

A Critical Review of Krashen's Input Hypothesis: Three Major Arguments

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Abstract

Second language acquisition (SLA) theories can be grouped into linguistic, psychological and sociocultural theories. Krashen's Monitor Model is seen as an innatist theory within the linguistic group. This paper critically reviews the Input Hypothesis, one of the five hypotheses of Krashen's Monitor Model. It examines three major arguments over the hypothesis, namely, the vagueness of the construct, the simplification of input, and the overclaims that he has made about the hypothesis.

Keywords: Input Hypothesis, Monitor Model, Comprehensible input, second language acquisition (SLA)

1. Introduction

Stephen Krashen, a pioneer in the field of second language acquisition (SLA), has made substantial contributions to the understanding of language learning process, whose ideas have long been "a source of ideas for research in second language acquisition" (Lightbown & Spada, 2006, p.38). He should also be given credit for fostering a transition in teaching methodology, from previous rule-focused approaches (e.g. grammar-translation method and audiolingualism) to meaning-focused ones, particularly communicative language teaching (CLT), which is now the most widely accepted approach (Lightbown & Spada, 2006). In spite of the acclaim he has received, Krashen's theory is considered to be "[O]ne of the most controversial theoretical perspectives in SLA in the last quarter of the twentieth century" (Brown, 2000, p.277). His Input Hypothesis in particular, which Krashen (1985, p.1) himself claims to be "the central part of an overall theory of second language acquisition that consists of five hypotheses", i.e. his Monitor Model, has been hotly debated and criticised. Given so many controversies over this construct, it is of particular interest to the author and will be critically reviewed in this paper.

This study first gives an overview of Krashen's Monitor Model within the framework of overall SLA research. It then critically reviews the Input Hypothesis, examining three major arguments, namely, the vagueness of the construct, the simplification of input and the overclaims that he has made about the hypothesis.

2. Theoretical background

2.1 General SLA theories

Though Ellis (2010) points to its meanings both as an established academic discipline and as the object of study in that discipline, SLA is generally understood to be a field of study in parallel with first language (L1) acquisition. In this sense, SLA research "focuses on the developing knowledge and use of a language by children and adults who already know at least one other language" (Spada & Lightbown, 2010, p.108). More broadly, Brown (2000: 271) sees it as "a subset of general human learning" and arrays the elements that should be included in a theory of SLA:

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[SLA] ... involves cognitive variations, is closely related to one's personality type, is interwoven with second culture learning, and involves interference, the creation of new linguistic systems, and the learning of discourse and communicative functions of language. (Brown, 2000, p.271)

Even more sophisticated is a taxonomy proposed by Yorio (1976), picturing a multitude of variables to be investigated in an SLA theory (Brown, 2000). To put it succinctly, a general SLA theory needs to take into account "language acquisition by learners with a variety of characteristics in a variety of contexts" (Lightbown & Spada, 2006, p.33). The following are some of the endeavours to explain SLA common to a variety of learners and contexts. With slight variation, SLA theories can be grouped into three categories: linguistic (e.g. innatist models), psychological (e.g. behaviourist and cognitive models) and sociocultural (e.g. social constructivist models) theories (Lightbown & Spada, 2006; Spada & Lightbown, 2010; Brown, 2000).

Linguistic theories base language acquisition on innate knowledge of principles embedded in the human mind and common to all languages (Spada & Lightbown, 2010). Krashen's (1982) Monitor Model is seen as an innatist theory and the second language (L2) application of Chomsky's (1968) universal grammar (UG) ((Brown, 2000; Lightbown & Spada, 2006). It was developed in the 1970s when the behaviourism-based language teaching methodology had drawn a lot of criticism (Lightbown & Spada, 2006, p.36). Psychological theories hold that it is the general cognitive mechanisms, rather than any specialised module, that function in language learning process as in other types of learning and information processing (Spada & Lightbown, 2010). This category embraces behaviourism, cognitive psychology, connectionism, processability theory, interactionist perspectives (*ibid.*). The cognitivist models are of primal importance, including McLaughlin's attention-processing model and other implicit or explicit models (Brown, 2000). Sociocultural theories place SLA in a larger social context, assuming "an intimate relationship between culture and mind" and the social nature of all learning, including language learning (Spada & Lightbown, 2010, p.114). A representative of social constructivist model is Long's (1983) Interaction Hypothesis.

