllabus in all the important study skills. Where there is little reading, there will be little language learning. As Bright and McGregor (1970) state, “... the more the student reads, the more background knowledge he acquires of other ways of life, behaviour and thought and the more books he finds he can understand” (53). A person’s specialized and general knowledge, further education, his point of view of life, his behaviour and his thought depend on the quantity and quality of his reading. In EFL contexts, reading has been traditionally considered the most indispensable skill. Indeed, reading is an invaluable skill in a context where exposure to the target language is limited, especially for foreign language learners who wish to continue developing their vocabulary and general proficiency.

At present, there is a great emphasis on reading comprehension in Iranian EFL classrooms. It is believed that the best way for learning a foreign language, especially in a country like Iran with its own peculiar characteristics, is to be able to read and comprehend the target language. Unfortunately, the experience has shown that Iranian students, who have studied English in public schools, have not the reasonable proficiency even in this skill. Gholizadeh (2001) has carried out a research on the effect of different kinds of texts on reading comprehension in Iranian EFL classrooms. She considers and sees a foreign language in a different way:

... knowing refers to product-oriented approach and doing refers to process-oriented approach. Learning a language embodies getting to know something and to be able to do something with that knowledge,
Reading ability is considered one of the most important skills that students of English as a foreign language need to acquire. It is a very complex process involving many physical, intellectual and often emotional reactions. In English as foreign language contexts, there has been a growing recognition that reading provides important opportunities for second language development in second language learners (Day & Bamford, 1998). This is true in EFL settings in which sources of L2 input are limited (such as in Iran). Learning how to read is a complex task that involves the successful convergence of many different underlying yet related cognitive and language skills. Chastain defines reading as "... a receptive skill in that the reader is receiving a message from a writer" (216). There are three important components of the reading skill; the recognition of the graphic marks, the correlation of these with formal linguistic elements and the correlation of these with meaning.

From a psychological viewpoint reading is problem-solving behaviour that actively involves the reader in the process of driving and assigning meaning. While doing so the reader is drawing on contextual information that contains syntactic, semantic and discourse constraints that affect interpretation (Cziko, 1978: 473). There are three kinds of contexts involved in the process. The syntactic rules of language and preceding words provide the syntactic constraints. The logical connectives and other elements of cohesion develop the topic of the text that provides discourse constraints. Semantic constraints contain the distribution of meaning and relationship of words within a specific language and culture. Readers decode the text semantically and syntactically. Within the context of sentences, after understanding the meaning of the words, they create a broader meaning for these words. They recognize the structures of the sentences and their meaningful relationship. After getting the meaning that relies on semantic rather than syntactic information, readers recode it in an abbreviated form for storage in the memory.
When language is considered as a code, reading becomes a process of decoding. In other words, the reader must be able to derive the meaning by decoding or translating the script into its spoken equivalent. This point of view delimits the definition of reading, what is not convincing. By considering reading as the ability to understand and comprehend a text, it won't be dependent on just visual word recognition. On the other hand if define reading is defined as deriving and extracting the meaning from a text, then is encountered a host of visual, linguistic and conceptual skills to be considered. At this point, it seems profitable to divide the reading skill into sub-skills and to study their interrelations within a taxonomy or hierarchy of skills. In order to deal with them exhaustively it is worthwhile to introduce and discuss schema theory, which is one of the most important theories in reading.

**Schema Theory**

Before dealing with this theory in detail, the notion of schema must be defined. The word schema, which is a Greek word in origin, in Kantian epistemology means “a concept, similar to a universal but limited to phenomenal knowledge, by which an object of knowledge or an idea of pure reason may be apprehended” (Random House Webster’s Unabridged Dictionary, 2001). Widdowson (1983) describes schema as “cognitive constructs which allow for the organization of information in long-term memory” (cited in Singhal, 2001: 2). According to Cook (1989), “the mind, stimulated by key words or phrases in the text or by the context, activates a knowledge schema” (69).

According to schema theory, reading a text implies an interaction between the reader’s background knowledge and the text itself. The stored knowledge in the reader’s mind is called schemata. Schemata are the dynamic, interrelated mental structures that are essential for the extraction of meaning. The organization of information in long-term memory is allowed by cognitive constructs, that is schemata. The schemata of readers differ from one another and these are also often culture-specific. This point will be discussed in detail. Schema theory is a theory of knowledge, how knowledge is constructed, and how knowledge is used (Rumelhart 1980: in Spiro, Bruce and Brewer: 33-38). This theory claims that fluent readers relate
their schemata with the information that lies in the text. It is based on the belief that the act of comprehension involves a person’s knowledge of the world as well. To comprehend a text, the reader’s own background knowledge is combined with new information from the text.

**Types of Schemata**

Three main types of schemata are content schema, formal schema (textual schema) and linguistic schema. Content schema refers to the knowledge of the world or a reader’s background knowledge that covers all kinds of knowledge, from everyday knowledge to very specialized one. It provides a reader with a basis for comparison (Carrell and Eisterhold 1983; Carell, Pharis, and Liberto 1989; etc.). Formal schema refers to the background knowledge of rhetorical structures of written texts and their organizational forms. It covers discourse level items and allows the reader to understand that different types of texts use text organization, structures, vocabulary and grammar differently. The reader’s culture, his previous education and study play the main role in providing him with a knowledge base of formal schemata. Linguistic schema includes the knowledge of the specific elements of language. It comprises the decoding features needed to recognize words and how they fit together in a sentence. Second/foreign language reader can generalize a pattern or guess through repeated example the meaning of a word that may not have initially have been part of his linguistic schema.

