On the relationship between Input and Interaction Psycholinguistic, Cognitive, and Ecological Perspectives in SLA

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Abstract:

Input is one of the most important elements in the process of second language acquisition (SLA). As Gass (1997) points out, second language learning simply cannot take place without input of some sort. Since then, specific issues have been actively debated in SLA on the nature of input and input processing, such as the amount of input that is necessary for language acquisition, various attributes of input and how they may facilitate or hinder acquisition, and instructional method that may enhance input. In this paper, four hypotheses and paradigms of input processing have been described. It is delineated that although the three paradigms of triggering, input hypothesis, and interaction hypothesis have been widely used and accepted, they lack the ability to account for the dynamic nature of language. Affordance, on the other hand, can account for such a nature of language.

Therefore, affordance replaces fixed-eye vision by mobile-eye vision; an active learner establishes relationships with and within the environment. The learner can directly perceive and act on the ambient language without having to route everything through a pre-existing mental apparatus of schemata and representation, while this is not true in the fixed-code theory. In the fixed-eye theory of communication it is assumed that ready-made messages are coded at one end, transmitted, and then decoded in identical form at the other end. We need in its place a constructivist theory of message construction and interpretation.

Key words: Input, interaction, SLA, Pschycolinguistic, cognitive, ecological perspectives

1. Introduction

Input is one of the most important ingredients in first language acquisition (FLA) and second language acquisition (SLA); this means that SLA and FLA cannot simply occur without the presence of input of some sort (Gass, 1997) [9]. This especially matters when one takes the nature of input into account; some believe that input alone suffices learners to acquire either of the languages (Krashen, 1987) [12]. Others, on the other hand, believe that input should be negotiated (Long, 1996) [13] or flooded (Sharwood Smith, 1994) [24], or noticed through output saliency (Schmidt, 2001) [23].

No matter what kind of approach one takes to explain the process of language acquisition, almost all approaches, models, theories, and explanations on SLA have highlighted the importance of input although with different degrees of emphasis or through different names. Sometimes, it is simply referred to as *cue* in competition model (MacWhinney, 2004) [16] and sometimes as

comprehensible or modified one in Krashen's (1987) [12] and Long's sense (1996) [14] and sometimes in the form of affordance (Van Lier, 2000) [25].

What actually matters in SLA, however, is that input is approached differently in different paradigms and frameworks. In nonmodular paradigms such as the competition model, connectionism (Calabretta & Parisi, 2001) [2], Anderson's ACT* model (1993) [1], and McLaughlin's information processing model (1987) [18], input and input processing are explicated in terms of frequency, weighting, automaticity, reliability, validity, and mapping conceptual provisions. On the other hand, the modular framework valued input as a form of evidence (negatively or positively provided). For example, Krashen (1987) [12] accentuates the importance of positive evidence in a form of implicit learning, whereas VanPatten (2002) [20] highlights the role of explicit learning, along with implicit learning. Others, such as Long (1996) [14] emphasized more on the negotiated input through interpersonal interaction. More innovatively, there are still some others who consider interaction and intra action as keys to language development (Lantolf, 2007 [13]; Van Lier, 2000 [27]; Swain & Lapkin, 2007 [25]).

In this respect, Van Lier (2004) [28] and Ellis (1999) [4] classify the literature on input into two distinct paradigms of psychological versus sociocultural perspectives. To Van Lier, these differences are the Dyadic versus Dynamic nature of input-related theories. Due to space limitations, this article only focuses on modular-based SLA theories or models to compare different perspectives on the nature of input and interaction. From among the vast versions of SLA models and theories, I select only four different epistemologically different perspectives towards input and SLA, namely Chomsky's view on Input – triggering (Flynn, 1996 [8]; White, 1996 [29]), Krashen's input hypothesis (1987) [12], Long's interaction hypothesis (1996) [14], and Van Lier's affordance (2004) [28]. Below each of the mentioned views will be reviewed and compared with each other.