2.2 Krashen's Monitor Model

An SLA theory, according to Brown (2000, p.274), "is really an interrelated set of hypotheses and/or claims about how people become proficient in a second language". Krashen's (1985) Monitor Model is such a theory, which consists of five hypotheses:

1) *The acquisition-learning hypothesis*, in which a dichotomy is drawn between acquisition and learning, the former being a subconscious way of developing L2 ability, the same as children acquiring their L1, whereas the latter a conscious way to know about language;

2) *The natural order hypothesis*, in which rules of language are acquired in a predictable order, which might be different from the order followed in class instruction;

3) *The monitor hypothesis*, the essence of which is that the ability to produce L2 utterances derives from the learner's acquired competence (subconscious knowledge) while learning (conscious knowledge), simply as a Monitor, helps him make corrections or change output;

4) *The input hypothesis*, which states that language is acquired by receiving "comprehensible input" slightly above one's current level of competence ($i+1$);

5) *The affective filter hypothesis*, in which the affective filter, like a mental block, can control the access of comprehensible input to the Language Acquisition Device (LAD) for acquisition.

2.3 Controversies over the Monitor Model

Krashen's Monitor Model has been severely criticised on lots of grounds by L2 researchers and theorists, psychologists and linguists alike (see Gregg, 1984; White, 1987; McLaughlin, 1987; Swain & Lapkin 1995). Gregg (1984) voiced some of the harshest criticisms, using very strong wording:

We have seen that each of Krashen's five hypotheses is marked by serious flaws: undefined or ill-defined terms, unmotivated constructs, lack of empirical content and thus of falsifiability, lack of explanatory power. (Gregg, 1984, p.94)

The attack on Krashen's theory is mainly directed to the following aspects:

1) *Excessive claims*

Brown (2000) thinks that Krashen's theory of SLA is oversimplified and the claims he made are overstated. For instance, Krashen and Terrell (1983) claimed that his Natural Approach was the first to base a language teaching methodology on an SLA theory, which was criticised by McLaughlin (1987: 58) for exhibiting a "tendency to make broad and sweeping claims for his theory", and such claims "would be disputed by most researchers in the field today".

2) *An absence of evidence*

Another criticism leveled at all of Krashen's hypotheses is an absence of evidence. McLaughlin (1978) is said to be "one of the first to raise the question of whether the five hypotheses could be tested by empirical research" (Lightbown & Spada, 2006, p.38). Furthermore, the evidence Krashen gives to support his theory is largely dismissed by McLaughlin (1987, p.36), as he puts it, "What Krashen does is not provide 'evidence' in any real sense of the term, but simply argue that certain phenomena can be viewed from the perspective of his theory".

3) *Invalid theory*

Some researchers question the validity of Krashen's Monitor Model as a theory. McLaughlin (1987) measures his model against four criteria for evaluating a theory, such as definitional precision and explanatory power, etc., but disappointingly comes to the conclusion that "Krashen's theory fails at every juncture". This view is echoed by Gregg (1984, p.94), who asserts that his theory is not "a coherent theory" and it even would be "inappropriate to apply the word 'theory' to it".

McLaughlin (1987, p.57) also notes other "unfortunate tendencies" in Krashen's theoretical formulation: to mold assumptions to suit his purposes (Gregg, 1984); to bypass counter-evidence or place it in footnotes (Takala, 1984), which is particularly disturbing because in that case the counter-evidence might be neglected by the reader. Of the five hypotheses in the Monitor Model, the Input Hypothesis is the focus of this study, as Krashen (1985, p.1) asserts that it is "the central part" of his Monitor Model.

3. The Input Hypothesis

In the Input Hypothesis, Krashen (1985) claims that "comprehensible input" can lead to acquisition, the process of which is explained in the following:

We progress along the natural order (hypothesis 2) by understanding input that contains structures at our next 'stage' — structures that are a bit beyond our current level of competence. (We move from i , our current level, to $i+1$, the next level along the natural order, by understanding input containing $i+1$; ...) (Krashen, 1985, p.2) According to Krashen (1985, p.2), the unknown structures are acquired with the help of contextual information. The hypothesis has two convictions: first, speech would emerge, rather than being taught, as a result of acquisition through comprehensible input with competence successfully built; second, grammar is automatically acquired if comprehensible input is received and there is enough of it.

