CHAPTER II

A REVISED TAXONOMY OF LANGUAGE LEARNING STRATEGIES

As Oxford (1992/93) reports, approximately two dozen language learning strategy systems have evolved during the last twenty years resulting in the lack of a single, coherent classification system, besetting the field with considerable confusion and vagueness of terms. Expressing concern on this situation Oxford and Crookall (1989) remark: "The field would be helped considerably if researchers would come to some consensus on definition of various strategies. As yet there is neither agreement on an overall, hierarchically organized LLS taxonomy or typology, nor on ways to delimit it or define a given strategy or a cluster of strategies" (p.414).¹

The purpose of the present chapter is to specifically address the problems mentioned above by Oxford and Crookall by attempting to present a hierarchically organized taxonomy delineating three different levels in the strategy system. This revised classification seeks to build upon the strategy system developed by O'Malley et al. within a cognitive framework.

As this strategy system views strategies as universal mental operations per se, rather than their external manifestations, it is implied thereby, that it can also
claim to be reasonably general, capable of covering a wide range of different learning strategies within it, applicable to different contexts, (whether belonging to the formal classroom or informal interactional settings), and different linguistic, social, ethnic or age groups. It claims to be particularly applicable to all second language learning, irrespective of the language learnt.

Definition of Learning Strategies

In cognitive psychology literature, learning strategies have been variously defined by different researchers. According to the oft-quoted definition by Rigney (1978), "Learning strategies are operations or steps used by a learner to facilitate the acquisition, storage or retrieval of information." R.E. Mayer (1988) defines them as behaviours of a learner that are intended to influence how the learner processes information" (p.11). According to M.C. Wittrock (1988), they are," ... ways that are used to acquire knowledge, to solve problems, to build mental representations and to make sense of experience" (p.288).^2

Hence, by learning strategies one generally understands those facilitative activities which deal with the receptive aspect of learning and are seen as quite distinct from the strategies of communication, which are believed to bear upon the productive aspect of language use. D. Brown (1976a) makes this distinction clear in the following words: "The
field of second language acquisition has distinguished between two types of strategies: learning strategies and communication strategies. The former relates to 'input-processing, storage and retrieval. The latter has more to do with 'output' - or how we express meaning in the language, how we act upon what we already know or presume to know" (p.91).

It is axiomatic that learning a language entails the learning of the receptive skills of listening and reading as well as the productive skills of speaking and writing. The productive skills of speaking or writing can not be learnt without actively being engaged in production tasks. It is also axiomatic to say that one learns to speak by speaking and to write by writing. Learning a language implies learning to produce the language too, and since learning to produce must of necessity incorporate the strategies of production as well, it makes little sense in viewing strategies of reception as being different from the strategies of production.

Bialystok (1983) had remarked long ago that "... any strategy may potentially operate as either a learning or a communication strategy: ideally the implementation of a strategy leaves a positive mark on both learning and communication" (p.102). Tarone (1983, 1987) has also pointed out the overlap between learning and communication.
strategies because of the following reasons: first, it is difficult to assess the individual's purpose (whether communication or learning), secondly, the purpose might be both, some learning often takes place even if the person just wants to communicate. She observed that many strategies such as paraphrase, borrowing and avoidance can be used both in reception and production.\textsuperscript{5}

In the light of the above, it would be unwise to consider learning strategies to be concerned only with reception and to believe in the same manner that the strategies of communication are concerned only with production. The researcher attempts to develop this argument in the following section and attempts to demonstrate that strategies of learning and those of communication, though considered two separate constructs, are actually labels for the same category of mental operations.

**Learning Strategies vs. Communication Strategies**

While discussing interlanguage, Selinker in 1972 remarked that those "items, rules and subsystems" which are "a result of an identifiable approach by the learner to the material to be learned" are defined as learning strategies, while those which are "a result of an identifiable approach by the learner to communication with native speakers of the TL" are "strategies of second language communication"
Since Selinker's (1972) invocation of learning strategies and communication strategies as two distinctly different entities, it has become customary in SLA literature to distinguish the strategies of learning from the strategies of communication, and while defining or describing the former, exhortations are frequently made to maintain a clear distinction between the two. Communication strategies have become established in the field as those strategies, which are used by an L2 learner when faced with some difficulty in speaking. Corder (1983) considers a communication strategy as "a systematic technique employed by a speaker to express his meaning when faced with some difficulty" (p.16). Tarone, Frauenfelder and Selinker (1983) call it "a systematic attempt by the learner to express or decode meaning in the target language in situations where appropriate target language rules have not been formed" (p.4). Faerch and Kasper (1983) posit that communication strategies are "potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular communication goal" (p.36).

Faulty Criteria for the Identification of Communication Strategies

Three important features emerge from the above definitions, (which also distinguish them from the
strategies of learning) as essential criteria for the identification of communication strategies:

1. Communication strategies are used by L2 learners only.
2. Communication strategies are mainly used in an oral interactive situation and are used only by the speaker.
3. The criterion of problem-orientedness is basic to a definition of communication strategies.

Communication Strategies Only for L2

Communication strategies have traditionally been associated in SLA literature with L2 speakers (Selinker 1972; Tarone, Cohen and Dumas 1983). However, since communication is a universal enterprise it must be admitted that these strategies are used by L2 learners as well. Corder (1983) acknowledges this fact when he says, "It is now fairly clear that all language users adopt strategies to convey their meaning, but we are only able more or less readily to perceive these when the speaker is not a native speaker" (p.15). Faerch and Kasper are also cautious not to precisely specify the category of learners who use communication strategies and use the term "individual" instead of a "learner" using a target language. Hence, a target language situation is not to be considered a defining criterion for the identification of communication strategies, and for their differentiation from language
learning strategies which are known to be used by L1 and L2 users. In fact, they are basically equivalent to learning strategies in general (O'Malley et al. 1985b, p. 577). This will become further clear during the discussion of the taxonomy.

**Communication Strategies Only for Speakers**

Secondly, positing communication strategies only in the domain of speaking is also a narrow view of the functions of those strategies, which should properly be considered in all the four skills of speaking, listening, reading and writing.

In fact, the interrelationship of language learning strategies and communication strategies has tacitly been recognized by many researchers in the past. Corder (1983) says, "... since communication is a cooperative enterprise, one must suppose that we may adopt both productive and receptive strategies of communication. So far, no one has attempted within the framework of interlanguage studies to investigate the latter. .... studies of communication strategies have, therefore, concentrated on productive strategies of language learners interacting with native speakers of the target language" (p.15). Thus, Corder is admitting the presence of both the receptive as well as the productive strategies under the rubric of communication strategies. Faerch and Kasper (1983) also mention the
strategies of reception while dealing with the strategies of communication: "In addition to these production strategies which were the only strategies to be considered in this article, it should be mentioned that 'receptive communication strategies' can also result in hypothesis formation: the learner might use his prior L1, IL or contextual knowledge in order to understand L2 items which are not yet part of his L1 system" (p.54).