2. Input, Sign, Two Value Systems

Research on input began in the 1970s nearly a decade "after the initial studies of motherese in L1 acquisition but with a broader focus than the L1 work" (Long, 1996, p. 415) [14]. Since then, specific issues have been actively debated in SLA on the nature of input and input processing. These issues mostly are summarized as:

1. The amount of input that is necessary for language acquisition,
2. Various attributes of input and how they may facilitate or hinder acquisition, and
3. How interaction may enhance input.

Within the modular model of SLA, each of these questions differentiates the way language learning is approached. This compounds when input is studied in either Sausurian dyadic or Peircian triadic based semiotics (Van Lier, 2004) [28]. In the Sausurian value system, sign is static, and gains value only in relation to other signs in the system of language. But in Peirce's semiotics, input is dynamic, open, ever-changing and developing into other signs. In the latter, input processing is a never-ending process of semiosis or meaning making. This means that it continually evolves in various directions, growing into other signs, through interpretative process. While Sausurian semiotics has a dyadic nature, i.e., there is a one-to-one relationship between object and sign or sign and meaning, Peircian semiotics is triadic because it consists of the dynamic interaction between "representamen and the referent or object and interpretant, the meaning or outcome of the sign" (Van Lier, 2004, p. 61) [28].

As Van Lier (2004) [28] states, the triadic sign may have three parts of Firstness, Secondness, and Thirdness in the Aristotelian notion. Firstness is just what is (quality; related to feeling and possibility) with no reference to anything else. Secondness is reaction, relation, change, experience. And finally, Thirdness is mediation, habit, interpretation, communication, and symbolism.

While all models and theories of input processing to date will fall into the first category, i.e., Sausarian dyadic sign, except for Van Lier's (2004) [28] ecological view towards input, i.e.,

affordance. This paper aims at studying these two extreme views with respect to the three questions raised above as (a) the amount of input that is necessary for language acquisition; (b) various attributes of input and how they may facilitate or hinder acquisition; and (c) the role of interaction in SLA.

3. Dyadic Based Nature of Input
Input as Trigger and Comprehensible Input

In the innatist view, language is neither taught nor learned, it basically "grows" as a "mental organ" (van Lier, 2004, p. 136) [28]. In this paradigm, the assumption is that (1) there must be a rich innate mental structure in the brain that unfolds just by virtue of the child's being in an environment in which the language is used; (2) the exact nature of exposure is not important; it does not matter what kinds of sentences, how accurate every sentence is, and so on; and (3) the precise nature of input is not relatively trivial, since all it does is trigger the growth of the innate system.

To argue for the truthfulness of this paradigm, some refer to the argument of poverty of stimulus as the "logical problem of language acquisition", while others have called it "Plato's Problem," "Chomsky's Problem," "Gold's Problem," or "Baker's Paradox" (MacWhinney, 2004, p. 884) [16]. The term "logical problem of language acquisition" was coined by David Lightfoot (Gregg, 1996, p. 50) [11].

The famous argument is the notion of the logical problem for L2 acquisition (Flynn, 1996 [8]; White, 1996 [29]; Gregg, 1996 [11]) which questions the possibility of language acquisition in spite of shortage of input. In this line, Felix (1984 cited in Gregg, 1996 [11] as well as Felix and Weigle, 1991) [7] also refers to the developmental problem that relates to the question of why natural languages are acquired the way they are, i.e., how the regularities that have been observed in real-time acquisition processes can be explained. The question is how does acquisition proceed? In Cummins's sense (1983 cited in Gregg, 1996) [11] the logical problem is described in property theory and the developmental problem in transition theory.

UG availability is also brought into SLA to explain attributes of input and the amount of input a learner needs to develop his or her L2 knowledge. Flynn (1996) [8] and White (1996) [29] refer to this phenomenon as parameter resetting. Accordingly, there are three possibilities regarding UG accessibility: full access (Flynn, 1996) [8], partial access (White, 1996) [29], and no access (Schachter, 1996a [21], 1996b [22]). In the case of UG availability, what is important is to see what would "trigger" the parameter to be reset (Cook, 1991 [3], for the discussion of triggering and learning see Schachter, 1996) [21].

