Crofts.

Varonis, E. M. and Gass, S. M. (1985). Non-native / non-native conversation: A model for negotiation of meaning. *Applied Linguistics*, 6, 71-90.

White, L. (1989). *Universal grammar and second language acquisition*. Amsterdam: John Benjamins.

- Krashen, S. (1985). The input hypothesis, London: Longman.
- Krashen, S. (1987). Principles and practice in second language acquisition. Englewood Cliffs, N. J.: Prentice Hall.
- Krashen, S. (1988). Second language acquisition and second language learning. New York: Prentice Hall.
- Lado, R. (1964). Language teaching: A scientific approach. New York: McGraw Hill.
- Long, M. (1983). Native speaker/non-native speaker conversation and the negotiation of comprehensible input. *Applied Linguistics*, 4, 126-141.
- Long, M. (1985). Input and second language acquisition theory. In S.M. Gass and C. G. Madden (Eds.), *Input in second language acquisition*. Rowley, MA: Newbury House.
- Long, M. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie and T. K. Bhatia (Eds.), Handbook of second language acquisition. San Diego: Academic Press.
- Loschky, L. (1994). Comprehensible input and second language acquisition: What is the relationship? *Studies in Second Language Acquisition*, 16, 303-323.
- Nuttall, C. (1996). *Teaching reading skills in a foreign language*. New ed. Oxford: Macmillan Heinnemann.
- Pica, T. (1994). Research on negotiation: What does it reveal about second-language learning conditions, processes, and outcomes? *Language Learning*, 44, 493-527.
- Pica, T., Young, R. and Doughty, C. (1987). The impact of interaction on comprehension. TESOL Quarterly, 21, 737-758.
- Skinner, B. F. (1957). Verbal behavior. New York: Appleton Century

REFERENCES

- Carrell, P. L., J. Devine, and D. Eskey (Eds.), (1988). *Interactive approaches to second language reading*. New York: Cambridge University Press.
- Chomsky, N. (1965). Aspects of the theory of syntax. Cambridge, Mass.: MIT Press.
- Chomsky, N. (1968). *Language and mind*. New York: Harcourt, Brace, Jovanovich.
- Chomsky, N. (1986). Knowledge of language: Its nature, origin and use. New York: Praeger.
- Cook, V. J., and Newson, M. (1996). *Chomsky's universal grammar:*An introduction. 2nd ed. Oxford: Blackwell Publishers.
- Ellis, R. (1985). *Understanding second language acquisition*. Oxford: Oxford University Press.
- Ellis, R. (1990). *Instructed second language acquisition*. Oxford: Blackwell Publishers.
- Ellis, R. (1994). *The study of second language acquisition*. Oxford: Oxford University Press.
- Fowler, W. S. (1974). First certificate English: Reading comprehension. London: Thomas Nelson and Sons Ltd.
- Gass, S., and Selinker, L. (2001). Second language acquisition: An introductory course.2nd ed. New Jersey: Lawrence Erlbaum.
- Gass, S. M., and Varonis, E. M. (1994). Input, interaction and second language production. *Studies in Second Language Acquisition*, 16, 283-302.
- Hatch, E. (1979). Apply with caution. Studies in Second Language Acquisition, 2, 123-143.

c. showed it to John.

d. got in its way to

prevent it from escaping.

- 9. The snake had escaped because
 - a. one of the monkeys was able to reach its cage from its own.
 - b. one of the monkeys had escaped and let it out.
 - c. the wood on its cage had warped.
 - d. someone had left its cage unlocked.
- 10. When the affair was over, John
 - a. refused to speak to the narrator.
 - b. preferred not to mention it.
 - c. told the narrator what he thought in a few words.
 - d. blamed him for his carelessness.

careful with it

- 3. According to the passage, the narrator,
 - a. put the snake in a normal cage.

 b. made a special cage

for it himself.