**Types of Schemata and Differences in Comprehension**

In their studies, Barnett (1989), Carrell and Eisterhold (ibid) and P. Johnson (1982: 503-516) have discussed content schema or cultural orientation as a factor that influences second/foreign language reading. The readers’ different life experiences may be different from the writer’s model reader. Sometimes readers may think that they comprehend a text, but have a different interpretation from the author’s. Carrell and Eisterhold (ibid: 80) state, “One of the most obvious reasons why a particular content schema may fail to exist for a reader is that the schema is culturally specific and is not part of a particular reader’s cultural background”. It is clear that the culture
of readers can affect interpretation because they view reading itself in different ways and also possess different content and formal schemata. According to their cultures, they may not possess some key concepts. In other words, some of the concepts may be absent in the schemata of non-native readers. As an example full moon, in Iran, Japan, Turkey, Arab countries or some other Asian countries is linked to schemata that include beauty, whereas in Europe it activates schemata for horror stories and madness. In Aebersold and Field’s (1997) words, for learners reading within the limits of their linguistic abilities, or for second/foreign language learners, “if the topic ... is outside of their experience or base of knowledge, they are adrift on an unknown sea” (41). In this case, some readers may overcompensate by wild guessing (Carrell 1988a). These kinds of strategies will surely result in difficulties in comprehending the text.

Research has shown that a text on a familiar topic is better recalled than a similar text on an unfamiliar topic. Swales (1990) believes that research of this kind “supports the common sense expectancies that when content and form are familiar the texts will be relatively accessible” (87). Many studies have indicated similar effects in those participants who better comprehended passages that were more familiar to them (Ammon 1987: 71-105; Carrell 1981; P. Johnson 1981: 169-181, 1982: 503-516; Langer, Barolomr, Vasquez and Lucas 1990: 427-471 and Shimoda 1989: 93-103). In studies such as Carrell’s (1987: 21-40), it is shown that subjects recall the most when both the content and rhetorical form is familiar to them. However, when one of these was unfamiliar, the unfamiliar content caused more difficulty for readers than did unfamiliar form.

In a study conducted by Steffensen and Joag-Dev (1984: 46-61), two descriptions of two kinds of weddings, an American and an Indian (subcontinent), both written in English were used. All the American and Indian students, for some of whom English was the first language and for the others it was second language, read the descriptions and recalled them. The words were easy to understand but the cultural protocol of one of the weddings was unfamiliar for them. The result was that the readers comprehend their own cultures more accurately than the other.

A study by Johnson (ibid), investigated the effects of the cultural origin of prose on reading comprehension. The subjects were 46 Iranian intermediate advanced ESL students at the university level. The material was unadapted English texts of two
stories, one from Iranian folklore and one from American folklore, and also the same stories in adapted English. Half of the subjects read the unadapted texts and the other half read the adapted ones. The reading comprehension was tested through the use of multiple-choice questions. The recall questions and the texts were given to Nineteen American subjects for comparison purposes. The results showed that texts based on one’s own culture were easier to read and understand than syntactically and rhetorically equivalent texts demanding specific background knowledge, which is discipline-specific, such as science texts.

Another study by Kang (1992: 93-105) was based on the readers’ ability to filter information from second language texts through a culture specific background. The subjects were Korean graduate students with advanced English. They read stories and answered questions. The results showed the effect of culture specific schemata and inferences on text comprehension.

The factors and variables related to the issue of how culture shapes background knowledge and influences reading are not fully understood but the importance of background knowledge and the role that integral content schemata plays in reading comprehension is inevitable. In the mentioned studies and in many others, readers appeared to have a higher level of comprehension when the content was familiar to them. Second/foreign language readers have difficulties in comprehending because they do not have the same degree of content schema as the first language readers of the same language.

Many studies have also examined the role of formal schemata (text schemata) in relation to readers’ comprehension. In these studies, readers are called to read the text and then tested for recalled information. The inherent structures of the text, such as compare-contrast structures, problem-solving structure in expository texts and standard versus structurally interleaved versions of stories, were identified. The result suggestion of these studies was that different types of text structure affected comprehension and recall. Some studies such as Carrell’s (1984: 332-343) showed that there may be differences among language groups. For example, Asians recalled best from texts with either problem solving or causation structures. Regardless of these suggestions, as stated before, it is important to recognize that the organizational structures in text will differ across cultures.

Some researchers have examined the role of linguistic schemata as related to the comprehension process. Stone (1985), in his study, assigned average fifth grade
readers randomly to either an initial Spanish-speaking group or an initial English-speaking group. The goal of this study was to examine whether language patterns found in English, which differed from those in Spanish, would have an effect on the second language learners' comprehension while reading English texts. For this purpose, three stories were prepared for each of three different language pattern categories, that is, similar, moderately similar and dissimilar. Measures of these nine stories included relating and comprehension questions. The lowest scores were found on the stories most dissimilar from the students' initial language. Mauranen (1992: 3-22) considered cohesion in both Finnish and English economic texts. He found that Finnish writers employed relatively little metalanguage for organizing text and orienting the reader. On the other hand, native English speakers used many devices for orienting the reader in terms of what is to follow in the text and how the reader should understand the different sections of the text.

