

# On the Importance of Imitation and Repetition in Foreign Language Learning

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## Abstract

In this article, imitation and repetition of exemplars of the target foreign language usage is argued to be essential in learning the language. Firstly, it is claimed that procedural knowledge of the language rather than its declarative knowledge is the target of learning and that the learning of the former consists of establishing form-meaning connections of the language. It is also claimed that procedural knowledge of the target language is best learned through the learning of exemplars of the language usage as instances demonstrating form-meaning connections of the language. The arguments here are based on two recent theories relevant to language learning: ACT-R by Anderson (1993) and Usage-Based Model by Tomasello (2003). Secondly, it is argued that in input-poor learning environments declarative knowledge of the language can be a facilitator of the learning of the target procedural knowledge because it can assist learners to identify the connections between form and meaning. Thirdly, it is claimed that imitation and repetition play a crucial role respectively in establishing form-meaning connections of the language. Finally, it is pointed out that the notorious technique of old pattern practice can and must be reconceptualized as a cognitive type of practice promoting the learning of the connections.

## 1. Declarative and Procedural Knowledge of Language

It is generally accepted that there are two different kinds of language knowledge: declarative and procedural knowledge. The former is the type of factual knowledge about language and it is usually conscious or explicit.<sup>1</sup> In contrast, the latter is the type of performative knowledge which is the direct source for application in the use of language and so it is most typically subconscious or implicit. It is claimed that it is very difficult and time consuming as well to employ the former type of knowledge in language use, especially in oral spontaneous use.

It is very often the case that foreign language learners have declarative knowledge of the

language without having its procedural knowledge. This is probably because these learners usually receive formal instruction of the language and, as a consequence of it, they have conscious declarative knowledge of formal rules of the language, but they do not have sufficient opportunities for developing procedural knowledge of the language. This may explain, at least partly, the general situation most of them find themselves to be in: while they have the knowledge of the language, they cannot engage even in a rudimental conversation in the language. The problem with them is simple and plain: they do not have the necessary knowledge of the target language for its spontaneous use, that is, procedural knowledge of the language.

## **2. Development of Procedural Knowledge of Language**

Anderson (1993), who is the originator of the distinction between declarative and procedural knowledge, states that procedural knowledge which is composed of production rules is formed through the process of production compilation. According to him, this is the process of establishing connections between antecedents and consequences. In the case of language, antecedents are meanings intended to be conveyed and consequences are their realization as linguistic forms in production, on the one hand, and in comprehension, on the other, they are reversed, that is, linguistic forms are antecedents and meanings to be extracted from them are consequences. Production compilation in language learning is, therefore, the process of establishing form-meaning connections in both directions.

Importantly, in his ACR-R theory, Anderson (1993: 294) claims that “productions rules are created” by learners initially by finding and experiencing the connections between antecedents and consequences in individual exemplars as instances of these connections, and then by generalizing them through repeated experience with more exemplars.

Applying the exemplar-based view of production compilation to language learning, it can be claimed that production rules of a language are exemplified in exemplars of the language use and that language learners can find and experience the rules in these exemplars individually item by item and, as a result of repeated experience with more exemplars, they can generalize them as abstract rules and learn them as such. Or more precisely, it is only through experiencing the connections between form and meaning in exemplars of use of a language that language learners can learn productions rules of the language. It is also necessary to recognize the importance of repeated experience with more exemplars in generalizing these production rules.

A similar idea of language learning has been proposed in Usage-Based Model (UBM henceforth) by Tomasello (2003).<sup>2</sup> Basically this model claims that language constructions (note that this model employs the term constructions instead of linguistic rules claiming that

people do not have such rules but constructions as patterns) are learned initially as item-based constructions in individual exemplars and that they are generalized as abstract linguistic constructions by accumulating similar items and finding common patterns in them.

It is also claimed in UBM that frequency in two different meanings is crucial in the process of learning: token frequency and type frequency. While token frequency (how often the same exemplars with particular constructions appear in the input) contributes to the entrenchment of item-based constructions, type frequency (how often different exemplars with the same particular constructions appear in the input) is of service to the abstraction of these constructions.

An emphasis should be placed here on the fact that constructions in UBM are, in fact, actualized through the process of linguistic realization of meanings which is governed by productions rules connecting form with meaning in Anderson's term. Thus the learning of constructions of the target language can also be seen as the process of establishing form-meaning connections of the language.

Common to ACT-R theory and UBM are the ideas that learners start the learning of the target knowledge with item-based learning of exemplars and that they generalize and abstract the knowledge through accumulating similar exemplars and finding common features among them.