- c. asked someone to make a cage for it. d. used one of the monkey cages for it.
- 4. The narrator was afraid that the snake would escape because
 - a. it was so small that it could get through any opening.
 - b. the rain might produce a larger opening.
 - c. he was busy having a bath.
 - d. the monkeys might let it out.
- 5. When the snake appeared in the hut, John was
 - a. feeding the birds.

b. making water

containers.

c. eating fruit.

d. putting on his

dressing gown.

- 6. The narrator thought
 - a. that the best way to save his friend was not to excite him.
 - b. that if he told John the truth he would jump out of his chair.
 - c. that it was wiser not to tell John about the snake.
 - d. that it would be amusing to frighten his friend.
- 7. When the narrator spoke, John
 - a. stayed where he was, quietly.

b. shouted in terror.

c. jumped out of his chair.

d. threw everything he

could find at the snake.

- 8. When the snake came out from under the chair, the narrator
 - a. cut its head off.

b. took hold of it

behind the head

was all but overturned. The Gaboon Viper, startled by all this activity, shot out from under the chair and wiggled determinedly towards the back of the monkey cages. I headed him off, and after a few minutes got him arrested in the folds of a butterfly-net, then I carried him and dropped him in his cage. I saw then the reason for his escape: the snakes had been stacked too close to the monkeys, and a female Drill had amused herself by putting her paws through the bars and undoing all the cages she could reach. The first one, as always happens, belonged to the Gaboon Viper. John said little, but it was brief and to the point. I agreed with him, for if the snake had bitten him, he would not have survived: there was no snake-bite serum in the Cameroons, to the best of my knowledge, and the nearest doctor was twenty-five miles away, and we had no transport.

Appendix C (Comprehension Questions) CHOOSE THE BEST ANSWER A, B, C OR D AND MARK IT ON YOUR ANSWER SHEET.

- 1. The snake was particularly attractive to the narrator because
- a. it was very expensive.

b. it had been very

difficult to obtain.

fond of snakes.

- c. its colours were seen at their best.
- d. his friend was so

- 2. The narrator's friend
 - a. was too frightened of the snake to look at it.
 - b. looked at the snake for a moment but did not like it.
 - c. thought it was very ugly and dangerous.
 - d. thought the snake was beautiful but begged the narrator to be

So the special cage was built, and the slow-moving and deadly snake placed inside. All would have been well if it had not been for the thunderstorm. This broke with unusual force just as I was having my bath and, remembering that the snake cages were piled out in the open, I shouted to the animal staff to bring them in. If the cages got damp the wood warped and naturally, snakes can move through small cracks. The cages were rushed inside and piled up near the monkeys. This proved my undoing.

John was seated near the table, in his pyjamas: he was busy cutting down some old fruit tins to make into water pots for the birds, and he was absorbed in his work. I was just putting the finishing touches to my toilet when I saw something move in the shadows beneath his chair. Putting on my dressing-gown I went closer to see what it was. There on the floor, about six inches away from John's feet, lay the Gaboon Viper. I had always believed, judging by what I had read and was told, that at moments like this one should speak quietly to the victim, thus avoiding panic and sudden movement. So, clearing my throat, I spoke calmly and gently:

'Keep quite still, old boy, the Gaboon Viper is under your chair.'

On looking back, I feel that I should have left out any reference to the snake in my request. As it was, my remark had an extraordinary effect on my companion. He left the chair with a speed and suddenness that was amazing. The tin can, the hammer, and the tin cutters, went flying in various parts of the hut, and the supper table

^{&#}x27;It's deadly, isn't it, old boy?' he asked.

^{&#}x27;Yes, very deadly.'

^{&#}x27;Well, for goodness' sake keep it in this cage.'

^{&#}x27;Don't worry, I'm having a special cage built for it.'

and suddenness that was startling, and suggestive of the better examples of levitation. The tin can, the hammer, and the tin cutters, went flying in various parts of the hut, and the supper table was all but overturned. The Gaboon Viper, startled by all this activity, shot out from under the chair and wiggled determinedly towards the back of the monkey cages. I headed him off, and after a few tense minutes got him entangled in the folds of a butterfly-net, then I carried him and dumped him in his cage. I saw then the reason for his escape: the reptiles had been stacked too close to the monkeys, and a female Drill had amused herself by putting her paws through the bars and undoing all the cages she could reach. The first one, as always happens, belonged to the Gaboon Viper. John said little, but it was terse and to the point. I agreed with him wholeheartedly, for should the snake have bitten him he would not have survived: there was no snake-bite serum in the Cameroons, to the best of my knowledge, and the nearest doctor was twenty-five miles away, and we had no transport.