Overall, it is clear that the second/foreign language reader encounters many difficulties in the reading comprehension process not faced by first language readers. One should be explicit about the structure of the materials the students are reading in an ESL/EFL class through which students can become aware of culturally shaped expectations about text and language. It seems that the culture of Iranian EFL readers and their background of the world, that is their content schemata, are widely different from that of the English native readers. The orthographic system of their mother tongue (Farsi) varies from the orthography of English. Their background knowledge of the rhetorical structures of written English texts (their formal schemata) seems to be at a lower level because their exposure to the English language through any kind of devices is much less than that of other ESL or EFL readers. English and Farsi do not share similar language elements. That is, the level of development of Iranian readers' linguistic schemata is much lower than, for example, Spanish or French readers while reading English texts. So, it is more probable for Iranian readers to encounter various difficulties in comprehending English texts than the European non-native ESL readers or other ESL or EFL readers.

Developing the readers' background knowledge or making them aware of the culture or properties of the language in which they are reading materials depends strictly on situational and circumstantial factors such as cultural, political and socioeconomic conditions where the learners live. Some of the Iranian adults or
children from rich or middle class families have the freedom or can afford to obtain the necessary facilities for improving their knowledge of the English language. Comparing these people with those who continue their education in a unidirectional and rigid educational system will result in a great diversity in the background knowledge of these two groups of language learners.

The Role and Aspects of Schemata in Reading

According to Swales (ibid), the reading process involves the identification of genre, formal structure and topic. Schemata that allow the reader to comprehend the text are activated by these factors. “The environment sets up powerful expectations: we are already prepared for certain genres but not for others before we open a newspaper, a scholarly journal or the box containing some machine we have just bought” (80). Wallace (1992) claims, “the first part of a text activates a schema … which is either confirmed or disconfirmed by what follows” (33).

Rumelhart (ibid: 35-58) states that the interrelated aspects of the process of comprehension related to the different functions of schemata are data-driven and concept-driven processing. Schema theory is not only related to comprehension during reading but also to the retrieval of what has been comprehended after reading. In data-driven processing, new information from the text activates relevant schemata in the reader's mind as he decodes a text. The first schema can be a part of the larger concepts, which may include the initially activated concept. Activated schemata, in turn, activate other possible schemata. On the other hand, concept-driven processing concerns the use of larger schemata structures in order to predict meaning. The reader uses sub-schemata to test the larger conceptual framework against the data, which comes thereafter as the main schemata have been activated. This dynamic process occurs on a number of levels simultaneously. The third aspect, according to Rumalhart (ibid), is goal-driven. Schemata direct the reader to seek out specific data. The reader reads a text with some expectations. He seeks certain types of information, that is, information that fits the motivating schemata.

These factors are relevant to remembering as well as comprehending. A text that is not comprehended cannot be remembered. Thus, remembering can be explained as the process of reconstructing the initial comprehension through the
framework of schemata. The role of schemata in retrieving the knowledge (memory) of a text is similar to its role in decoding and comprehending it. Consequently, it can be said that schemata also moderate the process of remembering a text. In recalling the memories, the reader’s schemata filter the initially stored data. Furthermore, the data that has been stored in a certain way may be recalled in another way.

Cook (1994: 14) gives the word *bank* as an example of how people can understand things based on their schemata. Based on the context, *bank* has two meanings. Without referring to schemata or background knowledge it is impossible to understand the meaning of this word, whether it refers to *financial place* or to the *shore*. In his experiments, Bartlett (1932: cited in Rafiyan, 1999: 34) asked the subjects to reproduce a text a long time after they had been exposed to it. Some of the subjects omitted or rationalized details, which they failed to adapt to their own expectations. He noticed that the subjects could remember details most relevant to their own experiences and background. He called this the *theory of remembering*. According to Bartlett the text is interpreted with the help of knowledge structures activated from one’s memory. This memory is capable of filling in details, which are not clearly referred to. Bartlett believes that the *theory of remembering* is the basic element of comprehension.

Widdowson (1990: cited in Rafiyan, ibid: 35) mentions two perspectives on meaning. The first one focuses attention on the semantic properties of language through text-based factors. He calls it the medium view. In this view, he believes that one can represent a text to the subjects without considering their level of knowledge. The reason for this is that subjects can infer meaning through the text that contains meaning in linguistic units, located within the language. The second perspective, the mediating view, focuses attention on establishing a situation for negotiation. This view implies that comprehending a text is not only through the linguistic units but it rests on the reader’s knowledge base, which is referred to as schematic knowledge. This perspective views the text not as the end but as a means mediating between the purposes of the writer and the reader’s level of competence to decode it. The medium view considers the meaning as a matter of encoding and decoding messages. This is done with the help of linguistic knowledge. In the mediating view, the meaning is a pragmatic matter of negotiation, an indexical relation between linguistic knowledge (semantic meaning) and features of the ultimate context (pragmatic meaning).
Anderson (1984: 186) describes the two mentioned views as the text-based approach and the ‘inside the head’ approach and compares them as follows

Table 2-11
The Text-based and Inside-the-head Approach

<table>
<thead>
<tr>
<th>Text-based Approach</th>
<th>Inside-the-head Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Reading is made up of skills.</td>
<td>1 – Reading is an integrated process.</td>
</tr>
<tr>
<td>2 – Reading has a hierarchical skill sequence.</td>
<td>2 – Reading has no sequence.</td>
</tr>
<tr>
<td>3 – Applying Reading skill leads to meaning.</td>
<td>3 – Reading is meaning centred.</td>
</tr>
<tr>
<td>4 – Reading is a separate process from speaking, listening and writing.</td>
<td>4 – Reading is an alternate language process.</td>
</tr>
<tr>
<td>5 – Reading is a passive process.</td>
<td>5 – Reading is an active process.</td>
</tr>
<tr>
<td>6 – Reading is a precise process.</td>
<td>6 – Reading is an inexact process.</td>
</tr>
<tr>
<td>7 – Form precedes function in reading.</td>
<td>7 – Function precedes form in reading</td>
</tr>
</tbody>
</table>

[Source: Anderson, 1984: 186.]