Tarone et al (1983) in fact went a step further, when they voiced their hunch about the similarity of production and reception strategies through the following words: "... certain interlanguage strategies associated with production apply to comprehension of language as well. For example, the learner can systematically overgeneralize the meaning of a word he hears in one context to the same word used in another context. Likewise, he can systematically alter target language input (e.g., add, delete, substitute or transpose forms) to make such input more consistent with his native language - hence, negative transfer in comprehension of the target language" (p.4). They took care, however, to make the cautious remark at the end and thus almost nullify their earlier stand, "We do not suggest that interlanguage comprehension data look like interlanguage production data. We aren't sure what they look like .... We simply wish to broaden the terminology to include this dimension of communication as well" (p.5). A revised definition on the
basis of the above, provided by Tarone et al. (1983) hence modified the definition of communication strategy as "a systematic attempt by the learner `to express or decode' [quotes added] meaning in the target language where the appropriate systematic target language rules have not been formed" (p.5).

Recently, Tarone and Yule (1989) have acknowledged the existence of the communication strategies not just used by the speaker, but also by the listener. Oxford and Cohen (1992) have pointed out as well, that the same general principles apply to compensating for missing knowledge in reading and writing just as in speaking and listening. Readers can make guesses and writers may make use of word-coinage or circumlocution. In her latest definition Oxford has also incorporated the "use" aspect of learning strategies (1992/1993, p.18).

Communication Strategies Only in the Face of a Problem

Thirdly, there is a problem with the criterion of problem-orientedness too. Since, in the prevalent mentalist view of learning, all learning is seen as problem-solving rather than habit-formation, the question of problem-orientedness should not be deemed a criterion exclusively for a particular class of learning strategies used in the production of language. Hypothesis formation and hypothesis-
testing, the chief processes in L1 acquisition in fact, cannot be claimed to be performed without any perception of a problem, whether conscious or unconscious.

Interestingly, SLA literature has identified another type of strategy of communication when the speaker does not encounter any problems: "... in addition to communication strategies there seems to be another kind of notion - the notion of production strategy. A production strategy like a communication strategy is a strategy of language use. I would define a production strategy as an attempt to use one's linguistic system efficiently and clearly with a minimum of effort" (Tarone 1983 p.66).

Related to the view of problem-orientedness is the view of considering communication strategies as products rather than processes. Though Corder (1983), and specially Faerch and Kasper (1983) define communication strategies as mental plans and processes, they depend for strategy identification chiefly on language learner product rather than the language learning process. Communication strategies are considered to be the strategies used to overcome roadblocks in communication, but it must be acceded that many a communication roadblock is removed unseen. In fact, traditional taxonomies are not based on what goes on inside the mind of the learners, but it rather rests on whether the learners produces an erroneous item or not. If they arrive
at the correct item through a particular strategy, they are assumed to have employed a strategy of "production", whereas, if they fail to hit the target, even though using the same strategy, they would be considered to have used a communication strategy. An example would make this clear. Through the so-called strategy of overgeneralization, which means generalizing of L2 rules to new L2 items, if the learners use the right past tense morpheme to the regular verb "work" and produce "worked" as the past tense form of verb, they are considered to have used a production strategy, but if by using the same strategy, they arrive at "goed" as the past tense form of "go", they are considered to have used a communication strategy.

A closer look at communication strategy terminology soon reveals that most of the strategy types are based on different erroneous productions made by learners, such as "borrowing", "code-switching", "paraphrase" and "circumlocution". Perhaps the most detailed theoretical description of communication strategies is provided by Faerch and Kasper (1983), who start with a detailed analysis of these strategies as "potentially conscious plans, and list many process-oriented terms in their classification such as "interlingual transfer", intralingual transfer", "generalization" and "restructuring" (p.53). Unfortunately however, they mix up these processes with some product-based terms such as "code-switching", "paraphrase" and "word-
The product-oriented inadequacy in communication strategy terminology has also been criticized by Poulisse (1987) because of its establishing distinctions among different strategy types on the basis of the linguistic form in which the strategy is couched. Poulisse argues that the traditional taxonomies are not adequate because different strategies are attributable for the same linguistic output. As an example, Poulisse cites the situation when the learner might replace the word "hairdresser" by either "haircutter" or more lengthily as 'one who, erm..., cuts peoples' hair". The conceptual process underlying these two utterances is the same but they are attributed to different strategies, "word-coinage" and "circumlocution" respectively (p.143).

To rectify this problem, Poulisse has proposed a process-oriented approach towards the classification of communication strategies distinguishing between two basic strategy types: conceptual and linguistic. Poulisse's classification claims to be broad and generally capable of covering a wide range of strategies. It also claims to have encountered few problems with the analysis of empirical data. However, many an instance of interaction or overlap between the two categories, i.e., linguistic and conceptual has been reported even in Poulisse's work. Also, Poulisse
has failed to consider the receptive aspect of communication strategies.

Apart from criticizing the existing communication strategies criteria for their being frequently product-oriented, Poulisse further finds faults with the prevalent communication strategies taxonomies because they suffer from a lack of generality and because the categories are not mutually exclusive and overlap with each other. Actually, both these problems are rooted in the fact that the identification of communication strategies is chiefly based on the language learner's product or output rather than the underlying mental processes.

The Similarity of Communication and Learning Strategies

Hence, on the basis of the above, the term communication strategy is a misnomer on the following grounds:

1. Communication is a general process and is applicable both to the first as well as the second language, and thus the strategies used in communication are also applicable to both L1 and L2 contexts.

2. Since communication involves all the four receptive and productive skills of listening, speaking, reading and writing, the strategies of communication can not be
attributed only to the domain of speaking, and should properly be envisaged in all these four areas of Language use.

3. The criterion of problem-orientedness is problematic in itself, since problem-solving is a basic feature of all learning, and it cannot be attached to this particular class of strategies exclusively.

Therefore, in view of the above arguments, if the strategies used in communication are those used by L1 learners as well as by those of L2; used in both the areas of language reception and production, involving listening, speaking, reading and writing; and if their purpose is to tackle problems in language learning or communication in general, they are not different from what are called the strategies of learning.

Further, the strategies of learning and communication can be proved to be one and the same on three more grounds. The first is a logical, the second is heuristic, and the third is a psychological one. On the basis of logic, it is wrong to maintain a dichotomy between these erstwhile two different classes of strategies. In the context of language learning, the aim of learning is to communicate; therefore, learning a language is learning to communicate in it and consequently, the strategy of learning a language is the strategy of communicating in it. There are two sides of
communication - reception and production, but since production is based on prior reception of the input, the underlying strategies used in these two aspects of communication are the same.

The second reason, the heuristic one, is based on a matching of the strategies listed in the two taxonomies of communication strategies and language strategies which will reveal at a closer look that the strategy types are virtually the same in the two groups. A comparative taxonomy of learning and communication strategies provided at the end of the chapter (Table 2.4 pp.), clearly demonstrates this.

Yet another reason for considering the strategies of learning and communication as similar, is a psychological one. Though a difference between the strategies employed in reception and those in production can be maintained theoretically, for all practical purposes the strategies of language reception and production should be considered the same, as both are essentially dependent on the same cognitive processing of information in the mind. Since, what is learnt and processed, is communicated or produced through the vocal organs or in the written mode, the cognitive processings that occur during comprehension and production are assumed to be analogous. This view is in fact corroborated by Anderson's (1983, 1985) model of learning,
who envisages the three processes involved in comprehension – perceptual processing, parsing and utilization as analogous, albeit in a reverse order, to the three processes involved in production – construction, transformation and execution.