Therefore, in explaining how UG is implemented in developmental stages, parameter resetting (Hyams, 1986 cited in White, 1996 [29]; Flynn, 1996 [8]) captures the idea of the possibility of partial access to UG. For example, Flynn (1996) [8] delineates parameter resetting possibility through (a) the CP direction parameter, p. 134-137; (b) L1 vacuously applied principles pp. 137-140; and (c) error data from adult L2 acquisition.

On the other hand Schachter (1996a, 1996b) [21, 22] opposed the assumption of triggering (Lightfoot, 1989 cited in white, 1996) [29] in L2 acquisition and proposed the Window of Opportunity Hypothesis which states that principles and parameters are mature and there will resist a sensitive period for that principle or parameter. However, learning principles proposed by others such as the Subset Principle (SP) (Berwick, 1985 cited in White, 1996) [29] captures the idea that learners are conservative in adopting over inclusive parameter settings and rely on positive evidence. But McLaughlin (1995 cited in White, 1996) [29] rejects the Subset Principle because of availability of overgeneralization. Also MacWhinney (2004) [16] distinguishes between overgeneralization and universal-based learning arguing that CHILDES database proves the other way around. As Newport, Gleitman and Gleitman (1977 cited in MacWhinney, 2004 [16]) reported,

"the speech of mothers to children is unswervingly well-formed" so the assumption of ungrammaticality of first language input is under question.

In this approach to learning, interaction means simple exposure. Krashen indicates that input modification gives saliency to input through exposure. Krashen (1987) [12] takes an extreme innatist view of development, except perhaps for early childhood bilingualism. Even those who espouse an innatist view of first-language acquisition are likely to take a more explicit, learning-centered view on second-language acquisition (Van Lier, 2004) [28]. The effectiveness of positive and negative evidence in second-language acquisition has been always debatable. Positive evidence is referred to text presentation (MacWhinney, 2004) [16] or positive input (Long, 1996 [14]; White, 1996 [29]) or any input to which learners are exposed. Negative evidence, on the other hand, is the information to which learners are attending to (Schmidt, 2001) [23]. The other names of negative evidence are information presentation (MacWhinney, 2004) [16] and negative input (Long, 1996 [14]; White, 1996 [29]). One of the figures in this paradigm is Krashen (1987) [12].

Comprehensible Input Hypothesis

The non-interface position in SLA, which is mainly supported by Krashen (1987) [12], captures the idea that SLA is an implicit activity. In this view, while both explicit L2 learning and L2 knowledge are possible, they remain separate from the L2 competence that learners come to acquire. According to Krashen, explicit knowledge only plays the role of monitoring.

Krashen' comprehensible input hypothesis (1987) [12] asserts that if the acquirer understands the input, and if there is enough of it, i+1 will automatically happen. In other words, if communication is successful, i+1 is provided. There is nothing like a deliberate attempt to provide i+ 1. Moreover, he stipulates that speaking fluency cannot be taught directly; rather it emerges over time, on its own. The best way to teach speaking is to provide comprehensible input. To Krashen, the affective filter would prevent input from entering into LAD (Language Acquisition Device) and being changed into competence. It has three components of (a) motivation, (b) self-confidence, and (c) anxiety.

The evidence Krashen relied on were (a) caretaker speech (language is simplified and modified to make it comprehensible) which is roughly tuned to the level of children, i.e., caretaker speech tends to get more complex as the child progresses; (b) modified input in second language situation is three types; (c) foreigner-talk: modified language; simplified language; (d) teacher talk; (e) silent period, (f) age difference, (g) immersion program, (h) bilingual program, (i) delayed L1 and L2 acquisition, and the like. The impact of this view on language learning is to provide the learner with simplified or elaborated input (comprehensible input) and decrease the load of the affective filter, the assumption being that learning would happens without intervention.