Consequently, it becomes obvious that besides the textual elements, there is something in the mind that guides the reader to comprehend and helps the reader in the comprehension process and this is schemata or background knowledge.

**Pedagogical Implications of Schema Theory**

Studies on schema theory have resulted in important pedagogical implications. The necessity of background knowledge and the explicit teaching of the discourse structure of a text before reading is an effective way to increase the possibility of comprehension and to make it an easy process for the reader. Previewing the text by skimming or brainstorming on the topic are examples of the methods of activating formal and content schemata. Doing a semantic mapping activity, writing down any words that come to mind on the topic and grouping them by semantic relationship are
some ways to activate linguistic schemata. The similar methods advocated by Aebersold and Field (ibid) and also Nuttall (1996) elaborate on various methods to help second language readers activate formal schemata for comprehension. The readers must be provided with the necessary tools to analyze discourse structures while reading. This will help them to recognize the underlying structure of a text and consequently they will be aware of how various elements of a text are interrelated. These methods, according to Aebersold and Field (ibid), facilitate comprehension during reading and include conscious monitoring of their own comprehension by the learner. They state, “Just as we subconsciously compare our conceptual hypotheses (or schemata) with the incoming data of the text, such activities attempt to make this process conscious in order to subvert potential comprehension failures” (186). Nuttall’s (ibid) text attack skills for understanding the discourse structure also include text-mapping methods. These methods are applied at the sentence and paragraph levels and for overall rhetorical structure. These kinds of analysis will help the reader to establish the schemata to use when approaching similar texts. To raise a reader’s consciousness of these structures and relationships and to help him attend to these elements while reading, Williams (1984) focuses his attention on the method of displaying the relationship among sentences within a paragraph. Post-reading activities are as important as facilitating comprehension. This helps to consolidate knowledge and reinforce the schemata that support that knowledge. According to Nuttall (ibid), another effective method of consolidating knowledge is structured writing. Perhaps the emphasis on reading for meaning is prior to all other pedagogical implications. For it reflects the basic concern of schema theory with the creation of knowledge. It also provides comprehensible input to second/foreign language acquisition.

Application of Schema Theory to EFL Reading

Reading has also been studied in the field of psychology. Goodman (1975: 12) has described it as “psycholinguistic guessing game” (qtd. in Carrell and Eisterhold, 1983: 74) in which “efficient readers minimize dependence on visual detail” using their previous knowledge to predict and check these against the text. As it is discussed
before, the reader’s schema is a powerful keyword for his better reading comprehension which Kant originally introduced as early as 1781.

Even pedagogical studies on younger readers, focusing on the content and formal schema (Pearson, Hanson and Gorden 1979: 201-209; Carrell 1987: 21-40; Konishi 1988: 100-119; etc.), showed that the young learners’ background knowledge is also an active factor for enhancing reading comprehension. In these studies, although theories of schema proved to be powerful cues, the schema itself was seen as a vague idea because it depended on different factors such as individual experience and inference. The effect of schema may also differ according to the reader’s level (Hudson 1982: 3-31). Carrell (1998) focuses her attention on the reading strategies and indicated that only a few studies concerning strategies are valid. She suggested that researchers should reconsider the method of instruction if reading strategies are to be successful.

According to Bartlett (ibid) and Anderson (1980: 23-132), structural understanding plays an important role in memorization and learning. Kintsch and van Dijk (1978: 363-394) discussed important rules by limiting their studies on semantic structures. They based their experiment concerning text-processing analysis on the rules like macrostructure and microstructure, for super-ordination and subordination. The units in their studies were small starting from words and their subjects were undergraduates. Their study showed that, for constructing sentences, macro-rule, i.e. the main idea of the text, is important factors. This main idea or macro-rule should remain in the readers’ minds, for they cannot remember everything. The results of some studies such as Taylor and Beach (1984: 134-146) and Baumann (1984: 93-114), based on Kintsch and van Dijk’s (ibid) rules, have shown differences between different age groups.

Students’ reading problems may be caused by insufficient background knowledge. According to Carrell and Eisterhold (ibid: 89), this is thought to be topic-related. So, it has been suggested that narrow reading in the student’s area of knowledge may improve the situation. They suggest that, providing local texts, which are developed from the reader’s own experiences, will be useful to solve these problems (schema deficiencies) especially when they are culture-specific. They also suggest “every culture-specific interference problem dealt with in the texts available to the EFL/ESL student outside the classroom” (89). Thus, the reason for these kind of problems does not lie only in the texts and instead of neutralizing the text it seems
more profitable to prepare students, as Carrell (1988b: 245) says, by “helping them build background knowledge on the topic prior to reading, through appropriate pre-reading activities” (245). Lectures, demonstrations, real-life experiences, discussion, role-play, text previewing and introduction and discussion of key vocabulary are some of the ways to construct schemata that have been suggested by Carrell (ibid).

