# WHAT SORT OF INPUT IS NEEDED FOR INTAKE?\*

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In this paper, I first analyze Gass and Selinker's (1994) account of 'input' and 'intake'. I make 4 arguments: (1) without 'accessible input', 'frequency', 'prior knowledge', 'affect', 'attention' and 'negotiation' do not appear to be *sufficient* for 'comprehended input'; (2) 'prior knowledge' does not necessarily constitute the basis of comprehension in L2 learning; (3) 'comprehended input' does not have to be 'learner-controlled'; and (4) 'input' and 'intake' are not necessarily two fundamentally different phenomena. I then propose two concepts which I believe are essential for 'input' to become 'intake'. First, the learner needs to be provided with 'accessible input', which refers to "input in line with the learner's developmental stages or readiness"; and secondly, the learner needs to process and understand the 'input', hence "processed input", which calls for the activation of learner factors (e.g., attention, affect, prior knowledge), the help of external factors (e.g., input processing instruction, input enhancement), and the interaction of both factors (e.g., negotiation).

### I. INTRODUCTION

Much recent work in second language acquisition research has been concerned with the nature of linguistic input in L2 acquisition. Corder (1967:165) made an important distinction between input and intake: "The simple fact of presenting a certain linguistic form to a learner...does not necessarily qualify it for the status of input, for the reason that input is 'what goes in', not what is *available* for going in, and we may reasonably suppose that it is the learner who controls this input or more properly his intake." (original italics) Corder (1973) further drew the difference between 'input' and 'output': the 'input' is the syllabus taught and the 'output' the learner's grammatical competence at any particular point. Wagner-Gough and Hatch (1975) pointed out the importance of investigating the target language input if anything interesting could be said about the learner output. The input hypothesis and the 'acquisition' and 'learning' hypothesis by Krashen (1981, 1982, 1985) triggered more interest in the investigation of the role of input in second language acquisition. 1985 saw the publication of the first book (Gass & Madden 1985) exploring the nature of input from various perspectives. These studies examined the links between input and output, methodology in input, native-speaker and nonnative-speaker interactions, and non-nativespeaker and non-native speaker interactions (Larsen-Freeman 1985). Ellis (1985) looked at the theoretical perspectives on input in language acquisition, concentrating on three theories: behaviorist theories which view 'input' as 'stimulus' and the learner as 'a language producing machine', nativist theories which view 'input' merely as a trigger that activates the internal mechanism and the learner as 'a grand initiator', and interactionist theories which view language acquisition as the result of an interaction at the discourse level between the learner's mental abilities and the linguistic environment and 'input' as the role of affecting or being affected by the nature of the internal mechanisms. Ellis (1985) also reported research findings on the role of 'input' both in natural settings and in classroom settings in addition to discourse studies focusing on the negotiation of meaning. Most recent studies seem to focus on input processing (Van Patten & Cadierno 1993) and input enhancement (Sharwood-Smith 1991, White, et al 1991, Sharwood-Smith 1993), both of which will be discussed in detail in the section dealing with 'processed input'.

On the other hand, McLaughlin (1987, 1990) argues for a cognitive psychological approach to second language phenomena that looks at 'input' as syntactic and semantic cues and that emphasizes the importance of the development of automaticity and the process of restructuring.

Jacobs & Schumann (1992) state that learning takes place largely through "the perception of a stimulus, attention to that stimulus, the movement of the information in the stimulus into memory, and finally, the expression or use of that information." (p. 294). Gass and Selinker (1994), based on Gass (1988), proposed a model for second language acquisition with a clear focus on the role of input in SLA.

This paper attempts to analyze Gass and Selinker's (1994) account of 'input' and 'intake' and proposes two concepts which I believe are essential for 'input' to become 'intake'.