Problems with Input Hypothesis

Like triggering assumption, comprehensible input hypothesis has faced many challenges. McLaughlin (1987) [18] questions Krashen's hypothesis on several grounds. First, according to him, Krashen has not provided a definition of subconscious and conscious learning, although he did operationally identify conscious learning with judgments of grammaticality based on rule and subconscious acquisition with judgments based on feel. Second, learning does not turn into acquisition. That is, according to Krashen, if what is consciously learned – through the presentation of rules and explanations of grammar – does not become the basis of acquisition of the target language. Kevin Gregg (1984 cited in McLaughlin, 1987, p. 21) [18] claims that some rules can be acquired through learning. The third problem is the assumption of L1=L2. Krashen argued that adult acquirers have access to the same "language acquisition device" (LAD) that children use. If Krashen's argument on age is correct, young adolescents who are at the stage of formal operations in Piaget's sense would be expected to be heavy monitor users and therefore poor performers. But their performance seems even better than that of young children. The next problem is related to natural order in that the only natural order evidence of Krashen is on morpheme. And finally, he

mentioned that input hypothesis makes a strong claim – that acquisition is caused by understanding the input to which the learner is exposed.

Another opponent of comprehensible input hypothesis is Van Lier (2004) [28]. Accordingly, Krashen has provided no coherent explanation for the development of the affective filter and no basis for relating the affective filter to individual differences in language learning. To Van Lier (2004) [28], acquisition is an emerged issue and he explains it in terms of the grammaticalization perspective, which encapsulates both incidental learning (acquisition, in a comprehensible input situation) and deliberate and focused learning which both can contribute to the emergence of linguistic abilities. The second problem Van Lier refers to is the nature of input Krashen stipulated. According to Krashen's view, input is "fixed pieces of language that are processed and stored in the brain. It ignores, or at least neglects, the socially active learner" (p.139). Moreover, to Van Lier, the affective filter in Krashen's hypothesis is a single dimension from open to closed form: "this view is compatible with a passive, social learner who just sits around soaking up comprehensible input" (p. 141). To Van Lier, the emotional factor cannot easily or clearly be divided into positive or negative factors: "no pain no gain" may sometimes be true and sometimes not."

4. Input Interaction

The third model that I am going to explain is interaction hypothesis or focus on form (Long, 1981, cited in Ellis, 1994) [4], the updated version of interaction hypothesis or focus on meaning (Long, 1996) [14], comprehensible output hypothesis (Swain, 1985 cited in Long 1996) [14], and noticing the gap (Schmidt & Frota, 1986 cited in Ellis, 1994 [4]; Schmidt 2001 [23]).

A more active and interactive perspective on input holds that we can make language more comprehensible by engaging in meaningful interaction (van Lier, 2004, p. 141) [28]. While being engaged in challenging tasks, learners need to work actively to comprehend each other's messages, and in this work they focus on those parts of language that need improvement, both receptively and productively.

Long (1996) [14] redefines interaction hypothesis and emphasizes the importance of negotiation for meaning. Accordingly, negotiation works when there is an interaction between non-native speakers (NNS) and native speakers (NSs) or more competent interlocutors; such negotiation facilitates acquisition because it *connects input, internal learner capacities, particularly selective attention, and output* in productive ways. A key feature in this interaction-based approach is the selective attention.

The assumption of interaction hypothesis is that because language acquisition entails not just linguistic input but comprehensible linguistic input, the relationship often goes unnoticed until abnormal cases are encountered of beginners trying to learn from incomprehensible language samples originally intended for mature speakers. Such efforts invariably result in failure in both L1 and L2 acquisition. In fact, interaction hypothesis emphasizes the role and importance of incomprehensible input compared to comprehensible input.

Different devices might be employed in the negotiation process such as repetition, confirmations, reformulations, compression checks, confirmation checks, and clarification requests. These might be found to be more (a) between NS and NNS than NS and NS, (b) on two-way tasks than on one-way tasks, (c) on unfamiliar tasks than familiar ones, (d) in mixed rather than same L1 dyads, (e) mixed rather than same proficiency interlocutors, and (f) mixed rather than same gender.

