

ՕՏԱՐ
ԼԵԶՈՒՆԵՐԸ
ԲԱՐՁՐԱԳՈՒՅՆ
ԴՊՐՈՑՈՒՄ

5

ԵՐԵՎԱՆ 2004

INPUT IN SECOND LANGUAGE ACQUISITION

It is axiomatic that in order for the Second Language Acquisition (SLA) to take place, there must be some L2 data made available to the learner as input and a set of internal learner mechanisms to account for how the L2 data are processed.

The term *input* in SLA is used to refer to the language that is addressed to the L2 learner either by a native speaker or by another L2 learner. In the over-proliferation of SLA theories, however, by an account there are between 40 to 60 theories of SLA; Long, 1993: 225), the term has acquired various interpretations, starting from that of the 'simplified, reduced' classroom language input to the eco-scope system implication (ecological approach: Leo van Lier 2000). Within the limits of the present article we shall try to present different views adopted by the SLA scholars.

As a starting point of input interpretation, it is common to allude to the 'three different views on the role of input in language acquisition' (see R. Ellis, D. Block, R. Mitchell & Myles and others): the *behaviourist*, the *nativist* and the *interactionist*.

The *behaviourist* view of language acquisition seeks to explain progress purely in terms of: 'what happens outside the learner'. From the *behaviourist* viewpoint, the linguistic environment is seen as the critical determining factor. In this model of learning *input* comprises the language made available to the learner in the form of *stimuli* and also that which occurs as *feedback*. The regulation of the stimuli and the provision of feedback shape the learning that takes place and leads to the formation of habit (Ellis, 1999:127). The behaviourist view emphasizes the importance of the linguistic environment, which is treated in terms of *stimuli* and *feedback*.

Nativist accounts of SLA view the learner as a 'grand initiator' (Ellis). This approach minimizes the role of input and explains language development primarily in terms of the learner's internal processing mechanisms. The nativists maintain that exposure to language cannot

account satisfactorily for acquisition, and that input merely serves as a trigger which activates the internal mechanisms (Mitchell & Myles 2002)).

The *interactionist* view treats the acquisition of language as a result of interaction between the learner's mental abilities and the linguistic environment. The learner's processing mechanisms both determine and are determined by the nature of input. Similarly, the quality of input affects and is affected by the nature of the internal mechanisms (Block 2003:25). The interactionist view sees language development as the result of both input factors and of innate mechanisms.

While tracing the L2 acquisition, the researchers rely on or refer to the studies of the L1 acquisition mechanisms. These are often used as a base or a standpoint or a comparison launch pad for explaining the processes of the L2 acquisition mechanisms. The reason for it is the fact that the greatest bulk of language acquisition research has been so far in the L1 sphere.

Therefore, while talking about language input, it is first *motherese* that the researchers focus their attention on, treating it as an initial, original means for providing linguistic data to the recipient/the child. It is believed that *motherese* serves three main functions: (1) an aid to communication, (2) a language teaching aid and (3) a socializing function (Ellis 1999:130). The way mothers talk to their children influences how rapidly their children acquire the language. This is why mothers tend to use simpler, shorter structures, make a heavy reliance on repetitions and often accommodate their utterances to 'baby-talk'. However, mothers do not apply a specially designed linguistic input, nor do they pay special attention to the formal correctness of their children's speech. Instead, it is the child's communicative competence and the social appropriateness of his/her utterances that mothers attend to (Lightbown & Spada 2003:14). Another peculiarity of *motherese* is that if *motherese* is not addressed directly at the child it does not appear to help (Ellis 1999:132), while this is not the case with L2 input.

The mechanisms active at the L1 acquisition stage tend to undergo certain qualitative changes at the time a person starts learning a second language. SLA models have incorporated ideas from cognitive psychology regarding individual differences in attention, automaticity (DeKeyser R. 1998, Schmidt R. 1995), short-term memory (Harrington M.1992, McLaughlin B. 1982), long-term memory, learning styles (O'Malley & Chamot, 1990; Sawyer M. 1992, Ranta L. 1998, etc.: see Cognition and

Second Language Instruction 2001). Studies have revealed that in the process of language acquisition age is of crucial importance. As development progresses from childhood to adolescence, the various areas of the brain lose their plasticity and their capacity for radically new forms of learning (Booth et al 1999). This declining plasticity of the brain lies at the root of the difficulties that older adults have in acquiring full competence in L2. Though with the help of language reinforcement techniques (bedtime monologue, word games, songs, poems, etc.) some adults succeed in overcoming the declining neural plasticity and the parasitism of L2 on L1, it is often the case when 'continued exposure to L2 does not appear to lead to continued learning. In practice the language attainment of these learners becomes fossilized or frozen at a fairly low level (MacWhinney 2001).

