Toward a Social Psychological Model of Strategy Use

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ABSTRACT *In the past few years, the literature has shown substantial growth in the study of language learning strategies and their relation to language learning and communication. With such rapid advances, it is necessary to closely examine the approach taken to this increasingly complex topic. Some of that complexity seems to arise from treating strategies with too broad a scope. Several other learner and situational variables interact with strategies to influence second language proficiency. Therefore, an alternate view of strategies is offered that limits their application to those behaviors that are intentional and freely chosen. Finally, a model is presented which postulates that for strategies to be used, students must be aware of one or more appropriate strategies, have reason to use them, have no impediments to their use, and should experience rewards for using them. The implications of this model for strategy training are discussed.*[1]

Introduction

One of the most fertile areas of research in language learning in recent years is the topic of language learning strategies. Learning strategies have been defined as "steps taken by the learner to facilitate the acquisition, storage, retrieval, or use of information" (Oxford and Crookall 1989). In general terms, language learning strategies are the techniques and tricks that learners use to make the language easier to master. It should also be noted that this definition refers to more than language learning. Strategies for communication in second language would be included under the same umbrella.

Whereas some learning strategies date back to the ancient Greeks (Houston 1986), the study of language learning strategies has recently been aided by the development of a taxonomy for their classification (Oxford 1990; Oxford-Carpenter 1989). The theoretical developments that form the basis of this taxonomy are useful in organizing what is known about learning strategies in general and language learning strategies in particular. The extensive list of specific strategies has been developed from numerous sources, including the intuitions of teachers and researchers, interviews with students, learners' notes and diaries, think aloud protocols, and other methods (Oxford and Crookall 1989).

While recent research has expanded the base of knowledge about language learning strategies, some conceptual problems should be addressed. Specifically, the definition of learning strategies, as offered above, is sufficiently broad to encompass elements that might be better considered as other types of variables, such as personality or situational factors. It will be argued here that the theory and research related to language learning strategies should pare down the definition of "strategies" to focus on techniques to facilitate language learning that are deliberately chosen by the learner. Personality and social factors can be included in a broader system that describes strategy use and the factors that influence it. The resulting model, presented below, can be used to make specific predictions about the relations among learner characteristics, situational variables, language learning strategies, and second language proficiency.

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Strategy Theory

The strongest theoretical approach to the study of language learning strategies has been developed by Oxford and associates (Oxford 1990; Oxford and Crookall 1989; Oxford, Lavine, and Crookall 1989). In addition to the theoretical propositions and taxonomy, Oxford (1990) also has developed instruments for the measurement of language learning strategies—the Strategy Inventory for Language Learning (SILL).

Oxford's (1989) theory differentiates between Direct and Indirect learning strategies. Direct strategies are "... those behaviors which directly involve the target language and directly enhance language learning" (449). Classified under direct strategies are three specific subtypes of strategies: Memory, Cognitive, and Compensatory. Memory strategies are those that facilitate the recall of vocabulary items (e.g., using imagery). Cognitive strategies are those that facilitate the processing of language input and preparing for language output (e.g., repetition). Compensation strategies are those that allow one to "fill in the gaps" in knowledge (e.g., guessing word meaning). There are a number of specific strategies associated with each of the three subtypes.

Indirect strategies, on the other hand, are "... those behaviors which do not directly involve the target language but which are nevertheless essential for effective language learning" (Oxford 1989, 450). Three subtypes of strategies are included in this class: Metacognitive, Affective, and Social. Metacognitive strategies are those that manage the process of learning (e.g., seeking practice opportunities). Affective strategies are those used for controlling emotions, attitudes, and motivation (e.g., writing a diary). Finally, social strategies are those that involve learning with others (e.g., asking for correction). Again, each of these three subtypes includes several specific strategies.

Language learning strategies represent a complex phenomenon. It is sometimes difficult to assign a given strategy to only one category. For example, the early distinction between communication and learning strategies was rejected by Oxford and Crookall (1989) because a given strategy may serve to aid both communication and learning simultaneously. Similarly, "memory" and "cognitive" strategies in Oxford's taxonomy are difficult to clearly delineate.