Finocchiaro (1986: 78) puts forward some implications for teaching reading resulting from the schema-theoretic point of view. She believes that prereading activities should have two purposes, (a) to build new background knowledge and (b) to activate existing background knowledge. She suggests that these goals can be affected in several ways: (1) teach about the topic of the text in L2 and L1, if necessary; (2) view movies, slides, filmstrips and pictures; (3) look at the title and first paragraph and invite students to generate questions about the topic; (4) discuss new or difficult vocabulary with the students, giving numerous examples of its use in authentic contexts; (5) place the new words or concepts on the board and give several examples of them, etc. (Ghafouri, 1997: 18)

In order to construct the related and necessary schemata, teachers can show, for example, pictures of a city before asking the students to read a text about that city, or play a video clip from a film adaptation of the novel the class is about to study. Although these pre-reading activities are probably not sufficient alone and some additional information should be supplied. Keeping the above-mentioned contextualization in mind, it will be useful to consider the present condition of Iranian EFL classrooms. Because of the social and cultural barriers it may not be possible for an Iranian EFL teacher to perform such activities with all types of texts exactly and beneficially.

Readers may come to a text with background knowledge but their schemata are not necessarily activated while reading. Carrell (1988a) claims that the “relevant schemata must be activated” (105). Thus, “preparing activities must accomplish both goals: building new background knowledge as well as activating existing background knowledge” (248). Aebersold and Field (ibid) suggest the ideas of questioning and brainstorming which they consider useful ways for learners to generate information on the topic based on their own experience and knowledge. They state that previewing
the title, subheadings, figures etc. also “help readers predict what they are going to read” (73) that seems to activate their schemata.

Another relevant point is related to the readers’ linguistic skills. Children or young readers that can be considered as lower level learners may possess the schemata but not the linguistic skills to discuss them in the L2. In this case, in order to access previous knowledge, teachers can use the first language. But teachers must at least introduce the relevant vocabulary during the discussion, otherwise a “schema has been activated but learning the L2 has not been facilitated” (Aebersold and Field ibid: 77).

The profitability of pre-reading activities has been proved for all language teachers. Some researchers believe that giving a context did not improve recall even for advanced ESL/EFL readers, suggesting that their schemata were not activated. By encouraging readers to use the good reader strategy of “touching as few bases as necessary" they may "apply meaning to a text regardless of the degree to which they successfully utilize syntactic, semantic or discourse constrains” (Hudson ibid: 186). Several studies have been done on the effect of pre-reading tasks or other similar activities on the comprehension process of Iranian learners of English. Almost all these studies have shown similar results and have proved the positive effect of these kinds of activities in Iranian EFL classrooms (Heibatollahi 1999: 73; Ebrahimy-sadr 1998: 77-78).

**Reading as Practice, Product and Process**

Due to its complexity, reading has been defined in different ways. These definitions have placed various aspects of reading at the centre of attention. Some judge successful reading by the number of words one can read. Others define it in terms of the ability to make sense of a continuous text, beyond the word level. Some others judge reading by reference to the strategies that the reader utilize to gain progress. Frankly speaking, very little is known about reading. In order to say something about reading, it must be known what reading is. Reading can be considered as practice (focus on the uses of reading), product (focus on text) or process (focus on reader).
**Reading as Practice**

Anthropologists and social psychologists deal with reading as linked to its uses in everyday life. They see reading as a part of language behaviour beyond the learning of specific skills or strategies. The discussion of reading as a framework of literacy practice is the field of emphasis for these scholars. Some readers may have this experience in other languages and others may be acquiring literacy through the medium of English.

Research that has been accomplished on literacy practice can be divided into two groups. Some studies investigate literacy practices in their own right and others discuss pedagogical implications. In a case study of a language minority primary school in London, Gregory (1996) examines the impact of home literacy practices in a language other than English on the dominant English-medium ones. She also examines the way children are socialized into these dominant ones institutionalized by schooling. Cope and Kalantzis (2000) introduce a new term that is multi-literacies as a new, diverse form of literacy. In this way they don’t consider reading and writing as the reception and production of linear text.

**Reading as a Product; Bottom-up Models**

According to the bottom-up models of reading (Adams 1982: 155-159), in order to extract the full meaning of a written text, the reader must have processed each of the individual sentences. To do this successively, the reader must correctly analyze the clauses and phrases of these sentences and the component words of these units and also he must recognize the component letters of the words. In reading a text in this way, every single small unit plays an essential role and the dependency is unidirectional. The reading process was shaped by this sort of hierarchical analysis for many years but it has been changed.

The active role of readers in comprehending a text is emphasized by the interactive models of reading. However, the essential bottom-up issues such as vocabulary knowledge and word recognition should not be neglected. These issues
assist L2 readers to "hold in the bottom" (Eskey 1988: 93-100). Vocabulary knowledge and word recognition are two different but completely related aspects of the reading process. Without decoding the written words comprehension of a text is impossible. According to the top-down models of reading, the decoding of individual words in a text is not sufficient for comprehension but it is still a necessary aspect of proficiency. Word recognition refers to the process of matching the visual perception of a word to its semantic reference. The reader's ability to recognize words automatically is essential for proficiency. Stanovich (1991: 418-452) points out that the automaticity of native readers makes a complex process look deceptively simple. Simultaneously, a reader decodes phonological and graphemic features of the words, attaches meaning, and integrates all into an evolving understanding of the text as moderated by the reader's existing schemata (Bernhardt 2000: 788-791). The mental resources must be free for higher-level processing of the text and to achieve this, the automaticity of word recognition is necessary. Efficient native readers focus on constructing the meaning of the text by moving rapidly through it but in second/foreign language reading, both knowledge of vocabulary and word recognition become problematic issues. In this way, the importance of these factors to reading, in general, is reinforced. For beginners, word recognition is a difficult task and the combined demands of word recognition and comprehension may exceed their limited attentional capacities. On the other hand, skilled readers, who automatically recognize the words, can do word recognition and comprehension simultaneously and consequently can read effectively. So, these differences between EFL readers in a basic skill such as word recognition can cause higher differences associated with the reading skill.