To Long (1996) [14], comprehensible input is insufficient on certain grounds: (a) extreme modification can result in ungrammaticality; (b) interactional modification (IM) produces longer texts; (c) IM can compensate for linguistic complexity by elaboration (i.e. redundancy), (d) competence equals grammatical and structure – paradoxically, comprehensible input may actually inhibit learning on occasion, because it is often possible to understand a message without

understanding all the structures and lexical items in the language encoding it, and without being aware of not understanding them all (p. 425).

Elsewhere, Swain (2000 cited in Van Lier, 2004) [28] emphasizing the role of output mentions that output can sharpen the learner's awareness of linguistic expression in ways that input simply cannot. When speaking, we may have to struggle to make our ideas clear in precise grammatical and lexical terms, or else we may be misunderstood. In ecological terms, proficiency emerges gradually, through repeated trials of production and reception, with meaning and precision occurring over time. There is similarity between this view towards SLA and ZPD of sociocultural perspective in that in ZPD the emphasis is on the expert-novice relationship.

Another hypothesis which falls into this paradigm is noticing the gap hypothesis (Schmidt & Frota, 1986 cited in Schmidt, 2001) [23]. Accordingly, the focus of attention and noticing of mismatches between the input and their output determines whether or not they progress, and that noticing, or conscious perception (for which attention is a prerequisite), is necessary and sufficient for converting input into intake. To Schmidt, noticing means registering the simple occurrence of some event, whereas understanding implies recognition of a general principle, rule, or pattern (p. 426). Schmidt (2001) [23] believes that there is no such a thing as subliminal language learning. According to Tomlin and Villa (1993 cited in Van Lier, 2004) [28], Schmidt's idea of noticing can be recast as detection within selective attention. Acquisition requires detection, but such detection does not require awareness. Awareness plays a potential support role for detection, helping set up the circumstances for detection but it does not directly lead to detection itself.

On this account, failure to learn is due either to insufficient exposure or failure to notice the items in questions, even if attending occurs (a learner could attend carefully to a lecture in an L2 and still fail to notice the items in question). This is the opposite position to that taken by Krashen and VanPatten (1988) [20] who denied there is any evidence of beneficial effects of a focus on form, at least in the early stages of language learning. As mentioned earlier, Krashen has claimed that adults can best learn an L2 in the manner children learn an L1 incidentally and in a subliminal way; attention is neither necessary nor beneficial.

In sum, negotiation for meaning hypothesis claims that incomprehensible input which leads to negotiation would involve learners in denser than usual frequencies of semantically contingent speech of various kinds (i.e., utterances by a competent speaker, such as repetitions, extensions, reformulations, rephrasing, expansions and recasts). Moreover, the frequencies of target forms in the reformulations tend to be higher. Furthermore, negotiation involves recycling related items while a problem is resolved, which should increase their saliency and the likelihood of their being noticed by the learner. Therefore, learners have more chances to detect the changes and understand them and incorporate than when both form and meaning are opaque.

5. Input as Affordance

A completely different perspective towards signs and input is taken by the ecological view taken and reformulated into language learning acquisition by Van Lier (2000, 2004) [27,28] and Lantolf (2007) [13]. As mentioned earlier, affordance – which is the new name for input in ecological perspective to SLA – is introduced in Peircian's semiotics. In this view, sign is dynamic, and evolves in various directions, growing into other signs, through the interpretative process. It has a triadic nature because it consists of the dynamic interaction between "representamen and the referent or object and interpretant" (Van Lier, 2004, p61) [28].