Further complicating the study of strategy use is the manner in which these techniques work together. The interaction among types of strategies is difficult to specify. Oxford (1990) has suggested that all forms of strategies "support" all other forms of strategies and that Direct and Indirect strategies work "in tandem." Based on existing models of language achievement that encompass other types of variables (Clément 1987; Gardner 1985; Spolsky 1991), however, it should be possible to be more specific in describing these relations. For example, it might be observed that using certain affective strategies will reduce the level of language anxiety, thereby freeing-up cognitive resources (MacIntyre & Gardner 1991) to be applied in the use of direct strategies. Such relations can be confirmed by future research in which specific models are tested. The groundwork has been laid for such very specific predictions (Nyikos 1990; Oxford et al. 1989). By placing strategies in the context of other variables, a more fruitful description of the sources of individual differences in language proficiency can emerge.

Strategies in Context

It is a truism that language learning never occurs in a vacuum. A multitude of situational and personal factors impinge on the learning process, including gender (Maccoby and Jacklin 1974; Oxford, Nyikos, and Ehrman 1988); attitudes and motivation (Gardner 1985); anxiety (Horwitz and Young 1991; MacIntyre and Gardner 1991); cognitive style (Stansfield and Hansen 1983); self-confidence (Clément 1987); teacher behavior (Tyacke 1991); and so on. Strategies must exert their influence within this system.

Oxford and Crookall (1989) recently reviewed the literature on strategy use. They list 16 conclusions under the heading "What We Think We Know" about strategy use. The re-

sults of the studies point to some consistent conclusions, including: strategies are used by students at all levels; more proficient students use different strategies from less proficient students; strategy use is associated with motivation, gender, ethnicity, cognitive style, and other personality variables; the efficacy of strategy training depends on such learner variables; and neither teachers nor students are fully aware of the strategies that are being used or could be used.

These results can be interpreted to mean that the use of strategies is fairly prevalent among language learners and seems to depend on the interaction of learner characteristics and the demands of the situation. In order to recognize the complexity of the process, conclusions reached about the effects of learner variables should also consider the situational variables and vice versa.

The study of gender differences in strategy use demonstrates some of the complexity associated with this area.[2] In general, it has been found that women use more strategies than men (Ehrman and Oxford 1988; Oxford et al. 1988). However, Tran (1988) found that, among Vietnamese immigrants to the United States, men used more strategies than women because the men more often had jobs outside the home. In an experimental study that assigned the strategies to be used by the participants, Nyikos (1990) found that some strategies lead to greater proficiency by females, other strategies increased the performance of males, and in a control group that used rote memorization, no gender differences were found.

Clearly emerging from these studies is the conclusion that characteristics of the language learner, situational variables, and types of strategies interact in a complex fashion to influence second language proficiency (Gardner and MacIntyre 1993, 1992). Variables such as gender and ethnicity are listed by Oxford (1989) as determinants of strategy use; but their influence may be more clearly understood through the attitudinal, motivational, and learning style differences generally associated with gender and ethnicity. For exam-

ple, if male students show resistance to certain strategies, then it might be their learning style, negative attitude toward the strategy, or level of motivation that would explain the relationship. Making note of the student's gender serves only to describe the tendency to possess these attributes, especially considering the vast individual differences within each gender. Similarly, in Tran's study (1988) the employment situation of the individual seems to be the key variable influencing strategy use rather than his/her gender or ethnicity.

Other characteristics of the individual student have been shown to relate to strategy use. For example, it has been found that years of language study and increased self-perceptions of proficiency are associated with more extensive use of strategies (Oxford and Nyikos 1989). Oxford and Nyikos (1989) suggest, however, that motivation emerged as the most important of the learner variables, with more highly motivated students using more strategies. A study by Bacon and Finnemann (1990) found that willingness to use a strategy was an important consideration. They note that motivation, attitudes, anxiety, and personality interact to produce a willingness or unwillingness to employ certain strategies. Along a similar line, Rost and Ross (1991) suggest that the decision to use a strategy must be preceded by a social decision to initiate a response. For example, before one uses the strategy of "asking others for help," one must possess a willingness to admit having difficulty and the motivation, self-confidence, lack of anxiety, etc., to ask for assistance. Both studies suggest that individual differences among language learners influence strategy use in this manner, making students more or less likely to employ the strategies.