Research has shown that both linguistic distance and orthographic distance between the L1 and the target language are factors in second/foreign language word recognition. Second/foreign language readers decode those words faster that have phonetic patterns similar to their L1 (Muljani, Koda & Moated 1998: 99-113). These kinds of evidences indicate that word recognition is not simply a matter of attaching semantic value, but that some degree of phonological decoding also occurs. On the other hand, a word must be known to be recognized and the reader must be able to cover the text properly in order to comprehend it. Some researchers suggest that L2 learners coming from different orthographic and phonotactic systems will need a special new processing mechanism for the L2 in which vocabulary development is
seen as essential. The size of their vocabulary and their ability to make the semantic connection must be increased.

Overall, it is clear that basic bottom-up processing must not be ignored and a lexico-grammatical focus, especially for EFL beginners, seems to be important and must be recognized. EFL learners need to be trained in the skill of rapid recognition of large numbers of words and structures in order to accomplish the objective of reading.

**Reading as Process; Top-down Theories**

According to top-down theories (Adams, ibid: 155-159), a reader does not read the component letters, words, and sentences of a passage in the same way as when they are presented in isolation. Good readers rely on graphic details as little as possible (F. Smith 1971, 1973). Research has shown a strong support for the controversy that skilled readers are distinguished by greater sensitivity to a variety of subtle higher order cues (Cromer 1970; Meyer, Brandt & Bluth 1980; Perfetti & Roth 1981). In countries such as Japan where English is a foreign language for schoolchildren, theories of top-down strategy have been pointed out by many researchers (Toyama 1979: 29-49; Shibasaki 1979: 52-75; Hatori & Matsuhata 1980; Shiozawa 1981: 98-109; Matsumura 1984: 104-131; Toda 1985: 20-23; Tenma 1989; Oouchi 1991: 7-9; Taniguchi 1992a: 10-45, b: 23-25; Itoh 1992: 35-46; Minai 1993: 29-42). Top-down processing provides a means by which the reader can use his own knowledge to reduce the amount of effort needed to extract the visual detail from the text. In this way, the course of comprehension can be described but not by bottom-up models. The idea that with the readers’ processing certain graphic details must be greatly reduced, again, is not supported by data. McConkie & Zola (1981) express this matter as follows:

Eye movement analyses indicate that when skilled readers are instructed to read coherent text for meaning, they fixate virtually every content word, regardless of its contextual predictability (Just & Carpenter 1980: 329-354). Moreover, they quite reliably notice the slightest misspelling of a content word – regardless of the visual similarity of the misspelling, of where in the word it occurs, or of how
highly constrained the word’s identity may be in context (cited in Adams, ibid: 155-159).

It is the skilled readers’ familiarity with the graphics intricacies of written language that distinguishes them from the poor readers. Their application is automatic because the relevant knowledge and processes are well integrated. Younger and poorer readers also try to apply their relevant knowledge in a top-down fashion as they read. Even younger and poorer readers can often guess the identity of a word as accurately as and more easily than they can decode it. It seems that younger readers are not able to recognize written words well, that is, they lack the lowest level skill in hierarchy. Research has proved that even preschool children possess considerable knowledge about the structure and connectivity of stories (Kintsch 1977). The bottom-up models have not paid attention to the role of higher order knowledge and top-down models have not acknowledged the importance of lower level process, which the text requires of the reader. So, these models share the problem of one-sidedness.

Reading Aloud and Silent Reading

The greatest amount of reading that is done in the world is silent and not aloud. Reading aloud is closer to pronunciation than to comprehension and is primarily an oral matter. Although it is useful for students to develop their skill of reading aloud, only few people are required to be fluent in it in society. Teachers, actors, newscasters, etc are some of them and the majority do not have to read aloud. In a classroom situation, as reading aloud gives practice to only a very small part of the skills of speaking, it should take up very little time in the lesson, whether with groups or one-to-one. Experience has shown that while reading aloud – a sophisticated skill that few master well, even in their mother tongue – can help with certain aspects of pronunciation, equally good pronunciation can be achieved without reading aloud at all. Reading is fundamentally to do with comprehension and reading aloud has more to do with the relationship between sound and spelling which are irrelevant to reading. As Smith says, “Reading is less a matter of extracting sound from print than of bringing meaning to print” (2). One of the most obvious dangers of encouraging reading aloud is to foster a false conception of reading and to practise
irrelevant skills. Reading aloud can be necessary in the early stages to provide feedback for the teacher, but it is clear that this has to do with pronunciation, not with reading. Another important danger of reading aloud is that it encourages reading at a less than optimum speed and obviously, speed is an important part of comprehension. In looking at this matter from another angle, reading aloud is seen as a process of decoding or translating from one medium to another, from print to sound and it seems possible to do such decoding or translating without understanding, or in other words without comprehension. There is a story of the poet John Milton, who is said to have taught his daughters to pronounce Italian and hence to read aloud to him, without teaching them to understand the language. English language teachers share the common experience in EFL and ESL classrooms of hearing learners reading aloud, with acceptable pronunciation, texts which they clearly do not understand.