### **3. Language Learning in Foreign Language Learning Environments**

UBM is a model for first language learning and ACT-R is also pertinent to first language learning. It should be stressed, however, that these views of language learning are applicable in foreign/second language learning as well, since there seems to be no other way of learning procedural knowledge of the target language as production rules or constructions than experiencing the connections between form and meaning of the language based on exemplars initially as individual items (token frequency) and then by accumulating them for abstraction to take place (type frequency). Procedural knowledge of language is dynamic in nature and, therefore, is not something to be described in words: they are learnable only through experiencing the form-meaning connections by learners themselves.

Care must be taken, however, to the situational difference of learning between natural first and second language learning and foreign language learning. Natural situations are input-rich, but foreign language situations are input-poor. In input-rich situations, learners have abundant opportunities of learning both in terms of token and type frequency. It is not the case, however, in foreign language learning. Some kind of active measures, therefore, must be taken in foreign language learning to enrich the input and increase the frequency of exemplar learning both as token and type.

#### **4. Weak Interface Position in Foreign Language Learning**

Concerning the developmental relationship between declarative knowledge and procedural knowledge of language, there are three different theoretical positions: Non-interface Position, Strong Interface position, and Weak Interface Position. Non-interface Position insists that these two types of knowledge are mutually independent developmentally (Krashen 1982). Strong Interface Position contends that declarative knowledge somehow converts directly into procedural knowledge (Stevick 1980, Bialystok 1981, McLaughlin 1978). In contrast, Weak Interface Position claims that while declarative knowledge itself does not turn into procedural knowledge, it can indirectly assist the learning of procedural knowledge as a facilitator of learning (Seliger 1979).

As Ellis (1997: 114) points out, while both Non-interface Position and Strong Interface Position are doubtful, Weak Interface Position is tenable. It is in this perspective of Weak Interface Position that the current topics of consciousness-raising (CR) (Sharwood Smith 1991), noticing (Schmidt 1990), and thus the role of formal instruction, should be discussed and interpreted. Firstly, CR is defined as a deliberate attempt to raise learners' consciousness on formal properties of the target language with a view to facilitating the development of the target language knowledge or procedural knowledge of the language (Sharwood Smith 1991: 118). Note that CR to formal properties entails finding their connections to the meanings they embody. Secondly, Noticing hypothesis claims that a second language learner will begin to learn the targetlike form if and only if it is present in comprehended input and noticed in the normal sense of the word, that is, consciously (Schmidt and Frota 1986: 311). In this case also, connecting the form with its meaning is assumed since, as is clearly stated, the form is noticed in comprehended input.

The argument above makes the point clear that declarative knowledge of the target language learned as a result of having formal instruction of any kind is helpful and necessary in input-poor learning environments. This is because in order for learners in these environments to successfully find and experience the connections between form and meaning as efficiently as possible, they need to know the forms or formal properties of the language beforehand. Actually, it takes much time for learners in general to find formal features if they are left on their own as is the case in natural learning. CR is an attempt to reduce the time needed for identifying formal features as much as possible. It should be remembered that CR is said to be a shortcut to learning (Sharwood Smith 1991).

In connection with this, it might be noteworthy that "a pure meaning-focused approach to foreign language teaching is misguided, but there are many possible ways to combine exposure to input and communicative practice with a focus on form and consciousness raising" (Schmidt 1995: 47-48).

## **5. Imitation and Repetition in Foreign Language Learning**

Foreign language learners at beginning stages in particular need to intensively experience exemplars of the target language usage in order to learn procedural knowledge of the language which is composed of production rules connecting form with meaning with the help of declarative knowledge of the language. This issue is concerned with how to raise the frequency of experience with exemplars not only as token but also as type and it is here that imitation and repetition become crucial.

Both the terms of imitation and repetition, however, have an unhappy history in foreign language learning and teaching. These terms have been associated with a behaviorist view of language learning and thus it is asserted that they cannot successfully explain the process of language learning.

In spite of this simplistic and mechanical interpretation of imitation and repetition, these two processes, in fact, can be quite complex and active when they are seen from the perspective of connecting form with meaning in language learning. Speidel & Nelson (1989: 4), for example, observe that "... far from being simple, imitation is the result of many transformations of energy and activation of many neural patterns. It is the result of new incoming formation meshing with information already in memory." Imitation conceived of in this way is not a parrotlike response to a model but an active attempt on the part of learners to experience the process of linguistic realization of specific meanings once more. In other words, this is an opportunity for experiencing the encoding process anew by learners themselves.