# II. ANALYSIS OF GASS AND SELINKER'S ACCOUNT OF 'INPUT' & 'INTAKE'

Gass and Selinker (1994) hold that the learning of a second language is a multifaceted endeavor and they propose a model which integrates linguistic, sociolinguistic, and psycholinguistic aspects of acquisition. Within Gass and Selinker's model, there are five levels in a learner's conversion of input to output: (1) apperceived input, (2) comprehended input, (3) intake, (4) integration, and (5) output, which are sketched as follows (for a complete figure, please refer to Gass & Selinker 1994:297):

> INPUT Ø APPERCEIVED INPUT Ø COMPREHENDED INPUT Ø INTAKE Ø INTEGRATION Ø OUTPUT

My analysis will focus on the three levels of the model, namely, 'apperceived input', 'comprehended input' and 'intake'. According to Gass and Selinker, "input" refers to "a body of second language data" learners are exposed to (p.298). But not all of those language data are used by the learner when they form their L2 grammar. Some language data pass through to the learner and some do not. The first stage, that of the passing through of the initial data is *apperceived* input (original italics), which refers to "bit of language which is noticed in some way by the learner because of some particular features" (p.298). The authors discussed four factors enabling "some particular features" to be utilized for learning: (1) frequency, (2) affect, (3) prior knowledge, and (4) attention. They explain the four terms as follows:

(1) 'frequency' consists of two aspects: (a) something which is very frequent in the input is likely to be noticed, and (b) something which is unusual because of its infrequency may stand out for a learner, particularly at a more advanced stages of learning, as in a new word or phrase, which may stand out and be noticed by the learner; (2) 'Affect' includes 'social distance, status, motivation, and attitude'; (3) 'prior knowledge' refers to 'knowledge of the native language, knowledge of other languages, existing knowledge of the second language, world knowledge, language universals, etc.; and (4) 'attention' is what allows a learner to notice a mismatch between what he or she produces/knows and what is produced by speakers of the second language.

For Gass and Selinker, these four factors not only "may determine why or why not some input is noticed by the learner", but "contribute to the potentiality of comprehension of the input" (p.300).

First of all, some of the explanations above do not seem to be very clear. For example, what exactly are "some particular features" in "a bit of language which is noticed in some way by the learner because of some particular features"? Next, it could be argued that although the four factors may contribute to 'apperceived input', they do not appear to be *sufficient* for 'comprehended input' if the 'input' is not accessible in the sense that the learner has no access to

the input because of its incomprehensibility and of the learner's lack of developmental readiness. In other words, they may not contribute to the potentiality of comprehension of the input without 'accessible input', the details of which will be discussed in section 3.

The effect of the first factor 'frequency' has been very much discussed in L1 acquisition (Forster & Chambers 1973; Whaley 1978; Forster 1976, 1981, 1990). Forster (1976, 1981) argues that frequency affects 'lexical access' in, for example, the 'lexical decision task'. Forster (1976: 274) reports that the subjects' RTs (reaction times) in Bednall's experiment were found to be much faster to a high-frequency word pair such as finger-leg (645 milliseconds) than to a lowfrequency word pair such as *bug-grub* (754 milliseconds). The rationale behind this task, according to Forster (1990), is that the only way to tell whether a given letter sequence is a word or not is by seeing whether that sequence is associated with a previously stored representation (italics added). Thus the frequency effect is based on one's prior lexical knowledge. But if an L2 learner has no prior lexical knowledge of the word 'bug', for example, frequency may not help him/her comprehend the meaning of the new word at all, especially when it occurs in a syntactic structure s/he has never heard of before. I once worked full-time in a Korean company for three months and part-time for half a year in another Korean company. Apart from me, the other staff members were all Korean, including the owner. Although they talked to me in English, they conversed with each other in Korean. Despite the fact that it was spoken around me very frequently and it WAS 'apperceived', I was not able to comprehend Korean.