Other demands of the situation will influence the use of strategies as well. For example, Oxford and Nyikos (1989) found that, among university students, the most commonly used strategies were those considered most appropriate to traditional classrooms and discrete-point testing as opposed to those used for independent communication. The exam-based testing in the university language

courses seemed to influence the choice of strategies.

Therefore, it would seem that a model of strategy use should include both individual and situational variables. For example, Oxford and Nyikos (1989) integrated their findings into a causal spiral wherein motivation leads to the use of strategies that increases self-rated proficiency and self-esteem leading to better motivation, more strategy use, and so on. This is a dynamic model in that it captures the developmental nature of language study and postulates reciprocal causation between learner characteristics, language strategies, and second language performance. A model will be offered below that builds upon this suggestion and extends it to include other types of variables and the manner in which strategies may influence second language proficiency.

Strategies and Proficiency

Several studies have reached the conclusion that more proficient students make better use of strategies (see Oxford et al. 1989 for a review). The implications of this finding must be considered cautiously. This might be interpreted to mean that either proficiency influences the choice of strategies or that strategy choice is simply a sign of proficiency level.

A study by Marrie and Nettan (1991) found that the use of strategies by younger students is similar to that of older students. They found that similar numbers of strategies were used by effective and ineffective communicators but the types of strategies were different. The more effective strategies were used by the more effective students.

Similar findings were reported by Corbeil (1990). She notes that language learning occurs at different rates for different people. Corbeil shows that a student's response to error correction may be an important factor in developing proficiency. The results indicated that better students used more elaborate strategies to better integrate the error correction into existing knowledge. The more successful students processed the information more fully, at a deeper level.[3] Unsuccessful students were willing to process on a more superficial level only. It appears that these students avoided and sometimes ignored the correction rather than integrating it with their existing knowledge. The better students expended more effort, became more engaged in their material, and treated the correction more positively than did the unsuccessful students who tended to gloss over the correction.

Rost and Ross (1991) were able to distinguish more proficient learners from less proficient ones by their use of certain strategies. For example, the more proficient learners would form questions that made an inference about the story while less proficient learners tended to ask. "What does _____ mean?" and similar questions. It is clear that the more skillful students were working on a different cognitive level from the less proficient ones.

When considering the association between strategy use and proficiency. it is difficult to tease apart the potential contribution of strategies to proficiency from the effect of proficiency on the choice of strategies. In other words. one may ask, "Does the use of certain strategies lead to (cause) improved ability level or does an elevated level of ability lead to the use of different strategies?"

To address this issue, let us assume that strategies are used to meet the needs of language learners at a given time. Initially, language students have the need to communicate at a most basic level. Students operating at this stage would be able to employ only the most rudimentary strategies, such as one-word utterances, coining words, mixing languages, gestures—anything to get the message across. After attaining some proficiency in the second language, students need to learn basic grammar rules, sentence construction, and vocabulary. Strategy use at this stage would be intended to address specific communication weaknesses or deficiencies. As proficiency progresses to the more advanced level, similar issues are involved but the specific needs are different. At this stage, language students can become more concerned with expanding their command of the language. More advanced vocabulary and the subtleties of gram-

mar use are important issues at this stage. Finally, after a command of the language is achieved, students may wish to become individualistic, technical, or creative in communication (depending on the situation). At this stage, grammatical and vocabulary competency are highly developed, and strategy use will be intended to make communication more effective, informative, or persuasive. The needs at this stage will be very different from the needs at lower levels and therefore the choice of communicative strategies will be different.

For example, if two students start learning a language today for the first time, then the more successful learner is the one who progresses faster and who, at the end of some time period, has attained higher proficiency. If this student were found to employ more strategies or a wider range of them along the way, then we have some evidence that strategies accelerate the rate of learning and lead to greater proficiency in the same amount of time. But when two students of different proficiency levels are studied, it often is not possible to assess whether differences are due to the rate of learning or the amount of proficiency already attained (possibly through more study or exposure to the second language).

Thus, an effective student might be observed using higher-level strategies while a less successful student uses lower-level ones. The better student may have progressed past the need to use lower-level, less effective strategies. Students' communicative needs change based on their attained competency. Strategy use would be one index of the level at which a student operates. Strategy use may also assist in the progression to higher levels. It is the age-old problem with the interpretation of correlational data—does strategy use result from or lead to increased proficiency? The answer, undoubtedly, is BOTH.

