

Input and Input Enhancement

Before discussing the different input enhancement techniques in this book and how they may be used to enhance SLA, it is first important to understand what input is and the role it plays in SLA. What is input? You have already seen this term used in the first two chapters. We will now discuss this concept in detail.

WHAT IS INPUT?

In the context of language acquisition, **input** refers to samples of language that learners are exposed to in a communicative context or setting. It is language that has some kind of communicative intent, that is to say, that there is a message to be communicated in the utterance so that the receiver of the message has a reason for attending to it. Researchers such as Schwartz call this type of meaning-bearing input **primary linguistic data** (Schwartz, 1993). **Input** or **primary linguistic data** is language that contains instances or exemplars of various grammatical forms and other linguistic information in the language environment of the language acquirer (Schwartz, 1993).

In the context of L1 acquisition, children are bombarded by input in their environment. "Do you want a drink of water? Don't forget to wash before dinner. Make sure you eat all your vegetables." These are all examples of input that a child may hear. People learning an L2 also receive input. Immigrants and language learners studying abroad, for example, are surrounded by L2 input as they go about their daily routines. At the bank, they may hear, "Could you please fill out this deposit slip." At the supermarket, they may be asked "Do you prefer paper or plastic?" by the person bagging groceries. Input may also be written. Billboards along the highway and advertisements or signs on a bus all constitute sources of input.

L2 learners in a foreign-language-learning context also get input. When learners hear "Please open your books to page 78" or "Please get into groups of three" in the target language, they are receiving input. Other sources of input may come from watching a film, listening to a song, looking at advertisements

or magazines and interacting with the instructor and other students in the L2. These examples illustrate that language learners may get input from an endless variety of sources. What is common to all these examples is that the language they hear or read contains a message that has to be comprehended. Input, then, is necessarily meaning-bearing for it communicates some kind of message. When a language learner hears "Paper or plastic?", someone is communicating something. When a language learner sees a sign that reads "Bathroom Out of Order", a message is also communicated. The learner's job is to receive and understand these messages.

Another characteristic of input that is important for language acquisition is that it must also somehow be **comprehensible**. If input involves the communication of a message, the learner must somehow be able to extract the meaning of the message. This does not mean that learners need to understand every word of the message but they should be able to make sense of the message in some way. Input that is completely incomprehensible will not be of much use to learners.

Interactional and Non-Interactional Input

Ellis (1994) makes a distinction between two types of input for acquisition: interactional and noninteractional input. **Interactional input** is input that is received in the context of interaction where there is some kind of communicative exchange involving the learner and at least one other person. A learner may be conversing with a native speaker, another learner or an instructor. Playing games, conversations with friends and family and classroom interactions all constitute examples of interactional input. **Non-interactional input**, on the other hand, occurs in the context of non-reciprocal discourse (Ellis, 1994). Learners in this case are not part of the interaction. Listening to announcements on the subway, watching television, listening to the radio or attending class lectures are all examples of non-interactional input.

Both interactional and non-interactional language can provide rich sources of input for language learners. However, in the case of interactional input, learners have the added advantage of being able to negotiate meaning, that is to say, they can let their interlocutors know if they do not understand what is said and ask for clarification. This renders the input more comprehensible and more accessible for acquisition. This is one of the reasons why interaction is also considered to be important for SLA (Gass, 1997).

Pause to consider . . .

incomprehensible input. Can you remember situations where the L2 input that you heard was not comprehensible? What factors contributed to making the input difficult to comprehend?

What Input Is NOT

In order to better understand the nature of input, it is helpful to also know what input is *not*. Input is meaning-bearing language that learners hear or see. It is

not language that learners produce. Language that is produced is called **output**. Of course, if someone is producing meaning-bearing language, that person's output could become input for someone else.

Explicit information about language is also not input for acquisition. Pedagogical grammar rules and explanations about grammar points are not input because they do not constitute meaning-bearing language in the sense that there is a communicative message the learner is supposed to attend to. *Il faut manger votre repas lentement* (You must eat your meal slowly) said by a teacher to a student in the cafeteria is meaning-bearing input for acquisition because there is a message being communicated here. "Adverbs in French are formed by adding *-ment* to adjectives that end in an *-e*" is not input for acquisition.