The researcher hopes that she has convincingly demonstrated that for all practical purposes, there exists no difference between the strategies of learning and those of communication and proceeds to present a revised taxonomy of language learning strategies which apply both to the receptive as well as the productive side of language learning or communication. The researcher has chosen the label "learning" instead of "communication" for these strategies because the former seems to have a wider connotation; and also, because recent strategy research has developed more under this very rubric. Before presenting the strategy classification, however, it is deemed necessary to deal with the confusion regarding the status of strategies within a hierarchy of mental operations, and an attempt is made to consider the differences between processes, strategies and tactics. This is followed next by a brief review of the strategy classification systems by Oxford and O'Malley et al which represent two most prominent research efforts in the area of language learning. Finally, the revised taxonomy.
Processes, Strategies and Tactics

A great deal of confusion in SLA field prevails regarding what the three terms-process, strategy and tactics precisely imply.

Process vs. Strategy

Blum-Kulka and Levenston (1983) use a temporal dimension to distinguish between process and strategy, maintaining that strategy refers to "the way a learner arrives at a certain usage at a specific point in time, and process is used for" the systematic series of steps by which the learner arrives at the same usage over time (p.125). Thus, Blum-Kulka and Levenston seem to suggest that an adhoc usage is a strategy while if the same usage is employed consistently and systematically over time, it will be called a process. Giving an example they state, "... if a learners' specific usage is traceable to his mother tongue, we say that the strategy used has been transfer. But to speak about transfer as a process, we have to know to what extent and in which ways the learners' mother tongue has influenced his interlanguage. If we find the same specific usage repeated by the learner in the same contexts over time, we may say that a certain aspect of the learner's interlanguage has been formulated as a result of a process of transfer" (p.125).
Bialystok (1978) distinguishes processes from strategies by the criteria of obligatory vs. optional, considering processes as obligatory and strategies as optional mental activities. Faerch and Kasper (1983) also seem to view process as "an indispensable category in IL studies," agreeing with the definitions of Brown (1976a) who calls them, "continuing development involving a number of changes" (p.136). Thus, Faerch and Kasper also take process in a general sense in which researchers refer to the processes of L1 or L2 acquisition or learning, and the processes of creolization and pidginization.

**Strategy vs. Tactics**

Oxford and Cohen (1992) make a difference between strategy and tactics on the basis of the use of the two words in military parlance; in which strategy is a broader concept than tactics. "Tactics is the act of using troops in battle: strategy is the art of using battles to win wars". (James 1984, p.15).

A parallel distinction has been maintained by the educational psychologist Schmeck (1988) who considers strategy to be "a general approach or plan" of the learner, as well as higher level cluster of learning tactics that work together to produce a uniform learning outcome." (p.171). Schmeck gives the examples of conceptualizing, personalizing and memorizing as learning strategies. Tactics
on the other hand are considered by Schmeck as "specific activities" of the learner, and are called "observable" operationalization of a broader strategy" (p.171).

According to Seliger (1982) strategies are groups of biologically determined, constant and abstract cognitive functions used to acquire knowledge. In contrast, tactics are lower level activities carried out in order to meet the demands of language acquisition according to the particular context. O'Malley et al. (1990) also choose to view strategies as underlying mental operations, distinguishable from tactics such as "creating opportunities for practice" and "responding positively to learning opportunities or exploiting learning environments" (p.45).

A few things which are evident in general from the above definitions are the following:

1. In the order of hierarchy, processes are at the topmost level of mental operations, strategies come next and tactics are placed at the lowest position.

2. Processes imply gradual development over time, while strategies and tactics take place at specific points of time. According to this, a strategy is a manifestation of a process at a specific point of time, and a tactic is a specific manifestation of a strategy at a specific point of time.
3. Processes are general, obligatory and indispensable; and strategies and tactics are optional. This stand is, however, debatable since as demonstrated later, while some strategies may be called optional, others seem more general and more like "biologically determined, constant, and more abstract cognitive functions", as Seliger points out above.

4. While strategies refer to abstract mental operations, tactics refer to observable operationalization of these strategies according to some views. While the hierarchical organization presented through these views is convincing, the criterion of tactics being observable is not exactly so. One can envisage many a circumstance when the operationalization of a strategy may not be observable and is carried out in the mind itself. For example, one might operationalize the strategy of repetition by reading a text aloud again and again, or one might do it silently in the mind. Seliger's distinction above, between strategy and tactics avoids this problem since he does not label his tactics as "observable".

Obviously, the problem of distinguishing clearly among the above three terms is a tricky one and in the absence of a clearcut and ultimate answer to this problem, the researcher proposes a three level hierarchical organization of strategy to be used in her classification scheme: megastrategy, macrostrategy and microstrategy. A
megastrategy is the highest level strategy, subsuming all other strategies within it. Macro-level strategies at the next level, encompass clusters of microstrategies, which are the lowest level mental operations of their kind. These microstrategies are operationalized through tactics which may not always be mental operations per se, and observability is not considered a criterion for their identification.

A Review of Oxford's Language Learning Classification Schemes

It is perhaps Oxford, who has done the most extensive research on language learning strategies. Over the years, she has produced many different classification systems of language learning strategies based on a synthesis of earlier classifications of which the three most prominent ones are mentioned below:

Oxford's Classification, 1985

Oxford's early classification scheme (1985) built upon previous language learning taxonomies yielded an extensive list of sixty four strategy types under two broad categories: primary and support strategies. O'Malley and Chamot (1990) point out three important drawbacks with this categorization:

1. It is not based on any underlying cognitive theory.
2. It fails to organize strategies in a hierarchical order according to their importance.

3. There are many instances of overlap among subcategories.

However, this strategy system by Oxford was useful in providing a strategy inventory known as Strategy Inventory for Language Learning (SILL).

**Oxford’s Classification, 1990b**

Later, Oxford (1990) presented a classification scheme again based on a synthesis of earlier work, this time consisting of six broad categories: metacognitive, affective, social, memory cognitive and compensatory. The groups of strategies termed as metacognitive, cognitive, affective and social are conventionally recognized by most other researchers as the main categories in strategy classification. However, Oxford adds two more to these: memory and compensatory. By memory strategies she means strategies such as "grouping, imagery, rhyming, moving physically and structured reviewing", and within compensatory strategies she lists strategies such as "guessing meanings from contexts and using synonyms and gestures to convey meaning" (p.20).
The problem with the above classification is firstly, that it separates "memory strategies" as an independent category, though it should more appropriately be subsumed under the cognitive category; memory being an important component of human cognition. Secondly, it mixes physical behaviour, i.e., "moving physically" with abstract mental operations such as grouping and imagery. Thirdly, the compensatory strategies as well, did not require to be separated from other cognitive strategies, since all the strategies which Oxford lists under this category are based on elaboration, well known in the literature as an important cognitive strategy.

On the above ground therefore, this classification scheme presented by Oxford is by no means an improvement upon previous taxonomies and does not satisfy Oxfords' own conditions which she later laid down (Oxford and Cohen, 1992) for an appropriate classification of language learning strategies.

Oxford and Cohen's Classification, 1992

Subsequently, Oxford proposed yet another classification scheme in collaboration with Cohen (Oxford and Cohen 1992). Deploiring a link between language learning strategies on the one hand and learning styles, and other personality related variables and demographic factors on the other, she attempts to do away this problem by providing
what she calls a "whole-person" classification of language learning strategies, which does not concentrate only on cognitive factors of learning, but views the learner as affected by a host of cognitive, affective, stylistic, ethnic and cultural factors. The substrategies which operate under the main strategies have been named as tactics in Oxford's new classification system. This strategy system which consists of seven main groups of strategy types has been reproduced below. It is significant that Oxford has here included the productive as well as the receptive aspects of strategies.
TABLE 2.1

A Possible Organization of Language Learning Strategies and Their Supporting Tactics Useful for All Four Language Skills (Oxford & Cohen 1992)

1. **Strategy** = forming concepts and hypotheses (building declarative knowledge).