The second factor of "affect" (i.e., social distance, motivation, and attitude) is undoubtedly an important factor contributing to the success or failure in second language acquisition. While Schumann (1978a, 1978b, 1988) argues for social and psychological distance as a determining factor for SLA, Gardner (1968, 1979, 1980, 1983, 1985, 1988) argues for instrumental and integrative motivation. But it could be argued that if the input itself is beyond the learner's accessibility, the 'affect' factor does not seem to contribute sufficiently to 'comprehended input'. A fitting example is the experience I narrated above. I could not comprehend Korean despite my motivation for picking up the language and integrating with my Korean colleagues. That also explains why three motivated English-speaking adults, two of whom were linguistically sophisticated, were found to have acquired no more than 50 stock vocabulary items and a few conversational formulae despite seven months in a Chinese-speaking environment (Long 1981).

The same seems to apply to the third factor of 'prior knowledge'. While I possess what Gass and Selinker refer to as "knowledge of the native language" (Chinese) and "knowledge of other languages" (English, some Japanese), and while I also have world knowledge, none of these factors seemed to help me much comprehend the Korean language spoken around me (despite "language universals"). The input was simply beyond my accessibility<sup>1</sup>. Cook (1993) argues that one of the fundamental reasons why L2 learners do not all achieve the same level of competence as L1 children is that "the prior knowledge of the L1 inhibits progress" (p.210). Similarly, Larsen-Freeman & Long (1991) cite Farhady (1982) and note that previous experience, if unsuccessful, unpleasant in any way, or limiting, can be deleterious for the current learning situation. Furthermore, the experimental study of readers' reading comprehension using the descriptive, regression, and correlational analyses of free recall and multiple-choice probe data (Henk, *et al* 1993) reveals that prior knowledge exerts only a moderate effect on text interpretation. All this, including my L2 learning experience, seems to pose problems for their argument: "prior knowledge forms the basis of comprehension (in either a narrow or broad sense)" (p.302).

The fourth factor of 'attention' does not seem to contribute sufficiently to 'comprehended input', either. I cannot say I failed to notice the mismatch between what I produced/knew (English, Chinese, Japanese) and what was produced by Korean speakers (Korean), since it was spoken around me. Yet I was still unable to comprehend the 'input'. It follows that for 'input' to be 'comprehended', it should, first of all, be 'accessible' to the learner. Ellis (1992:40) also argues that access to simplified input may in fact be a necessary condition for 'noticing' to take place. Thus it remains an issue whether 'attention' plays a central role in SLA (Schmidt 1990, 1993).

In addition to the four factors discussed above, Gass and Selinker view "negotiation and NS modification" (p.299) as factors contributing to "comprehended input". They state that

negotiation and modification are "relevant to how the input can be *shaped* so that it can be comprehended" (p.300) (italics added), and that "they are not necessary conditions, but rather serve to increase the possibility of a greater amount of input becoming available for further use" (p.300).

First of all, it does not seem to be very clear what Gass and Selinker mean when they say that negotiation and modification serve to increase the possibility of a greater amount of input becoming available for "further use", although the reader may conjecture from the figure (p.297) that they might allude to 'output'. Another point in need of clarification has to do with the necessary conditions for 'comprehended input'. Gass and Selinker do not make clear what constitute the necessary conditions, although they state explicitly that 'negotiation' and 'NS modification' are NOT necessary conditions (p.300).

'Negotiation of meaning' undoubtedly plays a significant role in SLA (e.g., Long 1981, 1983, 1990; Pica *et al* 1987; Ellis, *et al* 1994;)<sup>2</sup>. But it could be argued that 'negotiation' does not appear to be capable of effectively 'shaping' the input if the input itself is not 'accessible' to the learner, even though it is 'apperceived'. For example, 'negotiation' will hardly help a learner of English at the beginning, intermediate, or even advanced level to comprehend Chomsky's GB or minimalist theory, since the 'input' here is generally accessible only to those learners of English at superior level (American Council on the Teaching of Foreign Languages 1986) with adequate background knowledge (i.e. schemata). Thus effective 'negotiation' appears to hinge largely on whether the input is 'accessible' to the learner. Pienemann (1989) also argues that if learners are not developmentally ready for a new word, form or rule, they cannot acquire it, and thus negotiation will not help toward its internalization.