Now what if the explicit information were given in the target language? Would that be input? When instructors are explaining the rules for a particular grammatical form in the L2, they are communicating a message to students and in that sense, we can say that meaning-bearing input is involved. However, this explicit information is qualitatively different from the kind of primary linguistic data that is essential for creating a new implicit linguistic system. For example, let's say an instructor wants ESL (English as a Second Language) students to learn past tense formation in English. The explicit information provided to students in English (the L2 in this case) may be something like the following: "To form the past tense in English, you need to add *-ed* to regular verbs." A message is being communicated here in the target language but notice that this utterance does not contain *input* in the past tense. In other words, this utterance does not contain instances or examples of the past tense being used. Learners are learning information about how the past tense is formed but they are not necessarily getting input that contains uses of the past tense. The explicit information only speaks about the past tense as a topic. Thus, unless the instructor is also using the target structure (the past tense in this case) while giving the explanation, it is not linguistic input with regard to that structure.¹ In this book, I use the term **input** to refer to primary linguistic data that contain exemplars of particular target linguistic information used in a communicative context.

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the nature of input. Which of the following examples is an example of input for acquisition as used in this book?

1. My brother loves animals. He has many pets. He has three birds, two cats, two dogs and three turtles. He is thinking of buying two ferrets next week.
2. To make a noun plural in English, you must add an *-s* to the end of the noun.

How are these two examples different from each other?

I would like to clarify that I do not mean to say that information about language cannot be useful for language acquisition (a point we will discuss in greater detail in subsequent sections). The point I want to make is that explicit information about language does not represent the kind of primary linguistic

data that learners need to construct an implicit linguistic system. Without such data, instruction is pointless.

What Is the Role of Input in SLA?

We have already discussed that SLA is a complex process that involves the creation of an implicit (unconscious) linguistic system. Input provides the linguistic data that a developing linguistic system needs in order for acquisition to be possible. When learners receive input, they are feeding their developing linguistic system the data it needs to start the process of acquisition. Without input, successful language acquisition cannot happen. All scholars in SLA are in agreement that input is fundamental to language acquisition. Here is what one scholar has to say: "The concept of input is perhaps the single most important concept of second language acquisition. It is trivial to point out that no individual can learn a second language without input of some sort" (Gass, 1997, p. 1). There are no cases of successful learners who have not been exposed to lots of input. Learners who have mastered their L2 usually read a lot in the L2, listen to music and watch TV in the L2, have friends who speak the L2, and so on. Input is like fuel for a car or a plane. Without fuel, these machines cannot run. Without input, there can be no successful language acquisition.

How Do Learners Get Linguistic Data from Input?

As discussed earlier, learners are exposed to input whenever they hear or see language that contains a message to be communicated. Thus, the amount of input they are exposed to could be vast. Unfortunately, all the input that learners are exposed to is not necessarily viable for acquisition. Because it is not possible to pay attention to everything in the environment, learners cannot take in all the input that they are exposed to. Input, then, is somehow filtered by the internal mechanisms of learners. How does this happen?

Many scholars in SLA agree that in order for input to be usable for acquisition, it must be *noticed* or attended to in some way (e.g., Gass, 1997; VanPatten, 1996; Wong & Simard, 2001). What do we mean by "attending" to input? Currently, SLA researchers are not all in agreement as to what attending to input entails. Schmidt (1990, 1993, 1995, 2001) postulates that only features of input that have been consciously noticed by learners are usable for acquisition. Other researchers say that input must be "detected" but that this detection does not have to involve conscious awareness (Tomlin & Villa, 1994). Because it is quite tricky to measure the construct of awareness in experimental research, it has been difficult to find empirical support for either position. Nevertheless, regardless of the position researchers may take regarding the issue of awareness, there is a general consensus along with support from SLA research that some form of attention to input is necessary in order for input to be usable for SLA (Wong, 2001). Research has shown that in some cases, greater degrees of attention (which may or may not involve awareness) may lead to more learning (e.g., Huot, 1995; Leow, 1998; Rosa & O'Neill, 1999). In this book, when we say that input must be noticed, we mean that the learner has paid attention to it. This attention may or may not involve conscious awareness. In the next section, we will see what happens to L2 input once it does get noticed.

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the construct of awareness in SLA research. Why do you suppose it is so difficult to measure the construct of awareness in experimental research?

VanPatten's (1996) Model of SLA

We mentioned earlier that SLA involves at least three sets of processes. These processes are depicted in Figure 3.1.