First Van Lier (1996 cited in Van Lier, 2004) [28] has changed the term input to engagement. Later, Van Lier (2000) [27] changed input to affordance. According to him, input comes from a view of language as a fixed code and of learning as a process of receiving and processing pieces of this fixed code. This is variously referred to as "telementation" (Harris, 1996 cited in Van Lier, 2004) [28] and the "conduit metaphor" (Reddy, 1979 cited in Van Lier, 2004) [28]. This is the same

as viewing the learner as a computer into which data is "input". An affordance affords further action (but does not cause or trigger it). According to Van Lier (2000) [27], what becomes an affordance depends on what the organism does, what it wants, and what is useful for it. He exemplified affordance in a leaf saying that "the same leaf can offer very different affordances to different organisms: (a) crawling on for a tree frog, (b) cutting for an ant, (c) food for a caterpillar, (d) shade for a spider, and (d) medicine for a shaman" (p.252). A leaf is the same leaf for all organisms he exemplified but its different properties are perceived and acted upon by different organisms. Therefore, in Van Lier's sense (2004) [28], a word or an expression never means the same thing twice.

The construct of affordance is relevant to language learning in several different ways. First, it views language from a relational not a material perspective. Language learning is not a process of representing linguistic objects in the brain on the basis of input received. According to Van Lier (2000) [27] affordance refers to what is available to the person to do something with. It originates from Gibson's definition of affordance "as what the environment offers the animal, what it provides or furnishes, either for good or ill" (p. 92). This is the learner who detects and picks up and acts upon the affordance based on his capacity and in tune with his or her environment.

Within this paradigm, learning processes are processes of semiosis. The learning context, in ecological terms, is an activity space; therefore, when we are active in this activity space, "affordances become available for further action" (p.62). We may perceive these affordances and use them as meaning-making material directly or indirectly. In Van Lier's sense in nature these affordances are perceived directly and immediately, but later they are mediated through language. Through activity, perception, and affordance, language will emerge.

In Aristotelian terms, learning happens first in the form of iconic or "Firstness". Later, it grows into indexical expressions (Secondnesses) when they are shared, and ends up in symbolic form, i.e., "Thirdnesses", when they turn into games, or grow into speech. None of these levels would replace one another. Iconicity represents (a) feeling, sensation, smell, taste, direct perceptual experience, self; (b) phatic communion; and (c) tone of voice, expression, prosody, iconic gestures. Indexicality, (pointing) is (a) vocabulary learned in this level which represents; (b) linearity, synchronicity, division, otherness, the social world; (c) reaction, interaction, change, dialogue; and (d) deixis, pointing, deictic gestures (McNeill, 2000). And finally, symbolicity, (grammar emerges) represents (a) reason, logic, representation, integration, argument; (b) habit, convention, ritual; and (c) symbolic gestures (McNeill, 2000 cited in Van Lier, 2004) [28].

Therefore, affordance replaces fixed-eye vision by mobile-eye vision; an active learner establishes relationships with and within the environment. The learner can directly perceive and act on the ambient language, without having to route everything through a pre-existing mental apparatus of schemata and representation, while this is not true in the fixed-code theory. In the fixed-eye theory of communication it is assumed that ready-made messages are coded at one end, transmitted, and then decoded in identical form at the other end. We need in its place a constructivist theory of message construction and interpretation.
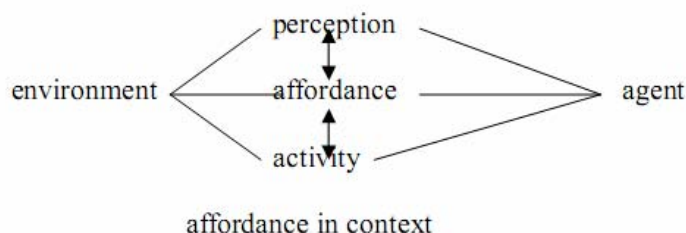
Figure 1. Affordance in Relation with Environment and Agent

In figure 1, relevance emerges in a third dimension, as a result of the interaction between perception/activity (through affordance and agent /environment relationship; environment is full of meaning potential; the agent has certain abilities; aptitude, effectiveness, fitness, or whatever psychologists, biologists or anthropologists might call it; affordance fuels perception and activity, and brings about meaning.