Understandably, "NS modification" contributes to the learner's comprehension. The trouble is, it does not seem to be readily available when English is learned in a foreign setting. We have far more people learning English without regular access to native speakers than with such access. Important as it is, the EFL context does appear to be neglected.

Gass and Selinker use "comprehended input" for the second stage in their acquisition model. They explain that there are two differences between their notion and Krashen's. The first difference lies in that 'comprehensible input' is controlled by the person providing input, generally (but not necessarily) a native speaker of the second language, whereas 'comprehended input' is *learner-controlled*, namely, it is the learner *who is (or who is not) doing the 'work' to understand the input* (italics added). The second difference is that 'comprehensible input' is treated in Krashen's theory as a dichotomous variable, namely, input is either comprehensible or incomprehensible, whereas 'comprehended input' is potentially multi-staged, with comprehension representing "a continuum of possibilities ranging from semantics to detailed structural analyses" (p.300).

There arises a question of whether 'comprehended input' is 'learner-controlled'. Although it is true that it is the learner who comprehends and ultimately internalizes the 'input', this does not mean that 'comprehended input' needs to be 'learner-controlled'. Comprehending or understanding 'input' is a *process*, which seems to be at least bi-faceted: first, the input itself needs to be 'accessible' to the learner, for if the 'input' itself is beyond the learner's accessibility, it is impossible for the learner to 'control' and comprehend it, and second, the learner tries to process and encode it. But his/her attempt might not materialize owing to the new words, new syntactic structures and new 'sociocultural knowledge' contained in the input. This applies not only to beginning and intermediate L2 learners, who may find it difficult to 'control' the process of comprehension because of new words and new syntactic structures they encounter in the input when we consider L2 learners' "cognitive deficit" (Cook 1993:110) in lexical and syntactic comprehension. L2 learners were found to have less word associations in the L2 (Lambert 1955, cited in Cook 1993), and their decoding abilities in syntactic comprehension did not catch up for the first five years of L2 learning (Magiste 1979, cited in Cook 1993). This is also true of some advanced learners, who may have difficulty understanding a text involving comprehension (beyond lexical and syntactic analysis) of 'sociocultural knowledge' of the target language, such as comprehending humor, sarcasm, jokes, cultural rules for interpretation (e.g., Hymes 1972) and/or cultural presuppositions (e.g., Saville-Troike 1989). Without relevant cultural knowledge of Sissala (a Niger-Congo language spoken in Burkina Faso and Gana), for example, an L2 learner would find it hard to comprehend the following sentences (Blass 1990:85-86):

# The river had been dry for a long time. Everyone attended the funeral.<sup>3</sup>

It follows that the learner might be 'doing the work of comprehending' the input, but unable to 'control' and 'comprehend' it. Widdowson (1990) points out that "it is because learners do not learn effectively without the intervention of properly educated teachers that we need to insist on the proper professional standards and status of teaching" (p. xiii). Following Widdowson, I would argue that L2 learners need to be empowered, i.e., they need the guidance of external factors (e.g., input processing instruction, input enhancement) to build up the necessary skills and knowledge of L2 for *effective comprehension*. Thus it seems to be more appropriate to argue for both internal and external factors involved in L2 learners' comprehension processes than merely emphasizing 'learner-control'.

Gass and Selinker view 'intake' as "the process of assimilating linguistic material" (p.302). It is "the mental activity that mediates between input and grammar and is different from apperception or comprehension as the latter two do not necessarily lead to grammar formation" (p.302). This, they say, suggests that 'intake' is not merely a subset of input. Rather 'intake' and 'input' refer to "two fundamentally different phenomena" (p.302).