Like other hypotheses in the Monitor Model, the Input Hypothesis suffers similar criticisms. McLaughlin (1987, p.43), for instance, faults it with an absence of evidence, saying that there are only "assertions that have only tangential relevance to the central claims of the theory". In view of this and other defects, Gregg (1984, p.90) goes so far as to advocate rejecting the Input Hypothesis, saying that it has "no more explanatory power than Molière's doctor's explanation that opium makes one sleepy by virtue of its dormitive powers". Among the multitudinous arguments about this hypothesis, three major ones will be examined in the following to inspect the construct more closely.

4. Three major arguments about the Input Hypothesis

4.1 Vagueness of the Input Hypothesis

4.1.1 *Comprehensible input*

The Input Hypothesis postulates that language is acquired in "only one way", that is, "by understanding messages, or by receiving 'comprehensible input'" (Krashen, 1985, p.2).

The problem here is, as McLaughlin (1987) contends, that Krashen never defined the concept “comprehensible input” precisely, giving rise to the untestability of the hypothesis. The ambiguity is chiefly manifested in what the formulation $i+1$ signifies and what “comprehensible input” means.

In Krashen’s account, the formulation $i+1$ is not given an exact definition, and is thus interpreted somewhat differently. Even Krashen himself is not consistent with its signification. He first states that i refers to “our current level of competence” and $i+1$ means “the next level along the natural order” (Krashen, 1985, p.2). He seems to be talking about one’s “level of competence”. He then limits this type of competence to grammar alone and interprets $i+1$ as “structures at our next ‘stage’” (*ibid.*). Despite this inconsistency, Krashen is more inclined to a general level of competence in grammar than any specific structure, and is hence criticised by White (1987, p.97) for failing to give “specific syntactic illustrations”.

Some scholars tend to interpret this formulation in a more concrete matter. McLaughlin (1987, p.37), for instance, considers “ $i+1$ structures” as “unknown structures”. By contrast, Lightbown and Spada (2006, p.37) try to give a much broader interpretation, in which i signifies “the level of language already acquired” and $+1$ is “a metaphor for language (words, grammatical forms, aspects of pronunciation) that is just a step beyond that level”. This understanding transcends the scope of grammar to cover such aspects as words and pronunciation.

Not only the formulation $i+1$ but also the concept of “comprehensible input” is given no clear definition. The word “comprehensible”, which literally means “able to be understood” or “intelligible”, is again interpreted differently. When talking about “causative variables” in SLA, Krashen (1982, 33) lays down two necessary conditions for language acquisition, the first of which is “comprehensible (or even better, comprehended) input containing $i+1\dots$ ”. In this explanation, two different concepts “comprehensible” and “comprehended” are juxtaposed, with the former concerned with a possibility or the process while the latter a reality or the result of the action. The latter is favoured by Swain (2000, p.98), whose perception of the Input Hypothesis is that “the cause of second language acquisition is input that is understood by the learner”.

4.1.2 The next level ($i+1$)

The vagueness of the hypothesis is also shown in how to decide “the next level along the natural order” (Krashen, 1985) or those “unknown structures” (McLaughlin, 1987). The problem lies in that the so-called “natural order” is not determined yet, which, in McLaughlin’s (1987, p.56) words, is “a non-existent theory of acquisition sequences”. That being the case, it is difficult, if not possible, for the Input Hypothesis to pinpoint what specific structure to be acquired first and what next “along the natural order”.

Consequently, others understand the next level in similar vague ways. McLaughlin (1987, p.56) considers the “right” structures at the next level ($i+1$) to be the ones “just beyond the syntactic complexity of those” in the learner’s current grammar, whereas in Lightbown and Spada’s (2006, p.37) interpretation, they are “just a step beyond that level”. Brown (2000, p.278) takes a middle position, maintaining that “input should neither be so far beyond their reach that they are overwhelmed (this might be, say, $i+2$), nor so close to their current stage that they are not challenged at all ($i+0$)”. Given the indeterminacy of the sequences, those attempts at describing the next level ($i+1$) will practically lead us nowhere.