Apart from the internal factors there exist apparent external circumstances related with the availability of L2 input for adults which seem to play not the most favourable part. For example, a child non-native speaker receives a simpler input in a more supportive atmosphere than an adult would. Or, when speaking to children the adult native speaker bears greater responsibility and often dominates the conversation by using frequent rhetorical questions and repetitions [input reinforcement]. In contrast, the adolescent learner is expected to play a much bigger part in keeping the conversation going. So, to be able to carry on the conversation the adult learner applies a number of learner strategies noted as 'stepping in sideways', repetition, changing the topic and the use of conversation fillers like 'ya know', which, in fact, are expressions of poor L2 input or L2 acquisition (Scarcella and Higa:409-37).

This brings us to the next, a closely connected with *input* notion known as *foreigner talk*. It is suggested that, whereas the main functional intent of motherese is to direct the child's behaviour, in *foreigner talk* it is to exchange information. Actually, *foreigner talk* refers to the L2 input in natural environment where the learner, voluntarily or not, is immersed into the L2 reality. By means of *foreigner talk* the native speaker (NS) strives to establish communication and promote ideas leading to the comprehension of his message, while the L2 learner, on his/her part, is eager to apprehend the piece of the information addressed to him/her. Being a product of the natural flow of communication, as different from the pre-elaborated, pre-thought and structured *teacher's talk* in the classroom, *foreigner talk* contains a higher proportion of statements, lexis

simplifications and both lexical and grammatical adjustments, as well as use of gestures and translation switches where/if possible.

According to Long, who treats input in interactional context, *foreigner talk* has both formal and functional characteristics. Long labels these *input* and *interaction* features respectively. The *input features* are of two types: those that involve simplifications within the grammatical rule structure of the language and those that involve simplifications leading to ungrammatical speech. *Interactional features* consist of the specific discourse functions performed by native speakers (Long:135-57).

Meanwhile, with reference to the distinctions between input and interaction features and between grammatical and ungrammatical simplifications, Ellis distinguishes three types of foreigner talk: (1)[the most common] foreigner talk consisting of only interactional adjustments (i.e. there are no formal simplifications), (2) foreigner talk consisting of grammatical and interactional input adjustments (i.e. there are no ungrammatical simplifications) and (3) foreigner talk consisting of interactional adjustments as well as both grammatical and ungrammatical interactional adjustments (Ellis 1999:133). Though the first type of foreigner talk appears to be the most common, much depends on the proficiency of L2 learner and the role relationships between the two sides of the discourse. Discourse, interaction or negotiation, all the three actually indicating to one and the same phenomenon, are pivotal in foreigner talk, as during this process, based on the feedback evidence obtained from the learner, the NS (the bearer of the foreigner talk) either activates or adjusts his/her strategies of simplification or clarification. There proceeds a flow of natural discourse, and no specific or all-sided amendments to the speech are generally made. As Hatch argues, it is asking a lot of the NS to measure simultaneously the learner's phonology, syntax and discourse with sufficient accuracy to adjust his own input. Negotiation provides an interactional rather than psycholinguistic explanation. In this respect Meisel (1980) suggests that *foreigner talk* reflects universal strategies of simplification which are part of the speaker's competence to use a language (as quoted from Ellis 1999:138), and it is natural to conclude that *foreigner talk* being a mighty stimulus for L2 acquisition, nevertheless, cannot serve directed instructional purposes, neither can it secure graded, comprehensive L2 input, towards which the *teacher talk* is steered.