Emergence

In an ecological perspective to language learning, language emerges. But what does "emergence" mean? Emergence means that "the whole is bigger than the parts; and it is also often smarter than parts. This is the major tenet of Gestalt psychology" (Van Lier, 2004) [28]. In the emergence view of language, language is much less regular in a general sense; a crucial characteristic of language is the mapping of structure onto function. This relationship is constantly being interpreted and reinterpreted as part of the negotiation of meaning that accompanies every dialogical interchange. According to the emergentist perspective, grammar is not a prerequisite of communication; rather, it is a byproduct of communication (Hopper, 1998 cited in Van Lier, 2004) [28].

Ecology

As mentioned earlier, affordance is mentioned in the ecological view of language. Ecology refers to the totality of relationships of an organism to all other organisms with which it comes into contact; management of the environment or specific ecosystems. Ecological linguistics is a study of language as relationships (of thought, action, power), rather than as objects (words, sentences, rules). It also relates verbal utterances to other aspects of meaning making, such as gestures, drawings, or artifacts.

Internalization

Ohta (2000) assigns four levels of internalization. First, the learner is unable to notice, or correct the error, even with intervention. Second, the learner is able to notice the error, but cannot correct it, even with intervention, requiring explicit help. Third, the learner is able to notice and correct an error, but only with assistance. The learner understands assistance, and is able to incorporate feedback offered. Fourth, the learner notices and corrects an error with minimal or no obvious feedback, and begins to assume full responsibility for error correction. However, the structure is not yet fully internalized, since the learner often produces the target form incorrectly. The learner may even reject feedback when it is unsolicited. And fifth, the learner becomes more consistent in using the target structure correctly in all contexts. The learner is fully able to notice and correct his/her errors without intervention.

Levels of internalization from interpsychological to intrapsychological functioning	
Level 1	The learner is unable to notice, or correct the error, even with intervention.

Level 2	The learner is able to notice the error, but cannot correct it, even with intervention, requiring explicit help.
Level 3	The learner is able to notice and correct an error, but only with assistance. The leaner understands assistance, and is able to incorporate feedback offered.
Level 4	The learner notices and corrects an error with minimal, or no obvious feedback, and begins to assume full responsibility for error correction. However, the structure is not yet fully internalized, since the learner often produces the target form incorrectly. The learner may even reject feedback when it is unsolicited.
Level 5	The learner becomes more consistent in using the target structure correctly in all contexts. The learner is fully able to notice and correct his/her own errors without intervention.

6. Conclusion

Input is one of the most important elements in the process of SLA. As Gass (1997) [9] points out, second-language learning simply cannot take place without input of some sort. Since then, specific issues have been actively debated in SLA on the nature of input and input processing:

1. The amount of input that is necessary for language acquisition,
2. Various attributes of input and how they may facilitate or hinder acquisition, and
3. Instructional methods that may enhance input.

In this paper, four hypotheses and paradigms of input processing have been described. It is delineated that although the three paradigms of triggering, input hypothesis, and interaction hypothesis have been widely used and accepted, they lack the ability to account for the dynamic nature of language. Affordance, on the other hand, can account for such a nature of language.

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References

[1] Anderson, J. R. (1993), Problem solving and learning, *American Psychological Association, 48*(1), 35-44.

[2] Calabretta, R., Parisi, D. (2001), Evolutionary Connectionism and Mind/Brain Modularit, In: *Modularity: Understanding the development and evolution of complex natural systems,* MIT Press, Cambridge, Mass.

[3] Cook, V. J. (1991), The poverty-of-the-stimulus argument and multicompetence, *Second Language Research, 7,* 103-117.

[4] Ellis, R. (1994), *The study of second language acquisition,* Oxford University Press, Oxford.

[5] Ellis, R. (1999), Theoretical perspectives on interaction and language learning, In: *Learning a second language through interaction,* 3-32, John Benjamin Publishing Company, Amsterdam/ Philadelphia.