   Tactics = simplifying through transfer, simplifying through overgeneralization, using inferencing to figure out the meaning in the absence of adequate vocabulary and grammar; categorizing, comparing, contrasting, hierarchically organizing, analyzing, reasoning deductively, abstracting, creating networks, propositions, and schemata (conceptual frameworks). (See Faerch & Kasper, 1980, 1983; Ellis, 1986; Oxford, 1990b; Schmeck, 1988). This group contains tactics that have often been known until now as cognitive strategies and compensatory strategies for listening and reading.

2. **Strategy** = testing hypotheses.

   Tactics = testing hypotheses by means of intake analysis, assessing correctness of feedback, consulting experts, asking for verification or correction. (See Faerch & Kasper, 1980, 1983; Ellis, 1986; Seliger, 1980). This group contains tactics that have often been classified until now as metacognitive strategies and social strategies.

3. **Strategy** = personalizing mental linkages.

   Tactics = referring to oneself, creating personal examples, using personal language and images, linking new information with personal experience and prior knowledge - also called elaboration. (See Schmeck, 1988; Oxford, 1990b) This group contains tactics that have often been contained until now in lists of cognitive strategies.

4. **Strategy** = embedding new material in long-term memory.

   Tactics = repetitive rehearsing of information; using memory devices like imagery, keyword technique, rhyming, acronyms, physical response; imitating, encoding by role or verbatim; formal practicing; and functional practicing. (See Schmeck, 1988; Oxford, 1990b) This group contains tactics that have often been termed until now memory strategies or cognitive strategies.
5. **Strategy = understanding one's affective state.**

Tactics = using positive self-talk, discovering one's personality type and learning style, assessing one's feelings, using a diary, relaxing by means of music or breathing, using humor. (See Brown, 1987; Dansereau, 1988; McCombs, 1988; Ilorwitz & Young, 1991; Oxford, 1990b) This group contains tactics that have often been termed until now affective strategies.

6. **Strategy = managing one's learning process.**

Tactics = setting goals, evaluating one's progress toward goals, checking comprehension, testing one's knowledge, planning for language tasks, deciding in advance to pay attention to specific aspects of input, deciding in advance to pay attention to the task and avoid distractions, arranging for practice partners, looking for practice opportunities, previewing, looking for the organizing principle, organizing the learning environment and materials. (See O'Malley & Chamot, 1990; Oxford, 1990b). This group contains tactics that have often been called until now metacognitive strategies.

7. **Strategy = producing oral or written language while lacking adequate linguistic knowledge.**

Tactics = communicative achievement tactics such as gesturing, miming, paraphrasing, literally translating, substituting, restructuring, approximating the message, coining words, switching to the native tongue, waiting for the item to come to mind; and communicative reduction tactics such as avoiding use of certain rules, speech acts, and functions. (See Tarone, 1980, 1981; Ellis, 1986; Oxford, 1990b). Most of these strategies can be used for both writing and speaking. This group contains tactics that have often been called until now compensatory strategies or communication strategies.
The above revised classification scheme by Oxford and Cohen suffers from the following defects:

**Overlap of Substrategies or Tactics across Different Strategy Types**

The following examples bear this out:

i) The strategies listed under the main category hypothesis-testing, i.e., transfer, overgeneralization, and simplification, all involve "linking of past experience to present knowledge". However, linking of past and present knowledge has been repeated under the rubric of another category, i.e., "personalizing".

ii) "Embedding" new material in long-term memory includes the tactic of "imagery", which is again listed under "personalizing", termed as "using personal language and images".

iii) Tactics mentioned under hypothesis-testing (e.g., testing one's knowledge, checking comprehension) have been repeated under the category of managing one's learning process.

**Criterion-Mixing**

The strategy listing suffers from another defect which Oxford and Cohen (1992) themselves complain of in other taxonomies and seek to redress, i.e., criterion-mixing:
i) Universally acknowledged mental operations such as simplification, inferencing and organizing have been termed simply as tactics and listed under the rubric of the strategy "hypothesis-testing". Doing this, Oxford and Cohen have contradicted themselves, because earlier, in the same article they define tactics as "short-term art of using specific behaviours" and "observable operationalization of a broader strategy" (pp. 4-5). Thus, even according to their own definition, simplification, inferencing and organizing cannot be called tactics.

ii) Again, "assessing correctness of feedback" and "consulting experts" are both listed as tactics under the strategy of hypothesis-testing. It should be noted that while the former can be viewed as a mental operation, the latter will more appropriately be called a tactic.

iii) In the same way, another example of criterion-mixing is to term "linking new information with personal experience and prior knowledge", well-known as the cognitive strategy of elaboration in cognitive psychology (Schmeck, 1988; Anderson 1983, 1985; Weinstein and Mayer, 1986; Schallert, 1982), merely as a tactic under the strategy of "personalizing".
Arbitrary and Ad Hoc Inclusion of Communication Strategies

The final type of strategies in Oxford and Cohen's classification scheme is "producing oral or written language while lacking adequate linguistic knowledge." Oxford and Cohen's inclusion of "communication strategies" within learning strategy taxonomy is ad hoc and not organically incorporated into the strategy system. The criterion of problem, or lack of "adequate linguistic knowledge" has already been demonstrated to be faulty while dealing above with communication strategies.

It has also been shown above that all the assumptions and criteria on which the strategies termed as "communication strategies" rest are wrong and ought not to be viewed as separate from language learning strategies in general. In fact they can be explained within the existing categories of learning strategies and need not be added separately to the list as an independent entity. Thus, the inclusion of communication strategies on an arbitrary basis is unsatisfactory.

Finally, Oxford and Cohen claim to give a whole-person view of language learning through their strategy list, but it is doubtful whether they really succeed in doing so. Since, if the strategy list aims at reflecting a human personality in its totality, then it should mention all the myriad factors that make up a personality such as culture,
gender, age, nationality, emotions, intelligence and aptitude as defining criteria for the strategies yielding an extensive list of strategy types such as culture-based, nationality based and so on.

A Review of O'Malley et al.'s Classification of Language Learning Strategies:

The next most prominent work on language learning strategies has been performed by O'Malley et al., whose classification system has also undergone many modifications, albeit minor ones, over the years. Their classification system draws upon cognitive psychology literature and identifies strategies essentially as distinct mental operations. Because of its insistence on viewing strategies as distinct cognitive mechanisms, this classification system has largely been able to avoid the problems of strategy overlap and criterion-mixing. Building upon previous strategy research of other researchers and their own, O'Malley et al. have added many new strategies to the existing main categories, making it quite extensive.