4.1.3 The acquisition process

What is equally obscure in the Input Hypothesis is the acquisition process. Krashen (1982) formulates the question of acquisition this way:

- 1) [g]iven the correctness of the natural order hypothesis, how do we move from one stage to another?
- 2) If an acquirer is at “stage 4”, how can he progress to “stage 5”?
- 3) More generally, how do we move from stage i , where i represents current competence, to $i+1$, the next level? (Krashen, 1982, pp.20-21)

Krashen (1982, p.21) answers the question by simply claiming that “a necessary (but not sufficient) condition to move from stage i to stage $i+1$ is that the acquirer understand input that contains $i+1\dots$ ”. It is arguable that understanding input alone is enough for acquisition. Evidently, more needs to be known about the transition from mere comprehension to successful acquisition. It seems that Krashen only sets the condition for the move but does not come up with a “mechanism for moving along any given ‘stream of progress’”, thus the claim is no explanation of acquisition in this sense (Gregg, 1984, p.87).

Both White (1987) and McLaughlin (1987) notice the same uncertainty: it is unclear how new input interacts with the learner's current level of grammar to cause change and how he could advance to the next stage, apart from merely recognising the insufficiency of the current one.

4.2 The simplification of input

One controversy closely related to comprehensible input is about Krashen's (1985) postulation that input can be made comprehensible by simplifying it. What he cites as examples of comprehensible input are caretaker speech (CS), sometimes referred to as "motherese" or "baby talk" (Gregg, 1984), teacher talk and foreigner talk. Initially obtaining evidence from L1 acquisition, Krashen (1985) holds that caretaker speech, the language especially directed at children who are acquiring their L1 and simplified somehow for communication, will help language acquisition. White (1987, p.101) contends that he is "misguided" in making such a claim of those forms of simplified input. Krashen's position can be disputed on two grounds: first, in L1 acquisition, CS does not always mean simplified speech; second, "comprehensible" input does not necessarily mean "simplified" or "caretaker speech".

4.2.1 Is caretaker speech simplified speech?

Caretaker speech (CS) is reported to have the following characteristics: 1) it is simplified for communication; 2) it is roughly-tuned to the child's level; 3) it concerns "here and now", i.e. the child's immediate environment (Gregg, 1984, p.89). Krashen (1985) uses CS as evidence for the Input Hypothesis mainly because it is usually simplified, which he sees as one way of making the input comprehensible. It is arguable, however, that CS should be simpler in syntactic structures than adult speech (AS). Newport *et al.* (1977), using precise percentage data, have shown that CS is not syntactically simpler than AS in such aspects as canonical SVO declaratives, clauses with deletion or movement of elements, questions and imperatives (Gregg, 1984, p.89).

Cross-cultural studies also question the notion of simplified CS. Heath (1983) studied black children in working-class families and found that without being particularly addressed to, they learned to speak by imitating what they heard in the surroundings, which was far beyond their current level (McLaughlin, 1987). Similar results were found in Ochs' (1982) research with children in Western Samoa (*ibid.*). The cross-cultural evidence reveals that in quite a few cultures or societies, caretakers (e.g. parents) do not always address young children in simpler codes (McLaughlin, 1987).

What further weakens Krashen's argument is the counter-evidence provided by Gleitman *et al.* (1984), who, by re-analysing the data presented by Newport *et al.* (1977), find that contrarily complex maternal speech can assist the child's language development (White, 1987, p.102). Gregg (1984, p.89) therefore concludes that it is "a pretty messy way" to characterise CS by its syntactic simplicity and to use it as evidence for the Input Hypothesis.

4.2.2 Does "comprehensible" input mean "simplified" input or "caretaker speech"?

Literally, "comprehensible" does not equal "structural simplicity" but has more to do with the learner's knowledge framework or cognitive ability. Even some complex structures could be comprehensible if they match the learner's knowledge framework. The argument here, however, concerns whether simplified input or CS could assist acquisition.