Appendix B (The Simplified Text) READ THE FOLLOWIG PASSAGE AND ANSWER THE QUESTIONS THAT FOLLOW.

A talkative hunter arrived carrying a small basket in which there was a fat and beautiful Gaboon Viper. The skin of these snakes is covered with the most complicated and colourful pattern, and having bought it, I carried it in for John to admire. The snake had recently shed his skin, so the colours glowed with his life, a lovely patchwork of pink, red, silver, and chocolate. John admired it, but asked me to keep it safely locked up.

patchwork of pink, red, fawn, silver, and chocolate. John admired it, but implored me to keep it safely locked up.

'It's deadly, isn't it, old boy?' he asked.

'Yes, very deadly.'

'Well, for goodness' sake keep it in its cage.'

'Don't worry, I'm having a special cage built for it.'

So the special cage was built, and the sluggish and deadly viper placed reverently inside. All would have been well if it had not been for the thunderstorm. This broke with unusual force just as I was having my bath and, remembering that the reptile cages were piled out in the open, I yelled to the animal staff to bring them in. If the cages got damp the wood warped and it is surprising how small a crack a snake can squeeze through if it wants to. The cages were rushed inside and piled up near the monkeys. This proved my undoing.

John was seated near the table, in his pyjamas: he was busy cutting down some old fruit tins to make into water pots for the birds, and he was absorbed in his work. I was just putting the finishing touches to my toilet when I saw something move in the shadows beneath his chair. Putting on my dressing-gown I went closer to see what it was. There on the floor, about six inches away from John's inadequately slippered feet, lay the Gaboon Viper. I had always believed, judging by what I had read and was told, that at moments like this one should speak quietly to the victim, thus avoiding panic and sudden movement. So, clearing my throat, I spoke calmly and gently:

'Keep quite still, old boy, the Gaboon Viper is under your chair.'

On looking back I feel that I should have left out any reference to the snake in my request. As it was, my remark had an extraordinary and arresting effect on my companion. He left the chair with a speed longer entitles teachers to the sole prerogative to ask questions; rather it advises them to permit the learners to ask questions which serve to clarify and confirm the challenging input. This new approach to teach reading comprehension can be labelled as the *interactional* approach, which, of course, should be distinguished from *interactive* model of reading in which both top-down and bottom-up modes of information processing are involved (cf. Carrell *et al.*, 1988).

Finally, the findings of this study promote the widespread use of authentic reading materials in both EFL and ESL classes. Authentic reading texts have often been criticized on the grounds that they are difficult for learners and thus provide them with incomprehensible input, which is often discouraging. However, as it was shown in this study, it is quite possible to make authentic texts which are beyond the competence level of the learners comprehensible through interactional modifications. As Nuttall (1996) rightly argues authentic texts not only encourage the use of text attack skills, but also exhibit characteristics of true discourse, which are not found in simplified texts. Therefore, they should be widely used by employing appropriate instructional techniques.

Appendix A (The Original Text) READ THE FOLLOWING PASSAGE AND ANSWER THE QUESTIONS THAT FOLLOW.

A voluble hunter arrived carrying a small basket in which nestled a fat and beautiful Gaboon Viper. The skin of these plump, squat-looking snakes is covered with the most intricate and colourful pattern, and having purchased it, I carried it in for John to admire. The reptile had recently shed his skin, so the colours glowed with life, a lovely do this task.

Results

The means for the two groups are presented in the following table. A comparison of the two means through a t-test revealed a significant difference between them: t=-2.42, p < 0.05. This suggests that the students who had received the input through interactional modifications had comprehended the reading text better than the students who had received it through linguistic modifications.

