

CRITICAL PERIOD IN LANGUAGE ACQUISITION: QUALITATIVE CHANGE OF LANGUAGE ACQUISITION DEVICE

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Abstract: The aim of this paper is to show that Orwell's problem in the sense of Chomsky (1986) Knowledge of Language is relevant to knowledge of language and that critical period in language acquisition is attributed to qualitative change of Language Acquisition Device (hereafter, LAD) based on Plato's problem in Chomsky (1986). Chomsky (1986) introduces Plato's problem of explaining how we can know so much, given that we have such limited evidence, and Orwell's problem of explaining how we can know so little, given that we have so much evidence. As Chomsky (1986) discusses, Plato's problem is relevant to knowledge of one's native languages, whereas Orwell's problem is to that of one's non-native languages, which Chomsky mentions a little. If one acquires his/her native language(s) by means of LAD based on Plato's problem, then he/she "acquires" his/her non-native languages by means of LAD' based on Orwell's problem. LAD' should be qualitatively distinguished from LAD because these two function differently to the extent that Orwell's problem is different from Plato's problem. So critical period in (native) language acquisition is when qualitatively changed into LAD'.

Keywords: critical period, language acquisition device, Plato's problem, LAD, Orwell's problem, LAD'

First of all, I should like to ask you all the following question. What do you think of Noam Chomsky?

Some might believe this famous American linguist, others might not believe this notorious transformational syntactician, and still others might be indifferent to the institution professor

at MIT, or psycholinguist Carol Chomsky's husband. To any of these three types of linguists, now, I present my own description of Noam Chomsky. Noam Chomsky is a linguist who has been changing his linguistic theory in order to hold his view of language acquisition. In what follows, Chomsky's view of language acquisition is taken into consideration both affirmatively and a little bit negatively.

Chomsky's concept of language acquisition is characterized by LAD (i.e., the acronym of Language Acquisition Device). Although Chomsky seems to have had the concept so-called LAD from the very beginning of his linguistic study in the 1950's, yet LAD was introduced for the first time thirty –five years ago in 1962 when the ninth international congress of linguists was held at Harvard and MIT. As long as thirty-five years Chomsky has been holding this concept LAD, so, on the basis of LAD's usefulness, I am going to show two points concerning LAD, which is the aim of this presentation "Critical Period in Language Acquisition: Qualitative Change of Language Acquisition Device" with one-page handout and with French and English abstracts on page 132 in this Resumes booklet.

Now, let's read the first paragraph of the handout or the abstracts. The first paragraphs are the same. "The aim of this paper is to show that Orwell's problem in the sense of Chomsky (1986) Knowledge of Language is relevant to knowledge of language and that critical period in language acquisition is attributed to qualitative change of Language Acquisition Device (hereafter, LAD) based on Plato's problem in Chomsky (1986)." The first half of the remainder is devoted to the aim (1) relevance of Orwell's problem to the knowledge of language, and the second half to the aim (2) critical period in language acquisition.

Then, let's go to the second paragraph of the second handout or the abstracts. I am reading that of the handout. "Chomsky (1986) introduces Plato's problem of explaining how we can know so much, given that we have such limited evidence, and Orwell's problem of explaining how we can know so little, given that we have so much evidence. Most of Chomsky (1986) is devoted to the discussion of Plato's problem, which Chomsky argues is relevant to knowledge of language, whereas the brief final chapter of Chomsky (1986) deals with Orwell's problem whose relevance to knowledge of language Chomsky does not mention in the least. But if language is classified into one's native language(s) and non-native language(s), then Plato's problem is relevant to knowledge of one's native language(s), while Orwell's problem is to that of one's non-native languages.

As to Plato's problem, the content of this problem has been discussed since Chomsky (1964) Current Issues in Linguistic Theory, whose longest chapter was presented at the ninth international congress of linguists. "Little evidence" reminds us of poverty of stimulus mentioned by Rizzi on Monday's Plenary session, and "little evidence" i.e., Linguistic Data is the input of LAD and "much knowledge" i.e., Knowledge of Language the output of LAD. Here it should be noted that Knowledge of Language means Knowledge of Native Language as in the case of "Native Speakers' intuition" or "Language is Mirror of Mind."

In contrast, Orwell's problem was not discussed in detail until Chomsky (1986) Knowledge of Language was published, and they say that Chomsky (1986) would have been published earlier without the brief final chapter on this political problem. Chomsky himself regards Orwell's problem as political rather than as linguistic, but, and this is a very big but, is Orwell's problem not linguistic? That is to say, is Orwell's problem not relevant to knowledge of language? The answer is YES. Since everyone, including geniuses on learning

languages, cannot have as much knowledge on his/her non-native languages as on his/her native language, Orwell's problem is relevant to knowledge of language, especially Knowledge of Non-native Languages to the extent that knowledge on non-native language is little.