In this model of SLA by VanPatten, when learners attend to or notice input and comprehend the message, a **form-meaning connection** is made. **Form**, used in this sense, refers to surface features of language such as verbal and nominal morphology and functional items of language like prepositions, articles and pronouns (VanPatten, 1996). "Form" could also be used at the word level to refer to word form (Barcroft, 2000). For example, all words have form and a referent. In the word *boy*, the form of the word is the letters *b-o-y*. The referent is the meaning of the word, that is to say, "a young human being who is male." **Meaning**, therefore, refers to referential real-world meaning. A **form-meaning connection** is the relationship between referential meaning and the way it is encoded linguistically. When L2 learners hear the word *boy* and understands that it means a young male that has not yet reached adulthood, a form-meaning connection is made. When learners hear *I talked to my professor* and understand that *talked* means that the action is in

the past, or if they hear *Sylvie regardera un film* (Sylvie will watch a film) and understand that *regardera* refers to the future, another form-meaning connection is made.

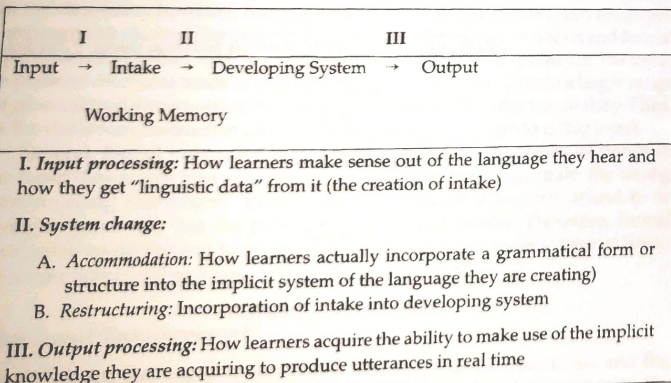
It is important to point out here that in order to make form-meaning connections, it is not enough that learners just notice the form. Noticing a form is a start but in order to make form-meaning connections, they also need to comprehend the meaning that the form encodes. For example, a learner of French may notice the plural marker *-aux* of the noun *hôpitaux* in the sentence *Les hôpitaux dans mon quartier sont excellents* (The hospitals in my neighborhood are excellent), but not understand that *-aux* encodes the meaning of plurality. In this case, we say that the learner has noticed the form but has not made a form-meaning connection. Of course with subsequent exposure to and noticing of the form over time, the learner may eventually also comprehend the meaning of the form and make a form-meaning connection. To reiterate, in order to make form-meaning connections, learners need to both *notice* the form and *comprehend* the meaning that the form encodes.

Form-meaning connections, also known as **intake**, have the potential to be internalized. The process in SLA that is involved in converting input into intake is called **input processing**. As you can see in Figure 3.1, acquisition begins with exposure to input. When learners attend to input and make form-meaning connections, that input becomes intake. Thus, only a subset of input becomes intake. This intake is held in working memory and has the potential to be internalized. When this happens, the developing linguistic system must make room for or accommodate this new linguistic data (i.e., through a form-meaning connection). Once a new form-meaning connection has been accommodated, the developing system changes and is restructured. The process that entails accommodation of intake data into the developing system and restructuring of that system is called **system change**. This process may be partial or incomplete. For reasons that we do not quite understand, some linguistic forms may be incorporated and some may not. Finally, linguistic data that have been incorporated into the developing system may be eventually accessed by the learner as output or production. This process is called **output processing**.

SLA, then, is directly dependent on intake and not on input since only intake data is usable for acquisition. The more intake that is created, the better acquisition will be. The model also shows that SLA is not dependent on output. Output is language that learners produce. Output is not possible unless there is good input and intake. Of course learners may be able to repeat verbatim what a teacher says or give answers to a mechanical drill without receiving any input, but the language that is produced here is not output in the sense that the learner is able to access language that has been internalized by their developing linguistic systems; it is mere repetition. Therefore, the richer the input in the learners' environment, the better the potential for intake.

Gass's (1997) Model of SLA

Gass (1997) proposed a model that includes three stages to account for the conversion of input to intake.



Based on Lee and VanPatten (2003) and VanPatten (2003).