CS has variations, such as "foreigner talk", the adjustments made by native speakers when addressing non-native speakers, or "teacher talk", the language used by teachers in classroom management (Krashen, 1985, p.8). Krashen (*ibid.*) attaches the same value to those variations as to CS, saying that "... the Input Hypothesis predicts the efficacy of these simple codes in the same way it does for caretaker speech". Foreigner talk, for example, needs to be "roughly-tuned to the level of the non-native speaker" for the input to be comprehensible (Krashen, 1985, p.9).

Both White (1987) and Gregg (1984) disapprove of this type of input and question the reasoning. White (1987) uses many examples of deprived input or non-target forms to highlight the dangers of simplified input. She argues that since simple sentences do not contain many complex language properties, if learners are addressed only this way, they are deprived of certain crucial input. Besides, not all teachers or native-speakers will modify their speech. To cite some extreme cases, there are "bad teachers and insensitive or inept native-speakers" (Gregg, 1984, p.97). Even if native-speakers do so, that does not mean merely to simplify the speech.

Their ways of modification when addressing non-native speakers practically are no different from those in ordinary conversations, where there are ambiguities or breakdowns in communication. Usually, some conversational strategies, such as repetition or relexicalisation (McCarthy & Carter, 1997), not necessarily simplification, are employed to make the input “comprehensible” and keep the conversation going. To use CS or its variations as evidence for comprehensible input or the Input Hypothesis is hence not convincing enough.

4.3 Overclaims of the Input Hypothesis

Krashen's (1985, p.1) claim that the Monitor Model is “an overall theory” of SLA is described by McLaughlin (1987, p.19) as “[T]he most ambitious theory of the second-language learning process”. As “the central part” of his “overall theory”, Krashen's Input Hypothesis has been over-emphasised too. It is hailed by Krashen (1980, p.168) to be “the single most important concept” in SLA today for its attempt at “[answer] the critical question of how we acquire language” (cited in McLaughlin, 1987, p.36). There is an exceedingly strong claim that comprehensible input is the causal factor in SLA and, in Krashen's (1985, p.4) words, “[A]ll other factors thought to encourage or cause second-language acquisition work only when they contribute to comprehensible input and/or a low affective filter”. This assertion, thought to be invalid (McLaughlin, 1987; Brown, 2000), can be argued against both internally and externally.

4.3.1 Internal factors

As regards the Input Hypothesis itself, comprehensible input is not the single causal factor in acquisition. It is argued that the acquisition of structures can happen even without input. In other words, internal factors or internally-driven systems can also foster grammatical change and lead to the acquisition of certain grammatical structures. White (1987, p.98) cites the example of the passive from Berwick and Weinberg (1984), who have shown that the child can acquire the passive form in his L1, simply based on his existing syntactic or lexical knowledge, with no need for any contextual or extra-linguistic information. Considering the very similar mechanisms underlying L1 and L2 acquisition, White (1987, p.98) points to the possibility that “there may be more than one potential route for grammar change”.

Apart from the system-internal factors, some structures can be acquired without being “comprehensible”. For instance, formulaic expressions, often used as single items or unanalyzed units, contribute significantly to native speakers' fluency (Nation & Meara, 2010). Initially, the child L2 learner learns to use them automatically for communicative purposes, but he does not understand fully or accurately the meanings of those expressions either as a whole or individually, nor the internal structures. To the child learner, this type of input is not strictly “comprehensible input” by Krashen's definition, since those expressions can only be said to be partly understood and their grammatical formations are deemed far beyond the learner's current level of competence (McLaughlin, 1987).

4.3.2 External factors

SLA cannot be attributed to comprehensible input alone, in that 1) in the Monitor Model, comprehensible input is conditioned by the affective filter; and 2) in the SLA framework, a lot of factors are needed for successful acquisition.

In the Monitor Model, Krashen (1985, p.3) proposes the Affective Filter Hypothesis, in which the “affective filter”, functioning as a mental block, can be “up” or “down” to block or allow comprehensible input to be received by the learner. The filter is “up” when the learner lacks motivation or feels anxious while it is “down” when he identifies himself with the target-language community with no concern for the possible failure in acquisition (*ibid.*). Gregg (1984), however, argues strongly that the Affective Filter Hypothesis does not explain the growth and function of such a filter, and there is no evidence to prove its existence.