Group 1 (n=23)	M	SD
Linguistic modifications	10	3.07
Group 2 (n=22)		Harry 11
Interactional modifications	12.27	3.22

CONCLUSIONS

The results of this study are significant in three ways. First, they lend additional empirical support to Long's claim that interaction and negotiation of meaning facilitate the process of comprehension more effectively than linguistic simplification. It was mentioned earlier that the previous studies of this type were concerned with oral input, i.e. they examined this issue through listening comprehension tasks. This study, however, supported Long's Interaction Hypothesis from a new perspective.

Second, they suggest that if reading input is to become optimally comprehensible, there should be abundant interaction between the teacher and the learners, which in turn gives rise to negotiation of meaning. This new manner of making input more comprehensible no

negotiation (Pica, 1994). It is a type of "interaction that occurs when learners and their interlocutors anticipate, perceive, or experience difficulties in message comprehensibility" (p. 494).

In this study, the subjects in the first group (G_1) received the input in the first linguistic environment (linguistic modifications) and then did the assigned task, which was answering ten multiple-choice reading comprehension questions. They were given a total time of twenty minutes to read the text and answer the questions.

The subjects in the second group (G2) received the input in the second linguistic environment, i.e. through interaction and negotiation of meaning. These subjects were presented to the original version of the text and answered the same reading comprehension questions; however, they were encouraged to ask any questions about the meaning of the unknown words, phrases, and structures. To make sure that these procedures would be carefully performed, I had a meeting with the teacher of this class, in which I explained to him the steps he was to follow. Then I attended his class as a non-participant observer to see how everything would go on. According to the given instructions, the teacher first handed the reading text out and asked the students to read it in ten minutes. At the end of this period, they were given another period of ten minutes to ask questions about the meaning of unfamiliar words and phrases which they had difficulty with. This was the most important part of the experiment in which negotiation of meaning, in its true sense, was created as a result of a collaborative attempt between the teacher and the students. Finally, after this period of interaction, the comprehension questions were handed out and the students were given another ten-minute period to

Materials and Procedures

The reading comprehension extract used in this study was an extract taken from Fowler (1974). This reading passage, which was beyond the competence level of the subjects, was presented to them in two different kinds of linguistic environments. The first linguistic environment was characterized by input that had been simplified by employing more frequently used words, avoiding complex grammatical structures and omission of some vocabulary items which would not distort the message of the original text. The simplification, a copy of which appears in the Appendix, was done by the researcher. The following figure provides examples of this linguistically modified input.

Original:	A voluble hunter arrived carrying a small basket in which nestled a fat and beautiful Gaboon Viper.	
Simplified:	olified: A talkative hunter arrived carrying a small basket in which the was a fat and beautiful Gaboon Viper.	
Original:	The skin of these plump, squat-looking snakes is covered with the most intricate and colorful pattern.	
Simplified:	The skin of these snakes is covered with the most complicated and colorful patter.	
Original: Simplified:	So the special cage was built, and the sluggish and deadly viper placed reverently inside.	
da idib b	So the special cage was built, and the slow-moving and deadly snake placed inside.	

The second linguistic environment was characterized by opportunities for interaction between the teacher and the learners in which the learners were allowed and encouraged to initiate interaction to seek clarification. This sort of interaction has come to be known as

reduction in linguistic complexity in the premodified input was not a significant factor in NNS_{S'} comprehension" (Pica *et al.*, 1987 p. 737).

The study reported in this paper was carried out to further investigate what type of input is better comprehended by language learners.

THE STUDY

The present study resembles the studies mentioned above in that it aims to look into the characteristics of optimal input. It differs from them, however, in that it examines the nature of optimal input for reading comprehension rather than listening comprehension. This, in fact, is a departure from the previous studies. Thus this study addresses the following research question:

Does interactionally modified input facilitate reading comprehension more than linguistically modified input as it does in listening comprehension?