This has important implications for the training of language learning strategies. To the extent that the use of strategies is (or can be) a cause rather than a consequence of better performance, then teaching strategies will be a productive enterprise. Rost and Ross (1991)

found that strategies may be taught to students who were not disposed to their use because of their cultural background. An entire text has been devoted to informing teachers about strategy use and instruction (Oxford 1990). While there has been some question about the effectiveness of strategy training programs (Vann and Abraham 1990), much of the enthusiasm surrounding strategy research stems from the possibility of training students in their use. Training studies, properly designed, can provide the answer to this "age-old question."

When the effects of language learning strategies on proficiency are discussed, it is necessary to include the personality and situational variables that also contribute to the effectiveness of strategy use. For example, studies suggest that better students make better use of strategies. This requires effort on the part of the learner, and it is not surprising that motivation plays a strong role in strategy use. We might also expect that the presence of anxiety would have the opposite effect. Theoretically, the context in which strategies operate is multifaceted and must include both learner and situational variables to be complete. Such a model is more useful in explaining the manner in which strategies can affect proficiency. When strategies are placed in this broader context, they can take on a more specific definition rather than encompassing some of these other elements.

The Definition of Language Learning Strategies

In their review of the literature, Oxford and Crookall (1989) suggest that students and teachers may be unaware of the strategies that are being used. Certainly teachers may be unaware of the techniques used by students; however, the suggestion that students do not know that they are using strategies may be problematic. The definition of strategies, "steps taken by the learner to facilitate the acquisition, storage, retrieval, or use of information" (Oxford 1989), allows for the possibility that students are unaware of strategy use.

This poses a conceptual question in that

both learner and situational characteristics may be (and have been) considered "strategies" when they may be more properly seen as contributors to the use of strategies. In everyday use, the term "strategy" seems to imply active planning in pursuit of some goal, such as strategies for success in business, military strategy, or strategic political moves. By implication, a strategy should not be something that automatically occurs.

For example, the Vietnamese immigrant who must use English in the workplace is not speaking English as a strategy to enhance his/her language skills. It is a requirement of the situation. Oxford (1990) lists "taking risks wisely" as a strategy. However, it has been suggested that the willingness to take risks is a personality trait associated with low levels of anxiety (MacIntyre and Gardner 1991) and self-confidence (Clément 1987; Ely 1986).

At its basis, a strategy is a tactic or plan. It would appear that the defining characteristics of language learning strategies are that they: 1) focus on intentional actions and 2) require that the student chooses to perform the strategic action. The issue of intentionality is central to the strategy concept. Inadvertent, haphazard, or automatic actions do not fit the general definition of a strategy as a plan for success. If an action is planned, then it must be intentional. Actions that arise automatically for a person are most likely to have their origins in the learner's personality, the situation, or a combination of the two. For example, an introverted person may have to force himself/herself to meet people at a social gathering, while an extrovert would automatically mingle. The introvert is using a social strategy, the extrovert is simply behaving according to his/her personality.

The second characteristic of strategies, choice, is linked to the first. Often, intentional actions are chosen from a range of possible actions. If no choice exists within a situation, then it is difficult to conceive that those actions are "strategic." Placing oneself in the situation might be a strategy but only to the extent that one could be somewhere else. For example, if speaking English is a job require-

ment, then it might be best considered as a property of the situation rather than a language learning strategy because the individual cannot avoid speaking English as long as he/she is employed.

An alternate definition for language learning strategies that captures these properties might be *the actions chosen by language students that are intended to facilitate language acquisition and communication*. This definition focuses on the deliberate actions of the language student and examines his/her intentions. Even if the action is ineffective, as long as it was intended to aid language learning, it can be considered a strategy. The definition excludes the possibility that students may be unaware of their strategy use. The definition also excludes situational and learner characteristics; they have a place elsewhere in the system.

A Model of Strategy Use

As mentioned above, language learning strategies are part of an elaborate system. Certainly, strategies have an important place, but their role should be understood as part of the larger scheme. To complete the model, one must consider anxiety, cognitive style, self-esteem, attitudes, and motivation in conjunction with the demands of the situation. Based on the literature reviewed above, it would appear that at least four conditions must be met before language learning strategies can be employed:

1) Students must be aware of the appropriate strategy or a range of strategies. Some strategies are used frequently, such as note-taking in class or repeating words to remember them. Other strategies must be taught, such as the Keyword method or deep breathing exercises for relaxation. Nevertheless, according to the definition of strategy offered in this paper, a strategy must be intentional and freely chosen. Thus, a student must be aware of the strategy before it can be used.