The skill of silent reading depends on several factors and varies from person to person. It is worthwhile to mention five kinds of silent reading. These are: 1) survey reading (i.e., to make a survey of materials to be studied and look through indexes, chapter headings and outlines); 2) skimming (i.e., to read the text rapidly in order to get the main idea); 3) superficial reading (i.e., to familiarize oneself with the material headings and outlines); 4) content study (i.e., to study the material in depth); 5) linguistic or literary study (i.e., to study the language in which the material is written from a literary or linguistic point of view). The first three of these kinds of silent reading come under extensive reading and the last two come under intensive reading that will be discussed in the next section in detail.

**Extensive and Intensive Reading**

It will be worthwhile to consider the distinction that is commonly made between intensive and extensive reading. Emphasizing intensive reading may discourage the use of normal speed and normal reading strategies and also it may encourage the wrong view of reading. Perhaps it is necessary to consider the purposes of intensive reading and whether these purposes can be achieved in a different way. In order to understand the distinction between intensive and extensive reading it is better to deal with the purpose of reading itself. Of course purposes and types of reading vary widely but this study considers two main purposes, which are the purposes of
intensive and extensive reading. According to F. Smith (1982: 6), most of us may read either for pleasure or for different reasons. In reading for pleasure or for aesthetic reasons, one reads for the sake of reading itself. On the other hand, if one reads for information or the other purposes alike, one read to gain something that we would be quite happy to gain by other means, if these were available. Richards, Platt and Platt (1992) define extensive and intensive reading as following:

Extensive reading means reading in quantity and in order to gain a general understanding of what is read. It is intended to develop good reading habits, to build up knowledge of vocabulary and structure, and to encourage a liking for reading. Intensive reading is generally at a slower speed, and requires a higher degree of understanding than extensive reading. (133)

**Extensive Reading**

Extensive reading simply refers to the outside classroom reading activity which students do with no help or guidance from the teacher. It suggests reading at length, often for pleasure and in a leisurely way. This kind of reading frequently takes place when the students read for themselves. Extensive reading has been considered as the best possible way for students to develop their automatic recognition of words when they see them. It is the primary method of developing a reader's fluency and automaticity. Extensive reading is advocated by several authors (Bamford and Day 1997; Carrel and Eisterhold ibid; Wallace ibid) and students need to read extensively if they are to gain any automaticity in their word and phrase recognition abilities. It is known as the best way for both children and adults to improve their English reading overall.

According to Krashen (1993: 23), probably the most famous proponent of the need for reading in a second language, reading is the only effective way to become a good reader, to develop a good writing style and adequate vocabulary, advanced grammar and to become a good speller. A variety of studies (Bell 1998; Camiciottoli 2001: 135-153; Elley & Mangubhai 1983: 53-67; Mason & Krashen 1997: 91-102; Nash & Yuan 1992: 27-31; Renandya, Rajan & Jacobs 1999: 39-61; Tse 1996: 16-29; Walker 1997: 121-149) show that extensive reading can enhance vocabulary

An extensive reading program was established at the British Council Language Centre in Sanaa, Yemen by Timothy Bell in 1998. Bell explains the important role of extensive reading in the foreign language learning process in detail. The summary of his explanation is as following:

1. It can provide ‘comprehension input’
2. It can enhance learners’ general language competence
3. It increases the students’ exposure to the language
4. It can increase knowledge of vocabulary
5. It can lead to improvement in writing
6. It can motivate learners to read
7. It can consolidate previously learned language
8. It helps to build confidence with extended texts
9. It encourages the exploitation of textual redundancy
10. It facilitates the development of prediction skills

(2-3)

Extensive reading is useful in many ways. The presence of an extensive reading program in English language classes will promote their students’ language development in all aspects. This kind of reading will give students a positive feeling about reading and improve their overall comprehension skill. And consequently, they will be able to achieve a wider passive and active vocabulary. Extensive reading
enables students to read without constantly stopping and provides increased word recognition.

Extensive reading presupposes speed and ease, which come only from copious reading. One of the biggest disadvantages of instruction in English in Iranian EFL classrooms is that no encouragement in the form of facilities is given to the students to read copiously. In some cases, students are not even introduced to the primary and premier steps of reading such as a graded list of simple or simplified novel and biographies. Some of them are not familiar ever with the elementary mechanics of increasing the speed of their reading.