[6] Ellis, N. C. (2007), The weak interface, consciousness, and form-focused instruction: mind the doors, In: *Form-focused instruction and teacher education: Studies in honor of Rod Ellis,* 17-34, OUP, Oxford.

[7] Felix, S. W., Weigl, W. (1991), Universal Grammar in the classroom: The effects of formal instruction on second language acquisition, *Second Language Research, 7,* 162-180.

[8] Flynn, S. (1996), A parameter-setting approach to second language acquisition, In: *Handbook of second language acquisition,* 121-158, Academic Press, New York.

[9] Gass, S. M. (1997), *Input, Interaction, and the second language learner*, Lawrence Erlbaum Associates, Publishers, Mahwah, NJ.

[10] Gass, S. M. (2003), Input and interaction, In: *The handbook of second language acquisition* 224-255, Blackwell, New York.

[11] Gregg, K. R. (1996), SLA theory: Construction and assessment, In: *The handbook of second language acquisition*, 831-865, Blackwell, New York.

[12] Krashen, S. D. (1987), *Principles and practice in second language acquisition*, Englewood Cliffs, Prentice-Hall International, N.J.

[13] Lantolf, J. P. (2007), Conceptual knowledge and instructed second language learning: A sociocultural perspective, In: *Form-focused instruction and teacher education: Studies in honor of Rod Ellis*, 35-54, OUP, Oxford.

[14] Long, M. H. (1996), The role of the linguistic environment in second language acquisition, In: *Handbook of second language acquisition,* 413-468, Academic Press, NY.

[15] Loewen, S., Philp J. (2006), Recasts in the adult English L2 classroom: Characteristics, explicitness, and effectiveness, *The Modern Language Journal, 90*, 536-556.

[16] MacWhinney, B (2004), A multiple process solution to the logical problem of language acquisition, *Journal of Child Language*, *31*, 883-914.

[17] McLaughlin, M. W. (1978), The monitor model: Some methodological considerations, *Language Learning, 28*, 309-332.

[18] McLaughlin, M. W. (1987), Learning from experience: Lessons from policy implementation, *Educational Evaluation and Policy Analysis*, 9 (2), p. 171-178.

[19] Ohta, A. S. (2000), Rethinking interaction in SLA: Developmentally appropriate assistance in the zone of proximal development and the acquisition of L2 grammar, In: *Sociocultural theory and second language learning*, 51-78, OUP, Oxford.

[20] Patten, V. B. (2002), *From Input to Output: A teacher's Guide to Second Language Acquisition*, The McGraw-Hill Companies, Texas.

[21] Schachter, J. (1996a), Learning and triggering in adult L2 acquisition, In: *Performance and competence in second language acquisition*, 70-88, CUP, New York.

[22] Schachter, J. (1996b), Maturation and the issue of universal grammar in second language acquisition, In: *Handbook of second language acquisition,* 159-193, Academic Press, New York.

[23] Schmidt, R. (2001), Attention*, In: Cognition and second language instruction* (2nd ed.), 3-32, CUP, Cambridge.

[24] Sharwood Smith, M. (1994), *Second language learning*: *Theoretical foundations,* Longman, London.

[25] Swain, M., Lapkin, S. (2007), The distributed nature of second language learning: Neil's perspective, In: *Form-focused instruction and teacher education: Studies in honor of Rod Ellis,* 73-86, OUP, Oxford.

[26] Tarone, E. (2007), Sociolinguistic approaches to second language acquisition research—1997-2007, *The Modern Language Journal, 91*, 837-848.

[27] Van Lier, L. (2000), From input to affordance: Social-interactive learning from an ecological perspective, In: *Sociocultural theory and second language learning,* 245-260, OUP, Oxford.

[28] Van Lier, L. (2004), *The ecology and semiotics of language learning: A sociocultural perspective*, Kluwer Academic Publishers, Boston.

[29] White, L. (1996), Universal Grammar and second language acquisition: Current trends and new direction, In: *Handbook of second language acquisition,* 85-120, Academic Press, New York.