Interest in the language of classroom has grown steadily in recent

years. It has been motivated by the recognition that whether it is a subject lesson or a language lesson, successful outcomes may depend on the type of language used by the teacher and the type of interactions occurring in the classroom. In the case of language classroom the growth of interest in the analysis of teacher language and interaction has been stimulated by the rejection of language teaching method as the principal determinant of successful learning. Studies by Scherer and Wertheimer (1970) investigated the comparative effectiveness of grammar-translational, audio-lingual and cognitive methods, but were not able to demonstrate that one of them was more successful than others. Despite the apparent differences in methodological principles, the various methods led to very similar patterns of classroom communication, with the result that the language learning outcomes were also similar (as quoted from Lightbown & Spada 2003:117). Analogous studies have led the researchers to accept the reality that because of the proliferation of systems 'each with their own set of categories', it is hard to make comparisons and draw generalizations about the nature of input/interaction in the language classroom (Ellis 1999:144). Indeed, teacher talk in language lessons is broadly similar to foreigner talk. It tends to be simpler, clearer, more comprehensible, accompanied with gestures and mimic, etc. Like the foreigner talk, teacher talk, too, bears formal adjustments that occur at all language levels. Yet, a clear distinction existing between the teacher talk and foreigner talk should be recognized. In the teacher talk ungrammatical speech modifications do not generally occur. Teacher talk is highly targeted, organized, structurally graded and phonetically as well as grammatically and lexically tuned. This provides a model language to be imitated and assimilated by the learner.

Nevertheless, the 'refined' teacher input has provoked doubts concerning the desired outcome of language teaching.

D'Anglejan (1978) notes that in classrooms where there is explicit teaching of the language, the communication that results rarely corresponds to any acceptable definition of communication outside the classroom. She argues that in such classrooms the input is of reduced variety and affords limited opportunity for hypothesis formation [L2 input actualization into output] and testing. This reduced input can be seen as the consequence of limited opportunities for the negotiation of meaning (Lightbown & Spada 2003:160).

Another difference between the natural and classroom communications

is considered to be the motivational orientation. MacNamara suggests (1973) that the kind of motivation which occurs in classroom settings is completely different from that found in 'street' settings (Ellis 1999:150). The absence of the imperative must in L2 communication forms a ground for incomplete, 'stifled' *negotiation of meaning* in the classroom. Hence, *teacher talk*, no matter how qualified an input it may be considered, provides rather limited opportunities for the L2 learner.

Despite this criticism views against overemphasizing these differences have also been promoted. Krashen asserts that classrooms can afford opportunities for genuine communicative exchanges (Krashen 1981). While Ellis considers that 'rather than treat natural and classroom environments as opposites, it would be more accurate [for the scholars] to see them as providing the same discourse types in different degrees. At the same time, among the different types of classrooms providing language learning, it is the immersion classroom, he considers and, in some cases also the bilingual classroom that are more likely to closely resemble natural environment. Though, in the final analysis Ellis admits that 'it is the style of teaching that counts, in particular whether it is teacher- or learner-centered'. (Ellis 1999:150-151).

So far we had been discussing different views on input, its types (motherese, foreigner talk, teacher talk), but the question of what the factors are that create optimal language input has remained open.

Until recently the dominating theory in input analysis was Krashen's *Input Hypothesis* complemented with his *Natural Order* and *Affective Filter Hypotheses*. In the *Input Hypothesis* Krashen asserts that one acquires language in only one way – by exposure to *comprehensible input*. If the input contains forms and structures just beyond the learner's current level of competence in the language (what Krashen calls 'i+1'), then both *comprehension* and *acquisition* will occur. Krashen claims that exposure to comprehensible input is both *necessary and sufficient* for second language learning to take place. Linked to the hypothesis are two further ideas: (1) Krashen believes that speaking is a result of acquisition and not its cause, and (2) if input is understood, and there is enough of it, the necessary grammar is automatically provided. Krashen also emphasizes that the input does not need to be finely tuned. It requires only *rough* tuning with the focus on successful communication only. He asserts that the natural order of language acquisition (Natural Order Hypothesis) is independent of the order in which rules are learned

in language classes. Like first language learners, second language learners, too, seem to acquire the features of the target language in predictable sequences. Consequently, it is the *comprehensible input* that the learners need before their internal processing mechanisms work (Krashen 1981).

The lack of success when comprehensible input is available Krashen explains through his *Affective Filter Hypothesis*. 'Affect', according to Krashen, refers to such things as motives, needs, attitudes and emotional states. If the learner is tense, angry, anxious or bored, he 'filters out' the input, making it unavailable for language acquisition. So, the filter is up (blocking input) when the learner is stressed, self-conscious or unmotivated. Whereas the filter is 'down' when the learner is motivated, positive motivations resulting in 'lowered affective filter'. Thus, the success of comprehensible input is explained by the Affective Filter that controls how much input is let and how much is excluded (Krashen 1981).