Researches that have been carried out in Iranian EFL classrooms have demonstrated the effect of extensive reading in increasing the learners' reading abilities. Ghafouri (ibid) conducted a research on three groups of students studying English in a private institute in Iran. He studied the effect of extensive reading on the development of the learners' language proficiency and also compared it with the effect of intensive type of reading. He explains the result of this work as follows:

It seems that the acquisition of L2 competence through absorption in comprehensible and pleasurable texts, is analogous, to some extent, to L1 acquisition by child. In learning from extensive texts, the learning process is rather subconscious and L2 learner reader works out the language system for himself in much the same way as young children acquire their mother tongue. (68)

He emphasizes the great value of extensive, free reading as a complementary activity to amend the EFL learners reading ability. In witness of shortcomings such as lack of exposure to large amounts of comprehensible and meaningful input for students in Iran and disusing new methods and approaches by teachers, the use of activities like extensive reading programmes becomes necessary and crucial. Ghafouri recommends a reading-based methodology and emphasizes that extensive type of reading must be continued for a long time in order to be effective. Considering expanding reading as an important and necessary need for Iranian EFL students, he states the following:
It can be concluded that self-motivated, extensive reading might play a useful pedagogical role in EFL settings and until we learn adequately about the nature of language, L2 cognitive variables and ways of developing communicative competence in L2 learners, we can count on extensive reading as an efficient, convenient and enjoyable means of helping foreign language learners develop L2 competence in a natural or quasi-natural manner. (68)

Many researchers such as Kalantary (1998: 97) and Mirmorsali (1996: 56) have confirmed and conceded the positive effect of extensive reading in EFL settings like Iran.

**Intensive Reading**

Not like extensive reading, intensive reading is more concentrated, students, reading the texts intensively, are less relaxed and don’t derive as much pleasure. This kind of reading deals with the study of those features of language, syntactical and lexical, which the reader focuses on in order to decode the message. Developing the strategies of expectation and guessing from context or using dictionaries are some of the skills that are considered in intensive reading. Rivers (1981: 232) considers intensive reading material as the basis for classroom activities and analyzes it as a basis for writing exercises. It is often done with the help or intervention of the teacher. Reading complicated materials and getting full information require intensive reading. For instance, those who are reading complicated materials such as scientific texts are likely to read more slowly and in-depth. Hence, as it is generally at a slower speed, it requires a higher degree of understanding than extensive reading. The objective of intensive reading is to develop the ability to decode messages by focusing on syntactic and lexical clues and the emphasis is on the skills for recognition rather than for the production of language features. In other words, the goal of intensive reading is full understanding. Verghese (1989) explains the objectives of intensive reading as follows:

Intensive reading has for its objectives the full understanding of the text with its argument, its symbolic, emotional and social overtones,
the attitudes and purposes of the author and the linguistic and literary means the author employs to achieve his purpose. (76)

While intensive type of reading requires a higher degree of understanding, the amount of vocabulary knowledge plays a major role in these kinds of processes. It is obvious that people with large vocabularies are more proficient readers than those with limited vocabularies. There are many methods and approaches proposed for teaching vocabulary in classroom situations. Some of those who have proposed these methods have failed to distinguish the substantial differences in EFL and ESL as well as showing little or no understanding of certain settings like Iran. Long and Richards (1987: 305) say, “Although many EFL/ESL programs aim to teach a productive vocabulary of some 2000 words, this is inadequate as a basis for reading anything but simplified ESL readers. For wider reading purposes, a vocabulary of some 7000 to 10000 words is needed”. Fox (1987) suggests the list suits the students’ productive vocabulary needs, but fails to meet the student's receptive vocabulary needs. “The student who knows only 2000 words and attempts to read un-simplified English… will not understand about 20% of the words and will find the text practically incomprehensible”. (308)

For teaching purposes, Nation and Newton (1997: 238-40) suggest that the 2,000 high frequency words should be taught first, followed by the 800 most frequently-occurring academic headwords if a learner needs to read academic texts or newspapers, or by low-frequency words if learners need English for social purposes only. It should be mentioned that all these suggestions would be practicable only in intensive reading programs. Nation and Waring (1997: 10) have found that “between 35,000 word families are needed to provide a basis for comprehension”. Indirect or incidental learning, or learning from context is frequently advocated as a means of increasing vocabulary, and extensive reading is often propose as a means to this end, but “the problem for beginning learners and readers is getting to the threshold where they can start to learn from context” (Nation and Waring ibid: 11).

As mentioned above, for the EFL classroom teacher, some of the theoretical and applied research seems to have been conducted in an ESL environment, where real world experience and the need to use English outside the classroom is a powerful motivating force in encouraging independent learner strategies.

It is, of course, not possible for students to learn all the vocabulary they need in the classroom. The final theme in current trends is to help
students learn how to continue to acquire vocabulary on their own. …

Students come to the classroom knowing that vocabulary acquisition is crucial to their skill in using a second language. There is no need to motivate them to want more words under their command. (Sokmen 1997: 255)

In witness of many problems such as lack of penchant for using new methods, employing inexperienced teachers, weakness in the material, etc., in Iranian EFL classrooms, the preparation of a productive and urgent curriculum seems necessary. To this end, many studies suggested different solutions for the problems of the present reading-based curriculum in Iranian schools. Some have emphasized the effect of pre-reading or pre-teaching activities (Ebrahimy-sadr ibid; Heibatollahi ibid). Some focused on the cultural or cognitive factors (Kalantary ibid; Rahmani 1999) and suggested a cultural-based teaching of foreign language for improving Iranian EFL learners’ reading comprehension ability. Findings of some researches show the inadequacy of textbooks and the disuse of authentic text in EFL reading classes especially in Iranian public schools (Memar 1997; Gholizadeh 2001; Hedayati 1999). The researches that have been undertaken in the field of intensive and extensive reading in Iranian classrooms demonstrate the great value and impact of type of reading in certain settings (Ghafouri ibid; Mirmorsali ibid). Based on the findings of these works and so many others, it becomes clear that the present curriculum suffers from many problems that should be investigated deeply and radically.