2) There must be sufficient impetus to use a strategy. This would include having a positive attitude about it, being sufficiently motivated, having an appropriate opportunity,

etc., to use a given strategy. If students are aware of a strategy and have a reason to use it, it is likely that they will do so unless something prevents it.

3) Students should not have reason *not* to use a strategy. If the student expects that the strategy will be ineffective, has anxiety about using it, or experiences sanctions against its use, then the strategy likely will not be used, regardless of how effective it might be. For example, taking notes into the exam room would be an effective strategy but may generate severe penalties from the instructor.

4) Strategy use should be reinforced by positive consequences. If a strategy is attempted and positive reinforcement is not forthcoming, then the probability of that strategy being repeated will diminish. If, however, a strategy is employed that facilitates learning or communication, then that strategy will stand a better chance of continuing to be employed. The rewards present for a strategy will depend on both the situation and stage of learning. Use of inefficient or ineffective strategies may continue in the absence of improved learning or communication because use of the strategy produces other rewards (e.g., reduces anxiety) or because the student is unaware of an alternative strategy that might be used.

Figure 1 *(see page 192)* demonstrates the use of strategies within this social psychological system. Let us assume that strategy use is the response to a communicative demand imposed on the student (e.g., responding to a question) or a goal that he/she wishes to achieve (e.g., learning a list of vocabulary items). In order to employ a strategy, the student must be aware of one or more strategies that could be considered appropriate to the situation. Awareness comes primarily from teachers, other students, and transfer of prior experience. In addition, as discussed above, the range of potentially appropriate strategies will be partially dependent on cognitive variables such as the student's level of proficiency, aptitude, cognitive style, and intelligence (Gardner and MacIntyre 1993, 1992).

Before a strategy is used, however, the student must have sufficient motivation to use the strategy and not have significant apprehension about its use. These two decisions are represented in the model and may depend on several affective factors, including attitudes toward the learning situation, desire to learn the language, motivation, language anxiety, attitudes toward the other language group, communication apprehension, self-confidence, and other factors (Clément 1987; Gardner 1985; Horwitz and Young 1991). Should there be a lack of motivation for the use of a strategy or sufficient apprehension about its use, that strategy likely will not be used. Continuation in the model then depends on the awareness of another appropriate strategy.

If there is reason to use a strategy and nothing to prevent its use, then the consequences of the strategy will influence its future use. When the communicative demand is met or the goal achieved, the student may gain proficiency, motivation to continue the use of the strategy will increase, apprehension about that strategy will diminish, and the student will likely continue to use it. Successful use of strategies may improve proficiency and generate new communicative demands and higher goals for the language student.

If the strategy is employed and the goal is not met, then self-perceived proficiency and motivation to use the strategy likely will diminish, anxiety may increase, and, given a choice, the student will not be as disposed to use that strategy again. If the situation involves ongoing communication, then a new communicative demand may arise as a result of failed strategy use. Thus, the relative success of a strategy will affect its use in the future, especially if the student is aware of other options.

Let us apply this model to a student of French who wants to improve her ability to understand native speakers. She is aware of three strategies that might be appropriate:

1) Become involved in an immersion class at a local school.

2) Purchase prerecorded instructional tapes.

3) Listen to French media (radio, TV, etc.).

The student believes that the immersion class would be a good approach, she has a