FIGURE 3.1 Three sets of processes in second language acquisition

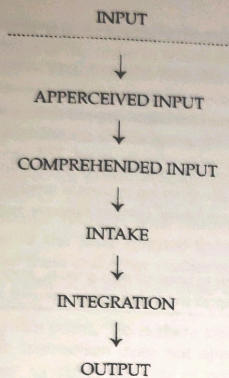


FIGURE 3.2 Model of second language acquisition by Gass (1997)

The dotted line underneath input serves to illustrate that input is filtered by the internal mechanisms of learners. Some language data will filter through, some will not. The first stage, **apperception**, entails that the learners must recognize that there is something out there to be learned. **Apperceived input** is input that has been noticed in some way by the learner and functions as a priming device that prepares the input for further analysis (Gass, 1997, p. 4). Like in VanPatten's model, Gass' model also shows that in order for apperceived input to become intake, input must be comprehended. Comprehension of input entails that the learner analyzes the input in some way to extract meaning. Gass (1997) offers consonant length in Italian as an example. In Italian, consonant length can serve to differentiate between different meanings of words: *capelli* (hair) versus *cappelli* (hats). The learner must first recognize this phenomenon, that is to say, that different consonant lengths in Italian can affect the meaning of words. This is the apperception stage. Comprehension kicks in and intake is created when the learner also recognizes the difference between *capelli* and *cappelli* and connects the concept "hair" to the form *capelli* and the concept "hats" to the form *cappelli*.

Learners Must Receive, Notice, and Comprehend Input

Both VanPatten's and Gass's models illustrate the necessity for learners to receive, comprehend, and notice input. Both models underscore the importance of comprehension in SLA and by extension, why input needs to be comprehensible. Input is fundamental for acquisition because it provides the data that is available for intake. However, if learners do not notice and comprehend the input, form-meaning connections or intake will not be created and that input will have little use for acquisition.

Is Exposure to Input Sufficient?

It should be clear by now that input is a crucial ingredient for language acquisition. As you may recall in Chapter 1, Krashen has gone as far as to posit that exposure to comprehensible input alone is sufficient for SLA. According to Krashen, if learners have access to an optimal amount of comprehensible input, then acquisition should just happen naturally. Pointing to research on developmental stages and acquisition orders, he claims that formal instruction has no use for acquisition.

Krashen is certainly correct to point out that SLA cannot take place without lots of comprehensible input. It is also true that people can and do learn L2s in the absence of any kind of formal instruction. Consider, for example, the diaries and records of Marco Polo and the missionaries who came to the New World (Wong & VanPatten, 2003). However, when efficiency and accuracy are at stake, learning an L2 via comprehensible input alone may not be the best option. Here are some reasons why.

First, as we saw in Chapter 1, input tends not to be as abundant as we would like in many L2 classrooms. Wing (1987) found that the average L2 instructor used the target language only about 50% of the time. Of that 50%, only about half of that language was actually communicative in nature. This means that in the average L2 classroom, only about 25% of teacher talk could be considered input for acquisition. Second, even when input may be abundant, such as is the case with learners in immersion programs, learners do not always notice or attend to certain features of input on their own. Recall from the previous section that in order for input to be usable for language acquisition, learners must attend to it in some way and make form-meaning connections. Research has also found that even when learners do attend to input, they may not always make the correct form-meaning connections (e.g., VanPatten & Cadierno, 1993; VanPatten & Wong, 2004). Spanish, for example, has flexible word order and does not always follow a subject-verb-object order. Therefore, it is not uncommon to find object-verb-subject word orders in Spanish. VanPatten and Cadierno (1993) found that L2 Spanish learners have a tendency to incorrectly think that the first noun they hear in utterances is always the agent (or person performing the action). Even though these learners paid attention to direct object pronouns, they were not making the correct form-meaning connection. What these examples suggest is that while input is a necessary ingredient for SLA, mere exposure to input may not be enough for many learning contexts. Sometimes input may need to be enhanced via some kind of formal instruction to help learners attend to it.

Does Instruction Make a Difference?