However, further developments in SLA theory have resulted in a deeper and more comprehensive analysis of *input*, emphasizing such factors as prior linguistic knowledge, frequency of exposure, attention, affect, interaction/negotiation, universals (based on Chomskian Universal Grammar), L1 knowledge and quality of analyzed output. Stating that the first and absolutely necessary condition for any learning to take place is the provision of some form of input in the learning environment, Gass considers that the primary stage in language input acquisition process is the *apperception* stage, during which the learner notices the incoming data, relating them to the past experience and later parsing them into meaningful units for further analysis (Gass & Selinker 2001). Though Gass 'professes herself agnostic' (Block 2003) as regards the exact nature of input (for example, whether it is elaborated or simplified) or where it should come from (teacher or fellow students in a formal setting), she considers frequency/infrequency (multiple instances or one unique input), affect (socio-cultural factors, status, motivation, attitude, as well as anxiety, fatigue and degree of comfort), prior knowledge (L1 impact, other L2 or the targeted L2 knowledge, Universal Grammar/innate knowledge) and attention (the prior level of which determines the match between the learner's prior knowledge and the apperception of input) to be essential features determining the apperception of input.

The key role of these factors in the language input has been acknowledged and studied by many SLA scholars, though formulated in different models (Competition Model: MacWhinney, IIO model: Gass,

S.L.A. model: Block, etc.) or accentuating this or that particular aspect, still assigning the input comprehensibility a leading position. Mitchell writes: It has always been obvious that comprehensible and appropriately contextualized L2 data is necessary for learning to take place (Mitchell & Myles 2002:126). And Long proposes to make the input comprehensible by using structures and vocabulary which the learner already knows, though promoting a 'here-and-now' orientation together with interactional adjustments, as the main source of comprehensible input (Long 1993).

The study of input would lack much if no reference were made to the notions of *intake*, *interaction* and *output*, which are closely interrelated with that of input.

Even if input is comprehensible and is understood by the learner, research has revealed that it may not be processed by the learner's internal mechanisms. It is only when *input* becomes *intake* that SLA takes place. *Input* is the L2 data which the learner hears; *intake* is that portion of L2 which is assimilated and fed into the interlanguage system. *Intake* means the assimilation of language features on the part of the learner. However, this assimilation is not automatic and is not determined solely by the fact that input has been apperceived and comprehended. Mediating throughout the process are prior knowledge structures such as Universal Grammar and procedural memory as well as learnability (Block 2003: 29).

Still, this transformation of *input* into *intake* would not be possible if it were not mediated by the *interaction/negotiation* stage, which, in fact, establishes the essential link between the two.

The *negotiation of meaning* through *interaction* is considered to be a crucial factor in triggering L2 development. In particular, it has been hypothesized that it is negotiation that makes input comprehensible and in this way promotes SLA. During the learning process the learner and the NS (or the teacher or the fellow-student) together strive to overcome communicative difficulties which are always likely to arise as a result of the learner's limited L2 resources. On the part of the NS or the instructor this involves the use of different *communicative strategies and tactics* (Long 1983:141). We find a similar view with MacWhinney who asserts that activity or interaction relate to learning in indirect ways, by feeding into the cognitive processes that are going on in the brain and mind of the learner [interaction – intake route] (MacWhinney 2001:246.)

Hatch, too, believes that it is not enough to look at input and to look

at frequency only; the important thing is to look at the corpus as a whole and examine the interactions that take place within conversations to see how interaction itself determines frequency of forms and how it shows language functions evolving (as quoted in Ellis 1999:138).

Interaction being an all-embracing, a much wider, general notion, involves a plethora of manifestations conveniently grouped into two large sets - natural and classroom environment interactions, the latter of which is an issue of controversy among scholars. Gremmo, Holec and Riley (1978) and some other scholars point out that the classroom only teaches pupils how to reply, and does not equip the learners for interaction outside the classroom where they have to initiate discourse. At the same time Ellis, stating his preferences towards interactions that take place in natural environment, concludes that 'doubts remain whether sufficient negotiation is possible in classrooms, particularly when IRF [Initiates(teacher), Responds (student), Feedback (teacher)] exchanges predominate. A one-to-many linguistic environment seems to him better-suited to promoting learning than a one-to-one environment (Ellis 1999:149).