In the SLA framework, the Input Hypothesis needs to be supplemented by other theories, such as the interaction hypothesis and the output hypothesis. Some researchers endeavour to explain precisely how to make the input comprehensible, which Krashen fails to do. Notably, Long (1983) proposes one way, i.e. through “modified interaction” in his Interaction Hypothesis. Through an empirical study of conversations between native speakers and non-native speakers, he describes three kinds of devices for the modification of interaction: strategies, tactics, and both. Later, Long (1996) stresses corrective feedback and negotiation of meaning in interaction for language acquisition (Lightbown & Spada, 2006, p.44).

Additionally, Swain (2000) gives prominence to output by presenting her comprehensible output hypothesis, in which she identifies some benefits of output in language development, such as enabling deeper processing of language, promoting “noticing” in the sense of recognising where the learner is unable to convey the right meaning at the right time, and testing the learner’s language learning hypotheses by studying the errors made through production. Aside from interaction and output, other factors are also relevant, such as those explained in noticing hypothesis (Schmidt, 1990), input processing (Vanpatten & Cadierno, 1993), etc. All things considered, the exposure to comprehensible input is indeed essential but not sufficient to explain overall SLA.

5. Krashen’s contributions

In addition to the three major arguments, Krashen is also criticised on other grounds, such as his objection to explicit grammar instruction (Brown, 2000), over-generalisation of rules (White, 1987), inconsistency in the use of terms (Gregg, 1984). However, despite his theoretical deficiencies, even his harshest critics cannot deny that some of his assumptions are correct, as White (1987, p.96) is quoted as saying, “there is something essentially correct about the input hypothesis”.

One important contribution is how his ideas influence language teaching methodology. This is not in the sense of their intuitive appeal to L2 teachers, which, as McLaughlin (1987, p.19) unjustly comments, is “due in large measure to his ability to package his ideas in a way that makes them readily understandable to practitioners”. The real contribution of his theory, the Input Hypothesis in particular, lies in giving prominence to input as well as learners’ exposure to input (White, 1987); underscoring meaningful communication in the classroom, with the emphasis on the message rather than form (Brown, 2000); promoting a shift from the previous rule- or grammar-based approaches to CLT (McLaughlin, 1987).

Other assumptions that are agreed upon include: the need to provide students with a proper challenge (*i+1*) (Brown, 2000); the degree to which acquisition depends on the learner (White, 1987); the role of affective factors (McLaughlin, 1987; Gregg, 1984; Brown, 2000); the importance of sequences of acquisition (McLaughlin, 1987; Larsen-Freeman & Long, 1991).

Generally, Krashen should be credited with integrating research findings from a variety of sources and with formulating “an extensive and detailed theory” (McLaughlin, 1987, p.58). What Gregg (1984, p.94) terms “serious flaws” found in Krashen’s theory can be viewed positively in that they spur other researchers to inspect Krashen’s theory more closely and, most importantly, in the process of falsification, more insights and alternative theories will be proposed, built on Krashen’s “bold, if brash, insights”, thus giving overall SLA research a great boost (Brown, 2000, p.281).

6. Conclusion

It cannot be denied that Krashen’s Input Hypothesis, along with his Monitor Model as a whole, is flawed, but it still offers some inspiring insights that both researchers and teachers can draw on. Well aware of its defects, some scholars try to modify the hypothesis. Besides trying to materialise the Input Hypothesis with specific grammatical structures, White (1987, p.108) suggests tightening it up and giving “a far more precise characterization of the possible interactions between learner and input”. McLaughlin (1987, p. 51) argues for “[A] more balanced view of the second-language learning process”, which embraces internal and external factors, comprehension and production in an equal manner.

SLA is a field so complex that no single theory or factor can account for it. Consequently, despite Krashen’s (1982, p.2) claim that those hypotheses are “a coherent theory” and the criticism directed for that by Gregg (1984), it is preferable not to see his ideas as a unified and integrated theory but one of the many models dealing with certain aspects of SLA, which, like other claims, hypotheses or theories, even competing ones, makes its due contribution to SLA research in general.

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