There is scope, however, to make this classification more rigorous and systematic and more hierarchically organized. The main categories of metacognitive, cognitive and socio-affective strategies of O'Malley et al. have not been classified further, which the present revised classification attempts to do. The classification scheme
presented by O'Malley and Chamot (1988) and reported in O'Malley and Chamot (1990, pp. 198-199) has been reproduced in Table-2.2 which is followed by the presentation of the researcher's own revised taxonomy. For the purpose of comparison, O'Malley and Chamot will henceforth be abbreviated mostly as O&C throughout this chapter.
**TABLE-2.2**

**Learning Strategies Taught in the Cognitive Academic Language Learning Approach (CALLA), (O’Malley & Chamot 1988)**

<table>
<thead>
<tr>
<th>Metacognitive Strategies</th>
<th>Cognitive Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advance organization</td>
<td>Resourcing</td>
</tr>
<tr>
<td>Advance preparation</td>
<td>Using reference materials such as</td>
</tr>
<tr>
<td>Organizational planning</td>
<td>dictionaries, encyclopedias, or</td>
</tr>
<tr>
<td>Selective attention</td>
<td>text-books.</td>
</tr>
<tr>
<td>Self-monitoring</td>
<td>Grouping</td>
</tr>
<tr>
<td>Self-evaluation</td>
<td>Classifying words, terminology,</td>
</tr>
<tr>
<td>Self-management</td>
<td>numbers, or concepts according to</td>
</tr>
<tr>
<td></td>
<td>their attributes.</td>
</tr>
</tbody>
</table>

- **Advance organization**: Previewing the main ideas and concepts of the material to be learned, often by skimming the text for the organizing principle.
- **Advance preparation**: Rehearsing the language needed for an oral or written task.
- **Organizational planning**: Planning the parts, sequence, and main ideas to be expressed orally or in writing.
- **Selective attention**: Attending to or scanning key words, phrases, linguistic markers, sentences, or types of information.
- **Self-monitoring**: Checking one's comprehension during listening or reading, or checking one's oral or written production while it is taking place.
- **Self-evaluation**: Judging how well one has accomplished a learning task.
- **Self-management**: Seeking or arranging the conditions that help one learn, such as finding opportunities for additional language or content input and practice.
<table>
<thead>
<tr>
<th>Strategy</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note taking</td>
<td>Writing down key words and concepts in abbreviated verbal, graphic, or numerical form.</td>
</tr>
<tr>
<td>Summarizing</td>
<td>Making a mental or written summary of information gained through listening or reading.</td>
</tr>
<tr>
<td>Deduction</td>
<td>Applying rules to understand or produce language or solve problems.</td>
</tr>
<tr>
<td>Imagery</td>
<td>Using visual images (either mental or actual) to understand and remember new information or to make a mental representation of a problem.</td>
</tr>
<tr>
<td>Auditory representation</td>
<td>Playing in back of one's mind the sound of a word, phrase, or fact in order to assist comprehension and recall.</td>
</tr>
<tr>
<td>Elaboration</td>
<td>Relating new information to prior knowledge, relating different parts of new information to each other, or making meaningful personal associations with the new information.</td>
</tr>
<tr>
<td>Transfer</td>
<td>Using what is already known about language to assist comprehension or production.</td>
</tr>
<tr>
<td>Inferencing</td>
<td>Using information in the text to guess meanings of new items, predict outcomes, or complete missing parts.</td>
</tr>
</tbody>
</table>

**Social and Affective Strategies**

**Questioning for**

Eliciting from a teacher or peer clarification, additional explanation, rephrasing, examples, or verification.
Cooperation

Working together with peers to solve a problem, pool information, check a learning task, or get feedback on oral or written performance.

Self-talk

Reducing anxiety by using mental techniques that make one feel competent to do the learning task.
A Revised Taxonomy of Language Learning Strategies

O&C have divided the strategy types into three main categories: metacognitive, cognitive and socio-affective.

Metacognitive Strategies: These strategies govern the planning, monitoring and evaluating of the language learning process. They do not involve the direct manipulation of input but affect it indirectly by making decisions about the learning process. For example, creating opportunities for practice can be viewed as a tactic or microstrategy under the metacognitive macrostrategy of organizing.

Cognitive Strategies: These strategies involve direct manipulation of the input. Making guesses on the basis of input, or highlighting can be called microstrategies within this group.

Socio-Affective Strategies: These strategies consist of social mediating activities such as asking others for clarification or addressing the affective demands of the learning situation, such as allaying fear and anxiety by deliberately trying to relax. This last category of socio-affective strategies has been split into two distinct categories in the present taxonomy as social and affective strategies to give them separate identity.

While retaining the above mentioned basic categorization regarding the main categories which the researcher calls
megastrategies, some modifications have been made in the identification and categorization of the substrategies as will be seen in the following:

**Metacognitive Strategies**

Metacognitive strategies have been subdivided into three main groups: organizational, executive and evaluative.

**Organizational Strategies**: These strategies are concerned with the advanced planning and organization of the learner vis-a-vis the learning task, whether receptive or productive. The following can be envisaged as metacognitive organizational strategies:

i) **Advance Organizer**: Understanding the cognitive demands of the receptive or productive learning task, mentally organizing oneself with respect to the task, thinking of a similar task before, can be cited as microstrategies under this category.

ii) **Self-Management**: Realizing the appropriate atmosphere conducive for one's learning and arranging for it, for example becoming culturally aware about the L2 group, seeking opportunities for practice in L2, such as going to L2 movies or speaking to natives for the sake of getting exposure.
iii) Delayed Production or Avoidance: Deciding not to use certain items of language until a later time because of being unsure of them, avoiding to speak in L2 when not sure of oneself, can be cited as microstrategies operating under this macrostrategy.

Executive Strategies: The executive strategies are concerned with the immediate execution of the learning task. The following strategies can be envisaged under this rubric:

i) Repetition and Rehearsal: Subjecting oneself to repeated exposures to the input for the sake of reinforcement is a micro-metacognitive strategy.

ii) Directed Attention: Applying concentration to the given task, avoiding distraction, selectively attending to certain portions of the task can be cited as examples in this category.

iii) Referencing: This microstrategy includes tactics such as consulting a dictionary, asking the teacher for clarification of doubts or getting help from peer.

Evaluative Strategies: Evaluative strategies are concerned with the assessment and checking of the learning process by the learner. This category may include the following microstrategies:
i) Self-monitoring, i.e., continual checking and correcting of errors in one's learning and production.

ii) Self-evaluation, i.e., evaluating one's achievement or progress at intervals or after a task has been completed.

Comparison of Metacognitive Strategies with O'Malley & Chamot's List

i) O&C's list of metacognitive strategies has not been categorized further, while the present taxonomy classifies them further into three main groups: organizational, executive and evaluative, and lists distinct categories under each which is an attempt to achieve greater precision and compactness of categorization.

ii) It covers all the strategies, mentioned under O&C's list of metacognitive strategies.

iii) It deletes "selective attention" from the metacognitive list as it is more appropriately considered a cognitive strategy.

iv) It adds repetition to the megacognitive list, while O&C's list it as a cognitive strategy. According to the researcher, mere repetition is a mechanical activity, not involving direct cognitive manipulation of the input, and thus should be called more appropriately an executive metacognitive strategy, rather than a cognitive one.
v) Referencing, which is another term for resourcing mentioned in O&C's cognitive list, is also seen more appropriately as an executive metacognitive strategy. Thus, the act of looking up a word is a tactic of 'referencing' - an administrative decision regarding the learning task. When the word is found and its meaning learnt from the synonyms given in the dictionary, different cognitive strategies of learning such as analogy and guessing can come into play.

vi) Lastly, it coalesces the two metacognitive strategies in O&C's list, i.e., "advance organizer" and "organizational planning" as they seem to refer to the single strategy of planning with regard to the receptive and productive aspects of learning.