Thus a distinction must be made carefully between two different types of imitation: the type of rote imitation and the type of encoding imitation. The former is a parrotlike response and the latter an active self-confirmation of the process of encoding. The denial of the former as a driving force of learning must not exclude the potential accelerating role of the latter.

Repetition can also be divided in two different types: repetition of the same identical utterance and repetition of different types of utterances having the same form-meaning connection. Even in the former, it can be quite active in that it is the process of repetitive experience of the encoding process of the utterance each time anew. This undoubtedly contributes to entrenching the encoding process as UBM proposes to be the function of token frequency.

Repetition in the latter serves the role of abstracting particular form-meaning connections. For example, by repeating "The boy is running," "The girl is swimming," "They are doing sports," and so on, learners can experience the connection between the progressive form with its corresponding progressive meaning individually and thus can generalize the connection. This mechanism clearly corresponds to the role of type frequency in UBM.

To sum up. In spite of the unhappy association with a behaviorist and mechanical view of language learning, imitation and repetition can be seen to be quite active in that they are opportunities for the learner to experience connecting form with meaning. Thus it can be claimed that they are indispensable in language learning, especially so in foreign language learning. Note that prior declarative knowledge of form is helpful in imitation and repetition.

## **6. Old Pattern Practice**

The discussions so far might remind us of pattern practice prevalent in the 1950s and 1960s. This notorious way of practice was condemned to be theoretically unwarranted and practically quite unsuccessful. Although careful reading of the rationale of pattern practice reveals a sound reasoning as in “Pattern practice capitalizes on the mind’s capacity to perceive identity of structure where there is difference in content and its quickness to learn by analogy.” (Brooks 1964: 146) and in spite of the fact that some learners did succeed with this practice, it resulted in a general failure.

With hindsight, several problems can be pointed out with pattern practice. First it was based on a mechanistic view of behaviorist psychology in which learners were not considered to be active agents of learning and it was claimed that learning was determined by environmental factors only. Second, learners were expected to pay attention only to the meanings of cues given to them at the expense of recognizing the connections between form and meaning as is clear in the following quotation: “Pattern practice is rapid oral drill on problem patterns with attention on something other than the problem itself.” (Lado 1964: 105). Thirdly, pattern practice was limited to oral production only and rejected the possibility of practice through comprehension. Fourthly, pattern practice required learners to make oral responses as quickly as possible in the hope that their responses could become habitual and automatic.

Because of all these problems, as easily can be expected, pattern practice resulted in a rather mechanistic and meaningless and therefore fruitless way of practice.

## **7. Cognitive Pattern Practice**

Before going into the discussion of a new interpretation of pattern practice as a technique for promoting learners’ learning of form-meaning connections both in terms of their entrenchment and abstraction, it might be interesting to refer to an insightful discussion on the relationship between “habit” and “rule.” In his long neglected article, Carroll (1971), rejecting the behaviorist interpretation of “habit” by Chomsky (1959), claims that the notion of “habit” is not incompatible with the notion of “rules” by stating as follows:

... I would emphasize that the notion of “habit” is much more fundamental, psychologically, than the notion of “rules.” A “rule” is simply a formal, usually, *verbal*, statement of the conditions under which something is expected to occur or not to occur, usually under certain sanctions. As such it is an abstraction or a construct in some sense independent of actual behavior. We are familiar with the fact that people can speak a language without any conscious knowledge or application of the “rules” that are said to underlie their language. A “habit” however, is a real thing that somehow resided in a person. It is *what he has learned*. As language teachers we are trying to produce and change certain kinds of habits. If psychology has anything to say to language teachers, it will say it about “habits,” not about “rules,” except possibly as second-order phenomena. You may look to linguistics for information about “rules.” (103-4)

According to Carroll (1971), a habit is defined as any learned disposition to perceive, behave, or perform in a certain manner under specified circumstances. It is undoubtedly the case that a habit is formed through repeated experience with the same pattern. It should be noted, however, that a pattern in pattern practice refers to a structural pattern. It should also be remembered that a structural pattern is conceivable only in conjunction with the meaning the pattern embodies. Thus, the process of pattern finding involves the process of identifying form-meaning connections in exemplar sentences. In addition to this, common meaning-form connections must be identified and generalized by experiencing exemplars with different sentence meanings. Using the same examples cited earlier in this article, in experiencing “The boy is running,” “The girl is swimming,” “They are doing sports,” and so on, each of which has a different sentence meaning, learners are involved in the task to find the common form-meaning connection in them: the connection between the present progressive form and the present progressive meaning. Note that the process of pattern finding and its generalization is the very process of habit formation in that form-meaning connections are established.