First, Gass and Selinker's explanation of the difference between 'intake' and 'apperception' or 'comprehension' does not seem to be well-founded. It is acceptable to say that 'apperception' does not necessarily lead to grammar formation, for what is 'apperceived' is not necessarily what is 'comprehended'. If there is no comprehension taking place, grammar formation is ruled out. On the other hand, it could be argued that 'comprehension' could very well lead to grammar formation. A simple example seems to suffice here. In English, if the learner understands that -s should be added to the present third person singular verb, such knowledge will lead to grammar formation. Thus it could be further argued that 'comprehension' is also a mental activity that mediates between 'input' and 'grammars' (L1 grammar, for example), and that it could very well lead to 'new' grammar formation. As Gass and Selinker themselves put it, 'comprehended input' mediates between what has been comprehended and what is eventually important for intake (p.302). Secondly, there is the question whether 'intake' is not merely a subset of 'input'. Interestingly, the definition cited above does not seem to be compatible with the definition given in the glossary by Gass and Selinker: intake-that part of the language input that is internalized by the learner (p.333). The second definition does seem to indicate that 'intake' is a subset of 'input'. Thus it is not clear how fundamentally different 'input' is from 'intake'.

Another question is whether "prior knowledge" (L1 knowledge, L2 knowledge, universals) and quality of analysis (i.e. 'comprehended input', p.302) by themselves could account fully for 'intake'. The experimental result by Van Patten and Cadierno (1993) reveals significant gains in both comprehension and production for subjects who experienced input processing instruction. The studies by Sharwood-Smith (1991, 1993) and by White, *et al* (1991) show that input enhancement, which is defined as "teacher-induced or externally induced input enhancement" (Sharwood-Smith 1993:176), aids second language acquisition (Both studies will be discussed in more detail in section 4). Thus it seems that external factors do contribute to 'intake'. This appears to support my argument: for intake to take place, the learner needs to process and understand the input and this process calls for the activation of the learner factors (e.g., attention, affect, prior knowledge) and the help of external factors (e.g., input processing instruction, input enhancement), although it is the learner who is ultimately doing the work of internalizing that part of language input.

Throughout the discussion of Gass and Selinker's account of 'input' and 'intake', I stress the importance that the L2 learner should receive 'accessible input'. What is 'accessible input' and how does it differ from 'comprehensible input'?

### **III. ACCESSIBLE INPUT**

Before I discuss 'accessible input', a brief review of the "input hypothesis" (Krashen 1981, 1982, 1985) seems necessary. The input hypothesis postulates that humans acquire language in only one way-by understanding messages, or by receiving 'comprehensible input'. We move from i, our current level, to i + 1, the next level along the natural order, by understanding input containing i + 1 (Krashen 1985). For Krashen, comprehensible input is thus the route to acquisition and information about grammar in the target language is automatically available when the input is understood.

Krashen's claim that 'comprehensible input' is the determining factor for second language acquisition gave rise to controversy. Gregg (1984) and McLaughlin (1987) pointed out that Krashen's theory is limited in its explanatory power because of its lack of precision concerning the defining characteristics of a stage I and a learner's I level. On the other hand, White (1987) argues that what is needed is not a total dismissal of the concept, but rather a more precise characterization of the way learners interact with the input. Long (1990) further pointed out that any theory of SLA must acknowledge the role of 'comprehensible input' in the development of the learner's internal grammar.

The term "accessible input" I am proposing here bears some similarities with 'comprehensible input', but I believe it has a wider scope than 'comprehensible input'. "Accessible input" assumes the meaning of 'comprehensible input', for when we consider whether input is accessible to the learner, we take its comprehensibility into account as well.

On the other hand, unlike 'comprehensible input', which fails to distinguish between different levels of comprehension that can take place (Gass & Selinker 1994), 'accessible input' deems it possible for the learner to have potentially multi-faceted levels of comprehension, for 'accessible input' only paves the way for 'comprehension', but whether 'comprehension' takes place hinges largely on 'processed input', which is not addressed in Krashen's theory, and which will be discussed in the next section.