Cognitive Strategies: Strategies of Simplification

Language learning, and for that matter all learning, is essentially a process of simplification. What the researcher wishes to say is that there is only one main cognitive strategy of language learning - the megastrategy of simplification. All other cognitive strategies of learning can be explained as manifestations of the single strategy of simplification.

In fact, simplification as a learning strategy has been a controversial entity in SLA. Faerch and Kasper (1980) consider it a strategy of "non-learning" and Corder (1981b)
believes that "... it does not make sense to refer to the learner as simplifying what he does not possess". However, some eminent linguists have given simplification its due place in language acquisition. Schumann's (1982) remark can serve as an answer to Corders' objection to viewing simplification as a learning strategy when he says:

"... as many researchers have pointed out, simplification implies having something and then eliminating it. If learners do not supply morphology, it is because they do not know it. But I regard lack of morphology as simplification because learners do not process it in the input, and, therefore, it is not available in their output. Giving example of another type of simplification he further says, "Transfer can perhaps be more easily seen as an aspect of simplification. Learners by following their language pattern in production of their TL are certainly making the task easier for themselves." (p. 338)

J.C. Richards (1975) also considers simplification "as a universal learning strategy based on the extension or application of rules", and states that simplification involves "increasing the generality of rules through extending their range of application and through dropping the rules of limited applicability." Thus, he was viewing "generalization" as a strategy of simplification (p. 116). Blum-Kulka and Levenston (1978) view simplification as a
strategy as well as a process both for the "learner" as well as the "user" and define it as "a process ... of making do with less words" (p.399). Hence, deletion of redundancy, transfer and generalization are identified as strategies of simplification by the above researchers.

Transfer and generalization are basically the same process which chiefly consists in relying on prior knowledge for the learning of new input. This view is also corroborated by Taylor (1978): "The overgeneralization and transfer learning strategies appear to be two distinctly different linguistic manifestations of one psychological process: reliance on prior learning to facilitate new learning" (p.73). This strategy is termed as "elaboration" in cognitive psychology and considered as one of the most fundamental strategies of learning (Anderson 1983, 1985; Weinstein & Mayer 1986; Schallert 1982). Given the universally essential nature of the strategy of simplification with regard to all learning in terms of both its components, i.e., deletion of redundancy and reliance on prior knowledge, mentioned above, this strategy should be seen both as a process as well as a strategy.

Hence, simplification can be defined as a strategy used by learners to ease their burden of learning either by:

i) Deleting redundancy in the input and selecting or attending to the more important (phonological, lexical,
structural or conceptual) items in the input and:

ii) relying on previous knowledge by finding relationships between previous knowledge and present input.

Hence, simplification as a megastrategy is composed of two macrostrategies:

Selection/Deletion

Elaboration

Selection/Deletion: Selection consists in easing one's burden of learning by concentrating on selected portions of language input or output. For example, lack of morphology in the production of learners is an example of the strategy of deletion in early L1 or L2 acquisition. Because learners choose to concentrate on the processing of important items of input, they leave out the redundant items as a processing strategy. Hence, the absence of less important or redundant items in the output such as inflexion and auxiliary. The following tactics can be envisaged under the strategy of deletion:

Semantic Deletion: This tactic involves deletion of the content words either while receiving input or producing output. In fact deletion of certain linguistic elements in output reflects similar deletion of these elements during reception for ease of processing. For example, "The food is
very hot" reproduced by a learner as "Food hot", is an example of semantic deletion/selection which demonstrates that the speaker has lightened his burden by selecting the two most important items for cognitive processing, and deleting others as redundant or less important for conveying the meaning.

Syntactic Deletion: Another form of deletion involves omission of form words such as inflexions, affixes and other morphological items. Thus, "cat drink milk", for "The cat is drinking milk," in the language of a learner is an example of syntactic deletion through which he/she drops the inflexion "-s", considering it redundant for the understanding or expression of his/her meaning.

In the classroom context, outlining, note-taking, highlighting, summarizing and precis-writing are all examples of deletion. Syntactic and semantic deletion interact with each other in real reception and production and it might not always be easy to decide which type of deletion is involved in a particular instance. Semantic and syntactic deletion has been termed in communication strategies literature as semantic and syntactic avoidance. Topic avoidance, however, along with delayed production seem more appropriately to be metacognitive strategies involving administrative decisions regarding the learning task.
Elaboration: Elaboration is a strategy chiefly based on creating links and relations either between items of present input or between new input and past experience. Recognized as a very potent strategy of learning in cognitive psychology, it consists chiefly in creating different sorts of relationships and networks which help the learner to form hypotheses and make inferences. Weinstein and Mayer (1986) note that in Wittrock's (1974, 1978, 1981) model of learning: "the integrative process used by the learner to relate new information to either concepts or schemas already in semantic memory, or distinctive memories of experience, are the key determinants of new learning and subsequent performance. They further remark that "creating connections", or elaborations between to-be-learned information and already established context and procedural knowledge is a major component of most knowledge acquisition frameworks based on schema theory (Schallert 1982)" (p.320). Apart from creating connections between past knowledge and present input, links can also be made among items of present input. Ellis (1986) uses the term "inferencing" for this type of elaboration, and reserves the term "simplification" for linking new information to past experience (pp. 171-72). However, such a distinction is not necessary in the researchers' opinion, as past and present knowledge structures interact with each other in complex ways in learning, and it is very difficult to precisely identify how
many different items of past and present knowledge have gone into arriving at a guess or making a decision.

The macrostrategy of elaboration can consist of the following microstrategies:

**Analogy**: As the term suggests, by analogy is meant the strategy of relying on similarity either between items of new input and past knowledge. Analogy or analogical reasoning can be manifested through the following tactics:

i) **Use of L1**: This is also termed as transfer in SLA and is employed when the learners find and utilize some similarity between the new L2 item and a previously known L1 item in understanding or producing the L2. An example of this can be the use of L1 translation equivalents or L1 concepts or sounds in learning L2. "Borrowing" or "code-switching" are examples of this strategy from the communication strategy literature.

ii) **Use of Known L2**: This process is termed as "overgeneralization" in communication strategies literature implying some sort of error in the IL input, but since the strategy can also help the learner in arriving at the correct item, the term generalization seems to be more proper in the context. An example of this strategy can be learning of pluralization such as "craftsman-craftsmen" on the basis of the rule "man-men". "Paraphrase" and
"circumlocution" cited in communication strategies literature can also be termed as instances of such simplification through the use of known L2.

iii) Use of L3: Similarly, the learner can make use of any other linguistic system apart from the L1 or L2 for gaining knowledge of an L2 item.

iv) Use of Known Extra-Linguistic Knowledge: The learner can also make use of previous extralinguistic knowledge about the world in understanding new L2 input or producing in the L2.

v) Visual Representation: Visual representation of an idea or resorting to similarity of the to-be-learnt or to-be-produced L2 item with its visual counterpart, i.e., employing mental images, picture, diagram, mime, gesture or use of T.V. which are well-established learning aids come in this category.

vi) Auditory Representation: This strategy is also based on finding some sort of similarity between the known and the new item; for example, learning the meaning of a bird or animal in L2 by listening to the sound made by it.

Inferencing: This involves making inferences based on different types of relationships between items of new input and prior knowledge or among different parts of new input.
The following tactics can be envisaged under this category:

i) Guessing: Learning the meaning of words from contextual clues.

ii) Relating: Finding implications or underlying relations between items, facts or concepts.

iii) Predicting: Predicting about syntactical, semantic or conceptual items about to be encountered in the language input.

iv) Contextualization: Placing a new item in its proper linguistic context.

v) Deductive Reasoning: Trying to understand new input on the basis of learned rules.

vi) Inductive Reasoning: Arriving at a conclusion or rule on the basis of different specific examples.