METHOD

Subjects

The subjects for this study included 45 male EFL Iranian students who were studying English at an intermediate level (level 6) of the Iran Language Institute (ILI). The subjects were all adults, most of whom university students, with an average age of 22. Two classes were randomly selected from the central branch of the ILI. The students in these two classes were quite similar in terms of age and educational background. There were 22 students in one class and 23 in the other.

Long's Interaction Hypothesis

Long's Interaction Hypothesis is an extension of the Input hypothesis. Long (1983, 1985) acknowledges that simplification and context do have a role in making input comprehensible; however, he adds that interactional modifications play a more significant role in comprehensibility of input, which in turn facilitates the process of language acquisition. In other words, Long's argument maintains that interactive input is a more crucial factor than non-interactive input in SLA. Some of the interactional modifications which are frequently mentioned in the literature are clarification requests, confirmation checks, comprehension checks and self-repetitions (Ellis, 1990).

In recent years, a number of studies have been carried out in order to lend support to the claim that interaction containing negotiation of meaning serves to make input more comprehensible to the learner than simplification (Long, 1983; Varonis and Gass, 1985; Pica et al., 1987; Gass and Varonis, 1994; Loschky, 1994). Pica et al., for instance, working with 16 nonnative speakers (NNSs) of English found that interactional adjustments increased comprehension more than linguistic adjustments. The participants in their study were asked to listen to a native speaker (NS) give directions for choosing and placing 15 items on a small board illustrated with an outdoor scene in two different input conditions. One group listened to a linguistically modified version of the script, with decreased complexity and increased quantity and redundancy. The second group listened to the same script without linguistic premodification, but with opportunities for interaction with the native speaker. The findings of the study revealed that "comprehension was best assisted when the content of the directions was repeated and rephrased in interaction; however,

contextual information to make sense of the incoming input. These contextual clues are extra-linguistic information (pictures and realia), the learner's knowledge of the world and the learner's previously gained linguistic competence. Thus, for example, it is possible for a learner who does not know the passive structure to make sense of the sentence *John was robbed of his money by the criminal* simply because according to his or her world knowledge the act of robbery is committed by criminals. This sentence could, of course, become more comprehensible with the aid of pictures and employing the learner's previously acquired knowledge with respect to the meaning of the preposition *by*.

The second way in which input becomes more comprehensible is to simplify it. Hatch (1979) summarizes the characteristics of the simplified input as follows:

- a) slower rate and clearer articulation,
- b) more use of high frequency vocabulary and fewer idioms, and
- c) syntactic simplification aided by shorter sentences.

Now does this mean that teachers should consciously simplify their speech when they address their students? Should they be preoccupied with using simpler vocabulary and shorter sentences? The answer to these questions according to Krashen (1987) is "no" because "we make these adjustments automatically when we focus on trying to make ourselves understood" (p. 65).

In brief, Krashen's Input Hypothesis attaches too much importance to the role of comprehensible input in second language acquisition. In this respect, Long's position will be examined in the next section. not contain i+5, i.e. structures belonging to stage 5 or beyond. According to Krashen (1987), optimal input for language acquisition has the following characteristics.

- a. It is comprehensible.
- b. It is interesting and / or relevant.
- c. It is grammatically sequenced.
- d. It must be in sufficient quantity.

Of the four characteristics mentioned above, it is the first one which is more relevant to the focal point of this paper, so it will be addressed below.

As Krashen (1987) puts it, comprehensibility is the most important input characteristic. "It amounts to the claim that when the acquirer does not understand the message, there will be no acquisition. In other words, incomprehensible input, or *noise* will not help" (p. 63). Krashen attributes the apparent failure of educational radio and TV programs in teaching foreign languages to the fact that the input these programs provide to the learners is nothing but noise.

My own children watched programs such as Ville Allegre faithfully for years, and acquired about as much as I did: They could count from one to ten in Spanish and recognize a few words such as *casa* and *mesa*! The comprehensibility requirement predicts that TV would, in general, be somewhat more successful than radio as a language teacher, but that even TV would be inadequate in beginning stages. (p. 63)

How can input become comprehensible to language learners? Krashen offers two solutions to this problem: first the use of context by the learner and second the provision of simplified input by the teacher.