I should like to confirm the following complicated point. It is not that evidence or linguistic data are little in the case of native language and are much in the case of non-native languages. In fact, the opposite is the case. The "little" in the input of Plato's problem and the "much" in that of Orwell's problem have something to do with its minimum and maximum, respectively. In other words, much knowledge of native language in spite of its minimum evidence or data in Plato's problem and little knowledge of non-native languages in spite of its maximum evidence or data in Orwell's problem.

The first aim is completed.

Next, the second aim is considered, and let's read the rest of the handout or the abstracts. Again, I will read that of the handout.

"On the basis of Plato's problem, Chomsky's model of language acquisition is (1).

Linguistic Data -----> LAD -----> Language

As in the previous paragraph, language is divided into native language(s) and non-native languages, and so (1) can be changed into (2) and (3).

Linguistic Data ----->LAD----->Native Language(s)

Linguistic Data----->LAD'----->Non-native Languages

LAD in (1) and (2) is based on Plato's problem, whereas LAD' in (3) is on Orwell's problem. LAD and LAD' have some similarities since they belong to the same person, but these two should be sharply distinguished because they function differently to the extent that Plato's problem is different from Orwell's problem, that is to say, LAD forms one's native language(s), i.e., much knowledge, while LAD' one's non-native languages, i.e., little knowledge. As for critical period in (native) language acquisition, one of the most mysterious subjects in linguistics, it is when LAD is qualitatively (not quantitatively) changed into LAD'." On the basis of Plato's problem, Chomsky's model of language acquisition, especially native language acquisition, is a model using LAD in (2). Contrastively, in (3), on the basis of Orwell's Problem, non-native languages acquisition model uses not LAD but LAD'. LAD and LAD' should be sharply distinguished in that LAD is a good device, which changes even bad material i.e., little evidence or linguistic data into good product i.e., much knowledge of native language, whereas LAD' is a bad device, which changes even good material i.e., much evidence or linguistic data into bad product i.e., little knowledge of non-native languages. But it should be pointed out here that the same person's LAD and LAD' have some similarities in the same way as the same person's new and old livers do because an old liver changes into a new one in a few months in the same individual.

Now, let's take into consideration critical period in language acquisition.

If we say critical period in language acquisition, the critical period is usually that in native language acquisition rather than in non-native languages' acquisition, though the critical period in non-native languages' acquisition is very much worth pursuing. Hereafter, critical period in language acquisition means that in native language acquisition.

Critical period in native language acquisition was, is, and will be one of the most mysterious subjects in linguistics, because this critical period is so difficult to observe that we can hardly describe or explain critical period. But at the same time critical period cannot be denied in the least, as far as one's native language is usually acquired adequately while one's non-native languages are not. Very intuitively, critical period means the period after which we cannot acquire languages adequately. That is to say, after critical period we cannot acquire our non-native languages better than our native languages. Hence, critical period is the time when LAD is changed into LAD'. The change of LAD into LAD' is qualitative, not quantitative, because LAD is a good device from BAD to GOOD whereas LAD' a bad device from GOOD to BAD.

This is the second aim of this paper.

Finally, I should like to present two pieces of evidence for critical period from LAD to LAD'. First, it can be explained easily that pidgins are replaced by creoles in the second generation. In the first generation after critical period, the output of LAD' is merely pidgins, whereas in the second generation before critical period, the output of LAD is creoles, not pidgins. Interestingly, change from pidgins to creoles in the second generation is a mirror of critical period from LAD to LAD' in individuals.

Second, we can grasp the possibilities and limitations of the Gouin Method, whose main assertion is to learn foreign languages in the way children learn their native languages. The Gouin Method is a very good method if the learners are young enough to be before critical period since they can learn the target foreign language almost in the same way as their native language. But the Gouin Method is not good if the learners' critical period had ended because they can no longer learn the target language in the same way as their native language. Then, how should the learners after critical period learn the target foreign language? The easiest way i.e., almost Gouin's intention is to learn the foreign language using LAD but not LAD', but this seems to be impossible so far as adults cannot become children any more. A possibility I have in my mind is to use a third Language Acquisition Device, i.e., in-between LAD, whose input and output are the same in quality. The better the input to in-between LAD is, the better the output from in-between LAD becomes. In-between LAD is no new concept because it is a kind of product of behaviorists' stimulus-response view in that input i.e., stimulus and output i.e., response are the same in quality as well as in quantity. But the problems of how in-between LAD is gained on the basis of LAD' and so on await further study.

O.K. I wish my little evidence to be your much knowledge. Thank you for your patience.