Organizing: For ease of learning, learners often rely on the strategy of organizing by imposing an order on their input or output. It is worth noting that this organizing is different from metacognitive organizing, because while in cognitive organization the learner organizes the material to be learnt, metacognitive organizing involves organizing oneself vis-a-vis the learning task. Organizing can manifest itself through the following tactics:
i) Grouping/Clustering: Lumping together many things which have similar characteristics or putting the newly available item (either in input or output) in an already existing category in the mind. In a speaking or writing task, grouping the related points together in a paragraph can be cited as an example.

ii) Arranging: Arranging involves placing items in a particular order or sequence, in terms of priority, chronology or some other criterion. In a writing or speaking task, arranging the points in order of their importance can be cited as an example. The same may apply in listening or reading tasks too.

iii) Breaking: Breaking involves decomposing of the input or output data into its component parts in order to make reception or production easier. After initial decomposing/breaking, the strategy may involve subsequent selection of items involving deletion of others, or it may also involve analysis of the component parts.

Comparison of Cognitive Strategies with O'Malley and Chamot's List

i) The revised taxonomy covers O&C's strategies of translation, imagery, auditory representation and keyword under the strategy of "analogy" (an elaborative strategy). Use of L3 and extralinguistic knowledge have been added to the list under analogy, which do not appear in O&C's scheme.
ii) The main strategy of deletion covers note-taking from O&C's list and adds the sub-strategies of highlighting, summarizing and precis-writing.

iii) The strategies of deductive reasoning, recombination, elaboration, inferencing, grouping and contextualization in O&C's list are subsumed under the main strategy of elaboration. However, the revised taxonomy adds the strategies of "inductive reasoning" to this list.

iv) As stated earlier, it deletes "repetition" and "resourcing" from O&C's list of cognitive strategies and transfers them to the list of metacognitive strategies as they are viewed more appropriately to originate as administrative decisions about the learning task rather than direct manipulation of the learning item.

To sum up, the revised categorization of cognitive strategies covers all the strategies mentioned in O&C's cognitive list and adds many more to it.

Affective Strategies

Affective strategies are concerned with the affective control of the learning process and the following strategies can be subsumed under this list:
Motivational Strategies: These strategies are concerned with the learner's self-motivation regarding the importance of the learning task. No learning can take place if the learner is not sufficiently motivated to learn. The motivational strategies could either be integrative or instrumental or both, according to the type of motivation they are related to. Hence, relating a given task to one's needs and encouraging oneself to do it might be cited as a tactic under this.

Inspirational Strategies: Emotional strategies such as allaying one's fears in taking up the learning task through self-talk, instilling confidence in oneself, rewarding oneself on completing a task successfully come under this category.

Social/Interactional Strategies

These strategies which help in initiating and maintaining interaction in the classroom or outside and aid in conversation, also promote learning in an indirect manner. For example;

Learning Tricks of Conversation: This may incorporate tactics such as those mentioned by Wong-Fillmore (1979):

i) Joining a group and acting as if you understand what's going on even if you don't, i.e., pretending.
ii) Giving the impression with a few well-chosen words that you speak the language, e.g., picking up some formulaic expressions.

iii) Counting on your friends for help, i.e., asking questions.

**Becoming Culturally Aware** Trying to acquaint oneself with the culture and traditions of the target community can also be cited as a social strategy.

Oxford (1992/93) deplores the "woeful lack of research emphasis given to social and affective strategies" (p.20). According to Dansereaus' classification, while cognitive strategies directly influence the learning process, metacognitive, social and affective strategies do so in an indirect way. These indirect strategies are important in themselves and should be studied in their own right. It is well recognized that optimum learning can never take place without the presence of proper motivation (an affective strategy) or without creating a proper learning opportunity (a metacognitive strategy). However, when the right motivation and right opportunity are present and learning does take place, then it is the cognitive strategies which come into play and decide how and to what extent learning will take place. Thus, cognitive strategies are concerned with the core learning process and should be viewed as such. This situation is analogical to the biological process of
the digestion of food. Digestion will be hampered by poor appetite, sickness or worry, and is important to consider these factors for proper digestion to take place. However, it should be realized that these factors will remain external to the working of the digestive system proper, and have to be considered so.

Comparison of Social and Affective Categories with O'Malley & Chamot's Socio-Affective Category

This listing of social strategies is slightly different from O&C's socio-affective category in the following ways:

i) It splits the socio-affective strategy type into two clear cut categories: social and affective.

ii) It adds many new social strategies to the list (those cited by Wong-Fillmore) under a separate category of social/interactional strategies.

iii) Affective strategies, also presented as a distinct category, has been classified into two broad groups: motivational and inspirational.

iv) O&C's strategy list (1988) mentions questions for clarification, cooperation and self-talk as three socio-affective strategies. Of these, the first two have been listed under referential strategies as a type of metacognitive strategy, as already mentioned. The last one
has been included into the category of inspirational strategies.

v) As in O&C's classification, social and affective strategies have not been elaborated upon much. However, this is not to imply their lack of importance.

Conclusion

Advantages of the Revised Taxonomy

i) The revised taxonomy is an extension of O&C's classification scheme and attempts to put diverse substrategies not hitherto categorized, into clearly defined main categories, and hence, tries to achieve greater coherence, precision and systematicity of presentation.

ii) The revised taxonomy is also more economical in that it subsumes various substrategies within a few main strategies under the four broad categories of cognitive, metacognitive, social and affective strategies. The metacognitive category incorporates all O&C's strategies within three macro strategy types. The cognitive and the affective groups have only two main strategies each, but are capable of encompassing a wide range of strategies within them. The interactional strategy category admittedly needs further elaboration.

iii) The description of all cognitive strategies chiefly as a process or a megastrategy of simplification, consisting of only two broad strategies, i.e., selection and elaboration,
and the explaining of all the diverse cognitive strategies mentioned in the literature within these two broad categories is expected to affect data collection as well as strategy instruction in a positive way.

iv) Viewing communication strategies and learning strategies as one and the same can prove to be a great boon to the field; as researchers working in two different directions, but basically the same thing, will join hands in promoting the field.

v) Viewing communication strategies as mental processes rather than a collection of erroneous productions, will solve many data collection and analytical problems faced by the researchers as already implied by Poulisse (1987).

vi) Finally, a clearer picture of the learning/communication strategies is bound to have many important implications for the methodology of strategy instruction within the framework of L2 pedagogy. In short, the merger of communication and learning strategies is sure to have many long lasting effects on the SLA field which cannot be predicted at present in their totality.
Employment of Learning Strategies in Reception and Production Tasks

Two things should be noted here: first, learning strategies interact with receptive and productive tasks in extremely complex ways and secondly, usually a host of different strategy types combine in the completion of a particular reception or production task. In fact reception and production themselves are intricately interconnected with each other in any learning or communication task. The brief description of the following two tasks can serve as an example:

Rehearsal/Memorization

For rehearsal or memorization of items, the learners may indulge in mental repetition or they might repeat the items orally or in writing, implying the employment of both receptive and productive skills. On the other hand, mere repetition of an item or a task is an exercise in getting repeated exposure and hence a metacognitive strategy. However, when the learner uses visual, aural or any other type of mnemonic device to enhance memory, such as highlighting or grouping, then both the main cognitive strategies of deletion/selection and elaboration evidently come into play.
Summarizing

Summarizing can as well be internal or external, that is, it can be performed only in the mind, or can be carried out orally or in writing. Furthermore, diverse strategies take part in performing the task of summarizing. When the speakers/writers select only the important points of a passage to include in a summary, they are using the strategy of deletion/selection - a macrostrategy in the cognitive group. When they arrange these ideas in a particular order, they are using the cognitive strategy of organization. On the other hand, they might also use some elaboration strategies for guessing the meanings of certain words or concepts, and finding relationships between the facts stated in the passage. Further, they might make use of some metacognitive referential strategies, such as asking the teacher, consulting a dictionary or peer. Also, they might employ the affective strategy of self-motivation to prepare themselves for the task especially in producing the summary. Not only this, a host of planning, monitoring and evaluative metacognitive strategies might be employed in completing the task.