According to Krashen, learners can benefit from three sources of

Selinker, 2001).

For instance, a Spanish learner of English, whose native language has the pro-drop parameter, must receive the necessary triggers to suggest to him or her that English is a non-pro-drop language. So the role of input in this case is to help the learner reset the L_1 setting to L_2 setting.

Regardless of different views which exist about the role of input, it should be acknowledged that input must be out there for second language acquisition to take place. Without any input, there would be no output. An ongoing debate, however, in this respect is concerned with what kind of input aids comprehension and hence is optimal for SLA. Stephen Krashen (1985, 1987, 1988), for instance, argues that optimal input is the input which has been made comprehensible through simplification and with the help of contextual factors. Building on this view and extending it, Michael Long (1983, 1985, 1996) admits that comprehensible input is a necessary condition for SLA; however, he states that interaction and negotiation of meaning play a more crucial role in comprehensibility of input than mere simplification. These two positions will be examined further below.

Krashen's Input Hypothesis

The Input Hypothesis is the central hypothesis of Krashen's Monitor Model. According to Krashen (1987), language acquisition occurs when an individual understands input that contains structures which are a bit beyond his or her current level of competence. In other words, if an individual is at stage or level i, the input that he or she should receive and understand should contain i+1. This suggests that if an individual is at stage 3, the input that he or she receives should

linguistic - modifications - SLA.

TWO MAIN VIEWS ON THE ROLE OF INPUT IN SLA

The two main accounts of the role of input in SLA are the behaviorist and the nativist views (Ellis, 1985, 1994). According to the behaviorist view, there is a direct relationship between input and output. Behaviorists rejected the role of human mind as an information processing unit, so they paid no attention to the internal processes that took place inside the learner. They argued that input served the primary purpose of providing the learner with specific linguistic forms and patterns, which he or she had to master. Thus, input was viewed as a source of providing appropriate stimuli for the learner, to which he or she had to give responses (Lado, 1964). The teacher was then expected to give feedback to the learner to reinforce the correct utterances and contribute to the formation of good habits (Brooks, 1960). All these practices were obviously inspired by the concept of operant conditioning (cf. Skinner, 1957).

The second major view on the role of input in SLA is essentially a nativist one, associated with the works of the American linguist Noam Chomsky (1965, 1968, 1986), who argued that every child is born with a built-in language faculty consisting of principles and parameters. The principles are aspects of language which are present in all human minds. The parameters, on the other hand, are aspects that vary across different languages. The proponents of this Principles and Parameters Theory, who are interested in SLA, argue that the role of L₂ input is to help the learner reset the L₂ parameters which are different from his or her L₁. In other words, the L₂ input has a triggering role (White, 1989; Cook and Newson, 1996; Gass and

The Impact of Interaction on Reading Comprehension

Sasan Baleghizadeh*

The study reported in this paper aims to compare the comprehension of two groups of adult EFL Iranian students on a reading passage under two input conditions: *linguistically modified input*, characterized by both lexical and syntactic simplification, and *interactionally modified input* with no linguistic modifications but with opportunities for interaction with the teachers. The results of the study revealed that the students who were allowed to seek clarification by asking questions had comprehended the text better than the students who had read the simplified version of the text. The conclusions drawn from the findings of this study are threefold: they lend empirical support to Long's Interaction Hypothesis, recommend interactional approach to teaching reading, and promote the use of authentic reading materials.

It is a widely accepted fact that in order to learn a language, one must receive the necessary data. In acquiring their first language, children receive a large quantity of L_1 data from their parents and the surrounding environment. In learning a second language, the majority of the learners receive the L_2 data from language classes. This data is provided to them through two main sources of input, i.e. the teacher and the textbook. This paper is intended to review the related literature on input in Second Language Acquisition (SLA) and find out what kind of input is best comprehended by language learners.

Key Words: interaction - Comprehension reading - lexical -

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