Figure 1

Social Psychological Influences on Strategy Use
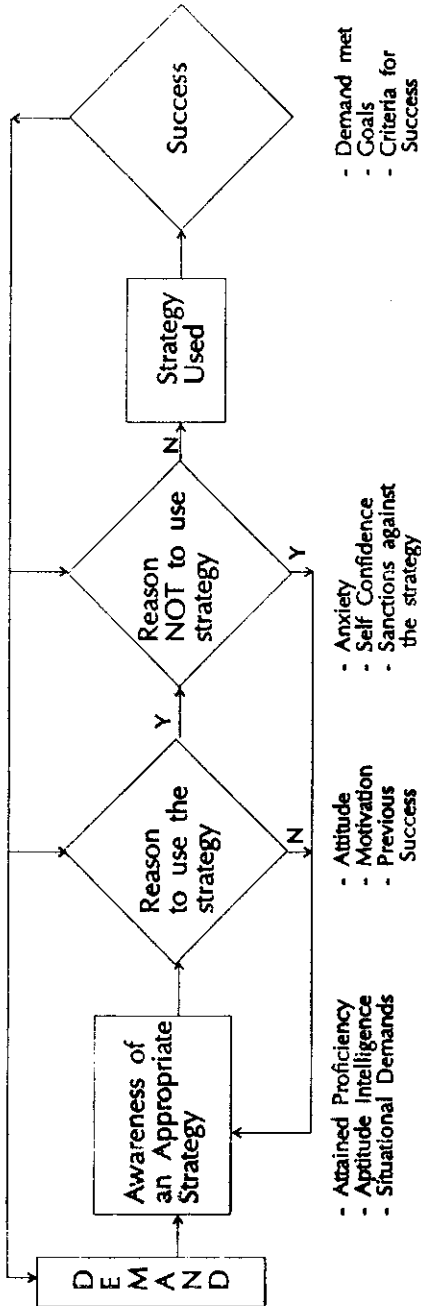
positive attitude about it, feels motivated to sign up, but becomes so anxious in the presence of others that she decides not to enroll. Our student does not feel anxious about using the prerecorded tapes, but she does feel that they are artificial and repetitive and therefore lacks the motivation to use the tapes. Finally, she decides to listen to French news broadcasts on television for a half-hour every night. This does not arouse anxiety, and she has a positive attitude about learning vocabulary and proper grammar in the context of authentic French communication. If the strategy fails, her motivation to employ that strategy in the future may diminish, she may become apprehensive, and/or her attitude toward French may be negatively influenced. If the strategy is successful, our student might have less anxiety about her comprehension skills, develop positive attitudes about communicating in French, and may be motivated to watch other programs as well. It is also important to note that, if successful, she will make gains in proficiency that will allow her to both expand on this strategy and employ a wider range of strategies in the future.

The model may be used to make specific predictions concerning the interrelations of the variables. For example, the model specifies that strategy choice is primarily dependent on the communicative demand or goal that the student wishes to meet. The demand generates awareness of appropriate strategies; however, there are a number of intervening steps before any one of those strategies can be employed. The model allows for strategy use to be context-dependent, because awareness of a given strategy may arise in one situation and not another. Therefore, transfer of strategies from one context to another is not guaranteed but increases in likelihood if two situations are similar. The model further indicates that students who are motivated to use a strategy may fail to do so because of interference from another variable, such as anxiety. The model also indicates that future strategy use depends on the consequences or outcomes of prior strategy use and that the judgment of success in meeting the communica-

tive demand will be a key predictor of the continued use of a given strategy. Finally, a student may repeatedly use an ineffective strategy if no other options are known, if other strategies do not pass through the two decision points in the model, or if that strategy causes a positive reaction at another point in the model (such as reducing anxiety).

This model may have implications for the potential success of strategy training as well. For example, a language teacher may want to encourage a student to infer word meanings rather than consulting a dictionary. The model presented here specifies that the inferencing strategy must be compatible with the student's current levels of knowledge, motivation, anxiety, self-confidence, and previous experience with the use of that strategy, among other factors. If the student lacks the readiness to employ the strategy, the training program may appear to be unsuccessful when, in fact, the program simply does not match the student.

Conclusion

Language learning strategies are emerging as an important consideration in language learning and teaching. Within the broad social psychological system discussed in this paper, strategies can be seen as actions chosen to facilitate language learning or communication. The possibility that strategies may be taught provides an encouraging avenue to those for whom second language learning is unduly difficult. It must be recognized, however, that language learning strategies are part of a larger system and their use and effectiveness will depend on several other learner variables.

NOTES

[2] For a complete discussion of sex differences, see Maccoby and Jacklin 1974.

[3] Cognitive psychologists have described levels

of processing ranging from shallow to deep (Craik and Lockhart 1972). In this case, deeper processing involves greater integration and assimilation of new information into existing knowledge structures by more fully considering its implications. Shallow processing would simply involve "parroting" the correction with little effort.

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