We need to keep two things in mind when addressing the potential effects of instruction. These are (a) the rate of acquisition and (b) the route of acquisition. **Rate of acquisition** refers to the speed in which learners acquire certain features of an L2. The order in which they do so is the **route of acquisition**. The research evidence for the existence of acquisitional orders and developmental stages suggests that instruction cannot alter the route of acquisition. As was discussed

earlier, research shows that learners acquire certain grammatical features in predictable orders regardless of the order in which they were formally taught in the classroom. After years of accumulated research in this area, most scholars in SLA are in agreement that formal instruction cannot change the order in which certain grammatical features are acquired (e.g., Ellis, 1989, 1994; Larsen-Freeman & Long, 1990; Lightbown, 1983; Long, 1988, etc.). Ellis (1994) found, for example, that classroom ESL learners who received formal instruction and practice in grammar displayed the same developmental stages as nonclassroom learners for the acquisition of English negation as well as other structures. Kaplan (1987) reported similar findings with learners of French in the United States for the acquisition of the *passé composé* (past tense) and the *imparfait* (imperfect) in French. What these and other studies suggest is that learners have internal mechanisms that guide SLA and that these mechanisms do not appear to be permeable to instruction.

You may be asking at this point, "So is there any point to teaching at all?" The answer is yes. While instruction does not appear to affect the order of acquisition, it does appear to affect the rate of acquisition. In other words, formal instruction may speed up the acquisition of certain features of an L2. Overall, research that compares classroom learning with naturalistic learning suggests that learners who have some kind of formal instruction learn certain features more quickly and as a result may go further down the path of acquisition (see Long, 1983, and Doughty, 2003, for reviews of research on the effects of instruction). Why is this?

First, classroom learners tend to be exposed to richer and more complex input than those in a lot of "naturalistic" environments such as those that immigrants tend to find themselves in. In many ethnic communities such as Chinatown in Chicago, L2 input tends to be limited to conversational language. In the classroom, however, learners tend to be exposed to both conversational language and planned discourse in the form of authentic written texts and formal speeches among other sources. As Lee and VanPatten (2003) point out, the input in planned discourse tends to be richer and more complex, contain a larger range of grammatical structures, more complex syntax and broader vocabulary. Thus, in the classroom, instructors can deliberately expose learners to richer input.

Second, formal instruction may heighten learners' awareness of things in the input they might miss otherwise or might get wrong (e.g., make the wrong form-meaning connection). Recall that only input that learners attend to or notice in some way has the potential to affect acquisition. Therefore, formal instruction could be used to make certain forms in input more salient so learners might notice and perhaps process them more quickly.

Why Input Enhancement?

The realization that input is not always abundant in L2 classrooms and the finding that learners do not always pay attention to what they need to in the input have prompted the language teaching profession to seek instructional techniques to make SLA better and more efficient. Input enhancement, a concept first introduced by Sharwood Smith, represents one viable option to do this. As you may recall from Chapter 1, Sharwood Smith defines **input enhancement** as

any pedagogical intervention that is used to make specific features of L2 input more salient as an effort to draw learners' attention to these features. Input enhancement is based on the undisputed position in SLA that comprehensible input is crucial to acquisition and the position that only input that learners attend to or notice in some way can have an impact on acquisition. Among the examples that Sharwood Smith offered as input enhancement techniques in his original discussion are input flood (see Chapter 4), typographically enhancing target linguistic features, and providing learners with metalinguistic rule explanations (1991, p. 119). The input enhancement techniques that this book focuses on are limited to those that draw on meaning-bearing primary linguistic data as their foundation for instruction. In other words, these techniques rely heavily on the provision of meaning-bearing input that contains exemplars of target forms. These techniques are input flood (Chapter 4), textual enhancement (Chapter 5), structured input (Chapter 6), and grammatical consciousness-raising tasks (Chapter 7).² While Sharwood Smith includes metalinguistic explanations as a form of input enhancement, this book does not treat this technique because it does not rely on primary linguistic data. This is not to say that I do not believe that such a technique can have value for SLA. I simply wish to point out that such a technique is fundamentally different from those that are input-based. I will discuss this in more detail in the next section.

What Can We Expect from Input Enhancement?

When examining these techniques, it is important to keep in mind that increasing the salience of input does not imply that the enhanced input will automatically become intake. Given the complex nature of SLA, it should be clear that instructors cannot control whether or not learners will process input correctly and efficiently, even when it is made salient. Sharwood Smith himself cautioned that while input enhancement is presumed to increase the chances that learners will attend to a target form, this does not mean that they will notice or internalize it. What these techniques *will* do is provide learners with supplementary doses of comprehensible input and boost the likelihood that they will notice what they need to in order to enhance the process of SLA.

We should also not expect learners to be able to immediately use the target forms accurately in production, even when they do notice forms. Remember that comprehension precedes production in SLA (Lightbown, 2000). Form-meaning connections need to be strengthened before they can be accessed for accurate production.