Furthermore, unlike 'comprehensible input', which "does not address the question whether the process of L2 acquisition can be steered by formal instruction" (Pienemann 1988:100) (For a similar argument, see McLaughlin 1987), "accessible input" assumes that classroom instruction can aid SLA only if the input is within the learner's accessibility. This is principally in line with Pienemann's teachability hypothesis. Pienemann (1988) claims that instructions can only promote language acquisition if the interlanguage is close to the point when the structure to be taught is acquired in the natural setting. In other words, the developmental stages inherent in L2 acquisition of the German INVERSION rule dictate that the L2 learner at the lower stage (ADVERB) has to learn the processing prerequisite for less demanding stage (PARTICLE) before processing the crucial operation underlying INVERSION (For details, see Pienemann 1988). Therefore, it is crucial that input be compatible with L2 learners' developmental stages or readiness. 'Accessible input' can thus be defined as "input which is in line with the learner's developmental stages or readiness". In other words, input is accessible to the learner if it is within "zone of proximal development" (ZPD) (Vygotsky 1978). For example, for learners of English, the learning of simple sentences (e.g., I saw him yesterday) should always come before relative clauses (e.g., I saw the man who talked to your sister the other day) are to be learnt. The reverse is to provide the learner with 'inaccessible input', which is beyond the learner's developmental readiness or the ZPD, and which may very well result in no or little comprehension. Thus the linguistic complexity of the input should be tailored to the learner's own level (Ellis 1992:44).

But merely receiving 'accessible input' does not naturally become 'intake'. In order for 'accessible input' to become 'intake', the learner needs to process the input. 'Processed input' is thus called for.

### **IV. PROCESSED INPUT**

Processed input is similar to Gass and Selinker's' "comprehended input". For Gass and Selinker, as I have discussed before, "comprehended input" is learner-controlled; that is, it is the learner who is (or who is not) doing the work to understand the input. My notion differs from theirs in that "processed input" draws on the internal learner factors as well as the help of external factors. In other words, it not only emphasizes the importance of the learner initiative in processing and understanding the input, but acknowledges the role of external factors which help the learner process and understand the input. At least 3 factors could influence the learner initiative: attention, affect and prior knowledge. The meanings of these terms used here are similar to the meanings defined and elaborated by Gass and Selinker. By 'attention', the learners notice that part of language input they need to learn. The learner may notice what Gass and Selinker call the mismatch between what is being learned and what has already been acquired. For example, an English learner of Spanish may notice that Spanish differs from English in that the former is a pro-drop language while English normally has to use the 'subject'. On the other hand, s/he may also notice the similarities between the two languages. For example, a Chinese learner of English may notice that English and Chinese have the basic word order of SVO. This kind of 'attention' has a lot to do with 'prior knowledge', which could include what Gass and Selinker mentioned "knowledge of the native language, knowledge of other languages, existing knowledge of L2, world knowledge, language universals, etc." (p.299). The learner's prior knowledge (or schematic knowledge) does help process and understand the input if it is within their accessibility, as in the case of comprehending Chomsky's GB Theory or Minimalist Theory I have already mentioned. The third factor of 'affect' (social distance, motivation and attitude) does help as well. A high motivation (whether instrumental or integrative) and a strong desire for acculturation help process and understand the input (Gardner 1968, 1979, 1980, 1983, 1985, 1988; Schumann 1978a, 1978b, 1986).

On the other hand, I believe external factors such as input processing instruction and input enhancement also contribute to helping the learner process and understand the input. Van Patten and Cadierno (1993) view input processing as involving form-meaning connection in the conversion of input to intake. In other words, input processing involves "those strategies and mechanisms that promote form-meaning connections during comprehension" (p.226). They reported their research findings by using processing instruction in foreign language teaching. They examined the possible effects of two different types of instruction on the developing knowledge system of the L2 learner: instruction as the manipulation of output, and instruction as structured or focused input processing, the former characterizing the traditional explicit instruction in which learner output is manipulated, as shown by Figure 1, the latter looking at form-meaning connection to discuss the processes that are involved in the conversion of input to intake, as shown by Figure 2 (p.227):

Figure 1: input ---> intake ---> developing system ----> output  $\neq$ 

focused practice

Figure 2: input ----> intake ----> developing system --> output  $\neq$ Processing mechanisms  $\neq$ focused practice

The results show that subjects who experienced processing instruction made significant gains in both comprehension and production and those who experienced traditional instruction made significant gains in production only.