The process of habit formation is, therefore, far from mechanical and meaningless: it is cognitive and meaningful in nature involving identification of particular form-meaning connections and their establishment as general patterns of connections.

It must be stressed that identification of particular form-meaning connections, their abstraction as patterns, and thus making them habits are all done based on exemplars. In this sense, exemplars of language usage are a *sine qua non* for language learning: no language learning can occur without experiencing exemplars of language usage. When an exemplar of a specific form-meaning connection is experienced by the learner as an item demonstrating the connection, it can lead to his or her identification of the connection. When the same exemplar is experienced repeatedly either receptively or productively by the learner, it may result in the entrenchment of that connection by the learner. And when different types of exemplars

embodying the same form-meaning connection are experienced by the learner, it will contribute to its abstraction as a pattern, that is, a habit.

To sum up so far. Language learning consists in exemplar learning. Exemplars provide the learner with the key to language learning in several important ways at least: identification of specific form-meaning connections, entrenchment of these connections, and their generalization. The first identification is done as item learning of the exemplar. The second entrenchment is attained by experiencing the same exemplar repeatedly (token frequency). The third generalization is completed through experiencing different types of the exemplar (type frequency). By going through these steps, learners can succeed in the learning of procedural knowledge of the target language, that is, production rules connecting form with meaning or constructions of the language. It goes without saying that imitation and repetition are essential in these steps of learning.

Old pattern practice can, therefore, be reconceptualized in this new perspective as a type of practice for promoting the learning involving identification of form-meaning connections of the target language, their entrenchment, and their generalization. Pattern practice in this new guise can be called cognitive pattern practice. It has the following characteristics:

1. It is cognitive rather than mechanical.
2. Learners' attention is paid both to form and meaning rather than on cues alone.
3. Learners can imitate and repeat exemplars at their own pace.
4. Imitation and repetition can be both receptive and productive.

There seems to be no need to elaborate more on the first two characteristics above. The aim of cognitive pattern practice is on the establishment of form-meaning connections of the target language. Automaticity in executing the connections is not the aim of practice; it is a result of practice. Learners can, therefore, practice at their own pace devoting to the task of establishing form-meaning connections.

Imitation can be both over and covert. It is not essential to imitate overtly for the establishment of form-meaning connections. Repetition can also be both receptive and productive. The idea of input processing by VanPatten and Cadierno (1993) corresponds to receptive repetition of different types of exemplars having the same meaning-form connection as in the following definition: Input processing "involves those strategies and mechanisms that promote form-meaning connections during comprehension" (VanPatten and Cadierno 1993: 226).

As VanPatten, Williams, & Rott (2004: 4) claims, the establishment of form-meaning connections is a fundamental aspect of both first and second language acquisition. As is also claimed by them, a form-meaning connection must go through each of the following



processes in order to be fully learned: making the initial connection, subsequent processing of the connection, and accessing the connection for use. These are really essential processes of language learning, and imitation and repetition can play a decisive role respectively in these processes which pattern practice in a new cognitive interpretation can accommodate.

## 8. Conclusions

The followings can be stated as conclusions of this article. Procedural knowledge of the target language consists of productions rules of the language connecting form with meaning or knowledge of constructions embodying their respective meanings. The learning of the target language procedural knowledge is establishing its form-meaning connections and it is done based on the learning of exemplars exemplifying specific form-meaning connections. It is stressed that imitation and repetition are crucial in the process of learning. Old pattern practice can be reconceptualized as a cognitive type of practice seen from the perspective of establishing form-meaning connections of the target language.

### Notes

1. The status of consciousness of declarative knowledge is different in ACT\* model and ACT-R model by Anderson, originator of the declarative-procedural distinction. While procedural knowledge is defined to be conscious in ACT\* (Anderson 1983), it can be subconscious in ACT-R (Anderson 1993). Subconscious declarative knowledge consists of “declarative memory for examples of how the procedures should be executed” (Anderson & Fincham 1994: 1322). The claim that declarative knowledge can be subconscious does not deny the existence of conscious declarative knowledge. Importantly, however, subconscious declarative knowledge is a stepping stone for developing procedural knowledge just as conscious declarative knowledge is.

2. Usage-Based Model claims that language structure emerges from actual language use or usage and that it is of no use to presuppose any kind of innate faculty for the learning of language structure.

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