Contradicting this view, Long holds the opinion that the role of free conversation is notoriously poor as a context for driving interlanguage development. In contrast, tasks, that orient participants to shared goals and involve them in some work or activity [classroom environment], produce more negotiation work. 'When working cooperatively on certain kinds of problem-solving tasks participant's 'conversational feet are held to the fire' (Long 1993). To conclude, it is worth to quote Gass who states that, whatever the environment is, where the negotiation/interaction proceeds, in terms of input, the type of interaction in which the learner is engaged determines whether or not input is apperceived. (Gass & Salinger 2001) .

The apprehended input, modified into intake, further manifests itself as an *output* which is an integrated expression of prior and newly acquired knowledge, personality mix and the situation in which it is being produced. The subject of the present article being *input*, we choose to refer to *output* only in terms of its relevance to input.

Though Krashen specifically rejects the possibility that production (as opposed to comprehension) serves any purpose in SLA, Sharwood-Smith as well as others note that the learner's *output serves as input* to his own language processing mechanisms. Output can serve as part of a

'feedback loop' to the intake stage. It should not be viewed as an endpoint: rather it is a potential catalyst for starting up the entire process again. (Block 2003:130).

Swain suggests that output is important in several ways: (a) the learner may be pushed to use alternative means where there is communication breakdown, in order to express a message precisely, coherently and appropriately; (b) using (as opposed to simply comprehending) the language may force the learner to move from semantic processing which is characteristic of early stages of SLA (i.e. whereas comprehension can take place by simply attending to the meaning of content words, production may trigger the focus of formal features); (c) the learner has a chance to test out hypothesis about the L2 (Robinson 2001:153).

The importance of the role of output in L2 development has also been put forward by Gass and Selinker. They point out that output can be beneficial to the process of language learning for at least the following four reasons: (1) it allows learners to test their hypothesis about the taught language, (2) it provides them with opportunities to get feedback on their hypothesis, (3) it helps to develop automaticity in the L2 and (4) it forces a shift from meaning-based to syntax-based processing (Gass & Selinker 2001).

Thus, without the output, that 'feedback loop', no subsequent input is actually materialized. The output itself modifies into input or part of it for further language acquisition.

In summary, we have looked at different approaches to the nature of input, discussed the types of input and the factors that mold successful input for L2 acquisition. We have also tried to bring input in line with intake, interaction and output and show how interlocked these phenomena are. We have underlined the importance of input in L2 teaching as well as the importance of looking at it within the complex system of close relationships of different aspects of the L2 acquisition process.

BIBLIOGRAPHY

1. Block D. *The Social Turn in Second Language Acquisition*. Edinburgh, Edinburgh University Press, 2003.
2. Ellis R. *Understanding Second Language Acquisition*. Oxford, Oxford University Press, 1999.

3. Gass S. and Salinger L. *Second Language Acquisition: An Introductory Course*. Mahwah, NJ: Lawrence Erlbaum, 2001.
4. Krashen S. *Second Language Acquisition and Second Language Learning*. Oxford, Pergamon, 1981.
5. van Lier. *From Input to Affordance: Social-Interactive Learning from an Ecological Perspective*. - In: Lantolf J. *Sociocultural Theory and Second Language Learning*. Oxford: Oxford University Press, 2000.
6. Lightbown P., Spada N. *How Languages are Learned*. Oxford, Oxford University Press, 2003.
7. Long M. *Input, Interaction and Second Language Acquisition*. *Language Learning* 31, 1981.
8. MacWhinney, B. *The Competition Model: the Input, the Context and the Brain*. In Robinson, P. (Ed.) *Cognition and Second Language Instruction*. Cambridge, Cambridge University Press, 2001.
9. Mitchell, R. and Myles F. *Second Language Learning Theories*. London, Arnold, 2002.
10. Robinson, P. (Ed.) *Cognition and Second Language Instruction*. Cambridge, Cambridge University Press, 2001.
11. Scarcella, R. and C. Higa. *Input, Negotiation and Age Differences in Second Language Acquisition*. *Language Learning*, N 34, 1981.