Van Patten & Caderno's paper is important in that it shows processing instruction helps L2 learners with their comprehension and production. There arises, however, an interesting question as to why the subjects who received traditional instruction produced the same significant gains in production (mean raw score 8.12 for posttest 3, p.237) as did those who received 'input processing' (mean score 8.11 for posttest 3, p.237), although they did not show significant gains in comprehension (mean raw score 3.89 in posttest 3 as opposed to raw score 7.41 in posttest 3 for subjects who received 'input processing' treatment, p.236). In other words, why did those who seemingly 'comprehended more' not 'produce more'? Or why did those who seemingly 'comprehended more' not 'produce more'? Or why did those who seemingly 'comprehended conditions under which comprehension and production took place. Whatever the reason, further research is needed to determine possible qualitative differences between 'processing instruction' and 'traditional instruction'.

In addition, input enhancement can facilitate processing input. White, *et al* (1991) suggest that input enhancement can aid L2 acquisition in two ways. First, by drawing the learner's attention explicitly to formal properties of the L2, form-focused instruction provides a more salient kind of positive evidence, which may help to sensitize the learner to aspects of L2 which would otherwise pass *unnoticed* (italics added); and secondly, input enhancement may be used to help learners 'unlearn' incorrect analyses of the L2 by supplying negative evidence. This can be crucial in L2 acquisition if learners make incorrect generalizations that cannot be disconfirmed on the basis of positive input alone. Another important way of employing input enhancement is to make more salient to the L2 learner those features of the target language which have been *noticed*, but possibly not (fully) comprehended, thus facilitating processing and understanding the input. For example, enhancement of 'only', i.e., drawing learners' attention to the different position of 'only' can help them understand the semantic differences of the following sentences:

- (1) John could *only* see his wife from the doorway (but he could not talk to her, for example).
- (2) John could see his wife *only* from the doorway (but he could not see his brother, for example).
- (3) John could see his wife from the doorway *only* (but he could not see her from further inside the room, for example)<sup>4</sup>.

Besides, it appears that external factors also contribute to the learner's potentially multifaceted levels of comprehension ranging from semantic to syntactic analysis. For instance, instructions on wide or narrow scope of quantifier can help the learner understand two different readings of simple sentences such as "Everyone likes someone" (May 1985)<sup>5</sup>.

It is important to point out here that the learner factors and the external factors are not necessarily independent of one another. They can contribute simultaneously to 'input processing'. One good example is 'negotiation'. Whether it takes place between a native speaker and a non-native speaker (e.g., in an ESL context), between non-native speakers (e.g., in an EFL context), or between the instructor and the learner, 'negotiation' helps process and understand the input (e.g., Long 1981, 1983, 1990; Pica *et al* 1987, Pica 1994; Ellis, *et al* 1994).

To summarize this section, I believe internal factors (e.g., the learner's attention, affect, prior knowledge), external factors (e.g., input processing instructions, input enhancement), and the interaction of both factors (e.g., negotiation) help process and understand the input, although ultimately it is the learner who processes and understands the input.

As for 'intake', I believe it is a subset of 'input'. In other words, it is that part of language input that is internalized by the learner through processing and understanding. I do not see them as "two fundamentally different phenomena" (Gass & Selinker 1994:302). Rather, they seem to be fundamentally related. 'Accessible input', through processing and understanding, becomes 'intake'. 'Intake' will not take place without 'input'. In other words, 'input' contributes to 'intake'. This does not mean that all 'accessible input' will become 'intake', for the simple reason that we do not take in everything even though it is made available to us. This seems to coincide with their argument: "not all that is comprehended becomes intake" (p. 301).