It should be noted that there exists a cognitive aspect to all metacognitive strategies, since all administrative decisions regarding the learning or communication tasks have to undergo some mental processing. For example, a
metacognitive organization and planning entails the cognitive strategy of elaboration which helps in relating a particular task to its proper environment. In the same manner, no other metacognitive or affective strategy can be envisaged without a cognitive element attached to it.

**Conscious versus Unconscious Distinction**

There has been a long tradition of unresolved argument regarding the conscious or unconscious nature of language learning. Krashen's theory about acquisition being an unconscious, and learning a conscious process is well-known. Many people have refuted this distinction between unconscious acquisition and conscious learning, among whom McLaughlin (1978, 1990) has been one of the foremost. Many times learning can be unconscious. For example, Reber and Allen (1978) found in their experiment that "learning occurs in the absence of explicit codebreaking strategies and ... subjects cannot tell us very much about what they know" (p.204). Dulany et al. (1984) on the other hand claimed that there was an important element of consciousness involved in the learning and articulation of grammatical rules. Schmidt (1990) has forcibly argued that the role of unconscious L2 learning has been exaggerated and that research should focus more on what learners notice and what they think during learning. However, he also mentions the difficulties involved in using the concepts conscious and
unconscious.

McLaughlin (1990) believes that these two terms are "too laden with surplus meaning and too difficult to define empirically to be useful theoretically" (p.627). McLaughlin also chooses to reject the conscious - unconscious distinction as it does not provide much insight into the process of learning. He argues that from a scientific point of view as well, theories maintaining this distinction are neither testable nor falsifiable, and hence, have no value.

Another important reason to reject this dichotomy according to the present researcher is that in actual learning experience, a constant flow of information from the conscious to the unconscious store and vice-versa continues to take place, and we simply do not know when conscious knowledge has become unconscious and unconscious conscious. Everybody is aware of the experience when some seemingly long forgotten matter is suddenly and unexpectedly retrieved and in the same manner a familiar name which we use frequently sometimes mysteriously refuses to come to mind.

In view of the above, the researcher chooses to avoid employing the conscious-unconscious distinction with regard to learning strategies. Though many researchers have pointed out that strategy should be considered conscious in order to be teachable, yet there is no consensus on this point. O'Malley and Chamot (1990) have also expressed their
tentativeness regarding this matter (1990, p.85). Earlier formulations in cognitive psychology (e.g., Posner & Snyder 1975) identified control with consciousness and automaticity with unconscious processes. However, Schneider and Shiffrin (1977) are careful not to associate the distinction between controlled and automatic processing with the distinction between conscious and unconscious processing. Hence, contrasts mentioned in recent cognitive psychology literature show a preference for the distinctions such as, controlled versus automatic processing and serial versus parallel processing, which are neutral with regard to the conscious - unconscious distinction.

Hence, if it cannot be decided for learning whether it is conscious or unconscious in a particular instance, it cannot be asserted so for those strategies too, which are directly concerned with the cognitive processing of information, i.e., the cognitive strategies of learning. However, metacognitive and affective strategies can be envisaged more easily as more or less conscious decisions regarding the learning task. One consciously plans how one is going to deliver a speech, or to improve one's vocabulary, or not to be discouraged by difficulties faced in a learning task. Being largely conscious, metacognitive strategies may be more amenable to teaching. There is another reason too: cognitive strategies are held to be
universal and supposed to be possessed by all learners, whereas many metacognitive strategies might not be known to many learners. This is not to say that cognitive strategies should not be taught. Though elaboration and selection are the two basic mental processes as well as strategies, which all learners are supposedly endowed with, many substrategies and tactics thereof might be unfamiliar to them. It is necessary thus, that the application of these strategies are further enriched and refined.

**Language Learning Strategies vs. General Learning Strategies**

In agreement with O'Malley et al (1985b), the researcher also believes that the strategies of language learning are not basically different either from L1 strategies or strategies of learning in general. This has been proved on an empirical basis, since strategies identified in SLA were also found to be employed for general learning in cognitive psychology and were applied to reading comprehension, thinking skills and problem-solving (e.g., Brown, Bransford, Ferrara, and Campione 1983; and Chipman, Segal and Glaser 1985). The model presented by Fillmore and Swain (1984) also suggests that the strategies used in L2 learning are no different from those used in non-language tasks.

In fact, the very basis of considering learning strategies within a cognitive psychology framework in this
work derives from the conviction of viewing these strategies as general to all sorts of learning - whether of L1 or L2 or of content subjects.
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<th>Mega</th>
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<td>Deductive reasoning</td>
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<td>Affective</td>
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<tr>
<td></td>
<td>Inspirational</td>
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</tr>
</tbody>
</table>

153
Inspirational

Social

Learning tricks of conversation
Becoming culturally aware

Pretending
Learning formula
Asking clarifying questions
<table>
<thead>
<tr>
<th>Communication Strategies</th>
<th>Terminology of the Revised Taxonomy of Language Learning Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer from NL</td>
<td>L1 analogy, substrategy of elaboration, a cognitive strategy (simplification)</td>
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<tr>
<td>Overgeneralization</td>
<td>L2 analogy, substrategy of elaboration, a cognitive strategy (simplification)</td>
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<tr>
<td>Prefabricated pattern</td>
<td>Repetition/rote-learning, a metacognitive strategy of execution</td>
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<tr>
<td>Overelaboration</td>
<td>L2 analogy, substrategy of elaboration, a cognitive strategy (simplification)</td>
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<tr>
<td>Epenthesis</td>
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<tr>
<td>(a) Topic avoidance</td>
<td>Avoidance, a metacognitive strategy of execution</td>
</tr>
<tr>
<td>(b) Semantic avoidance</td>
<td>Semantic deletion, a substrategy of deletion/selection, a cognitive strategy (simplification)</td>
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<tr>
<td>(c) Appeal to authority</td>
<td>Referencing, metacognitive strategy of execution, also a social/interactional strategy.</td>
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<tr>
<td>(d) Paraphrase</td>
<td>Analogy (Resort to either L2 or extralinguistic knowledge or both), substrategy elaboration, a cognitive strategy (simplification).</td>
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<td>(e) Message abandonment</td>
<td>Avoidance, a metacognitive strategy of execution.</td>
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<tr>
<td>(f) Language switch</td>
<td>L1 analogy, substrategy of elaboration, a cognitive strategy (simplification)</td>
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</tbody>
</table>
REFERENCES


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158