What about Explicit Information?

In the previous section, we saw that explicit information is not a pedagogical technique that relies on the provision of input in the sense that the input contains exemplars or uses of particular target forms. **Explicit information** is information about language, most often provided via pedagogical rules. Can explicit information have a positive impact on SLA?

First, it is important to keep in mind that instruction, no matter what form it may take, cannot alter the fundamental learning processes in SLA. With this

constraint in mind, we may then ask, "Can explicit information enhance SLA by speeding up the process of acquisition?" To the extent that explicit information may help learners notice things in the input, it may have the potential to enhance SLA. When we explicitly tell learners about a form via rules or other explanations, learners may be primed to notice the form when it appears in a piece of input. Thus, like other input enhancement techniques, explicit information may help learners notice the forms faster. VanPatten (2004) adds that in addition to noticing, explanations may help learners understand the relationship between form and meaning (or function) more quickly, leading to increased comprehension. VanPatten points out that this may be particularly useful in contexts where temporal reference is not clear and learners must rely on verb forms alone to get meaning:

... if I know that the past tense in a language is encoded with a stress shift from the stem of a verb to a final syllable and I know the shape of those final syllables, then I may be able to "comprehend" past tense more readily than if I didn't know this. To the extent that comprehension is a pre-requisite or part of acquisition (via some kind of input processing), any instruction that leads to increased comprehension may also lead to increased acquisition.

—VanPatten, 2004

Thus, viewed in this light, explicit information may be beneficial in some cases. This does not mean, however, that class time should be devoted to explaining the L2. We must not forget that in order for any instructional technique to be effective, it must be provided via meaningful and communicative contexts. More importantly perhaps is the fact that explicit information cannot be a substitute for meaning-bearing input (i.e., primary linguistic data). We cannot ignore the fact that learners need access to abundant amounts of comprehensible input in order for acquisition to happen. In other words, instruction in the absence of input cannot lead to acquisition. Again, I am using input here to mean language that contains communicative uses of the target form. The drawback of explicit information, of course, is that it does not necessarily provide learners with additional amounts of input. Additionally, when instructors devote class time to explaining language, they are taking time away from providing students with input. Thus, one danger of explicit information is that it may rob learners of opportunities for exposure to input. Based on my observations of new teachers, I suspect that one of the reasons why explicit information is sometimes viewed in a negative light is because those who use it tend to use it abundantly. I have seen instructors get so caught up in explaining things that very little class time is left over for any kind of meaningful language use. The trick then becomes one of how to incorporate explicit information (if the decision is made to use it) into a lesson without denying learners the things we know are essential to SLA, that is to say, input and communicative use of language. Therefore, explicit information may be beneficial to the extent that it may help learners notice and comprehend L2 input better and more rapidly. Explicit information can, however, be detrimental to SLA if it robs learners of opportunities to receive comprehensible input and to engage in meaningful interaction.

SUMMARY/CONCLUSION

In this chapter, the nature of acquisition and the role of input in SLA were discussed in order to provide a theoretically sound rationale for the use of input enhancement. Input enhancement is based on the position in SLA that acquisition is input dependent and that learners must attend to input. A distinction was made between techniques that are input-based or rely on primary linguistic data (i.e., those presented in this book), and those that do not, that is to say, explicit information. Explicit information may help learners notice certain forms in input faster but it does not necessarily provide learners with additional input that contains communicative uses of a target form. Thus, should instructors decide to use explicit information, they need to make sure that opportunities for students to receive input and to engage in communicative interaction are not compromised. Input-based techniques, on the other hand, rely on primary linguistic data as their foundation for instruction. Thus, in addition to drawing learners' attention to form, these techniques have the added advantage of providing learners with additional doses of input. In the next chapters, we will turn our attention to these individual input enhancement techniques.

CHAPTER NOTES

1. Many scholars would agree that explicit information, even when it does contain exemplars of the target form, would not be the most useful source of "input" for beginning learners since they tend to lack the linguistic ability to process this information in the L2. Advanced learners would benefit more from this type of "input."
2. See Doughty and Williams (1998) Chapter 10 for a more comprehensive list of different types of instructional interventions (i.e., focus-on-form techniques).

ENHANCE YOUR KNOWLEDGE

More on the Givens of SLA

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