## V. CONCLUSION

In this paper, I have analyzed Gass and Selinker's 1994 account of 'input' and 'intake'. I have argued that without 'accessible input', the factors proposed by Gass and Selinker do not appear to be sufficient for turning 'apperceived input' into 'comprehended input'. Based chiefly on the evidence that L1 knowledge (Chinese) and L2 knowledge (English, some Japanese) did not help me comprehend the Korean language spoken around me, and that L1 knowledge inhibits progress (Cook 1993), I have argued that 'prior knowledge' does not necessarily constitute the basis of comprehension in L2 learning. I have also argued that 'comprehended input' does not have to be learner-controlled, for 'learner-control' seems to lack a solid base without 'intervention' (Widdowson 1990) and 'accesssible input'. I have further argued that 'input' and 'intake' are not necessarily two fundamentally different phenomena, for intake refers to that part of the language input that is internalized by the learner, rather than merely to the process of assimilating any linguistic materiel. In an attempt to modify Gass and Selinker's account of 'input' and 'intake', I have proposed two concepts which I believe are essential for 'input' to become 'intake': 'accessible input (i.e., "input that is in line with the learner's developmental stages or readiness") and 'processed input' (i.e., "input processed by the learner factors, the help of external factors and the interaction of both factors"). I believe the investigation of 'input' is significant for second language acquisition research and teaching. What kind of 'input' should be made available to the learner focuses on whether the learner has access to UG principles and parameters, an important issue that has been very much discussed in SLA research, While some SLA researchers (e.g., Bley-Vroman 1989; Clahsen 1988; and Schatchter 1989) argue for the fundamental differences between L1 and L2 acquisition, some others (e.g., Krashen 1980, 1981, 1982; Flynn & Espinal 1985, Flynn 1988, White 1989) argue for the fundamental similarities between L2 and L1. If L2 differs fundamentally from L1, it is very unlikely that L2 can be learned on the basis of "impoverished input". As pointed out by Bloom (1993), the acquisition of complex linguistic structure on the basis of 'impoverished input' poses puzzles of a theoretical depth rarely found in psychology. Thus it seems to be important that the L2 learner receive 'accessible input'. Undoubtedly, SLA, as Gass and Selinker (1994) put it, is dynamic and interactive in nature and only by considering its many and diverse aspects can we begin to understand the complexities of this process. It is perhaps precisely due to these complexities that there exist some 40 to 60 theories of SLA (Long 1993). While Gregg (1993) advocates more theoretical research towards explaining how L2 learners acquire competence in an L2 (in the Chomskyan sense of the term) [original bracket], it seems that empirical evidence also plays an important role in SLA research. Classroom research findings can provide insights on whether SLA abides by UG principles and whether there is ample evidence showing that L2 can be learned by means of 'parameter resetting', as claimed by Uziel (1993). In this sense, empirical research contributes to confirmation, rejection or modification of UG principles and parameters. I believe it is on both theoretical and empirical grounds that we need to investigate the role of input in SLA.

#### NOTES

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<sup>1</sup>. Although the similarities between two languages may allow native fluency in one to serve as basic competence in the other, as in the case of a German adult who claimed to have acquired Dutch only by listening to Dutch radio broadcast (Larsen-Freeman 1979), such cases are very rare, as pointed out by Long (1983).

2. For some of the areas of SLA (e.g., morphosyntax) in which 'negotiation' does not seem to play a significant role, see Hawkins (1985), Aston (1986), Sato (1986), Derwing (1989), Ehrlich, *et al* (1989), Pica (1992), Pica, *et al* (1993), Pica (1994) and Ellis, *et al* (1994).

<sup>3</sup>. The relevant cultural knowledge of Sissala is: if a river has been dry a long time, then a river spirit has died. Whenever a spirit dies there is a funeral (Blakemore 1992).

<sup>4</sup>. These examples are taken from Quirk, *et al* (1985).

<sup>5</sup>. Two different readings are

(i) for everyone x, there is some y, such that x likes y. In this case, the sentence means "each person may like someone different". 'Everyone' has 'wide' scope; 'someone' has 'narrow' scope;

(ii) there is someone y, such that everyone x, x likes y. In this reading, there is one individual that is liked universally. 'Someone' has 'wide' scope; 'everyone' has 'narrow' scope (May 1985).

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