淡江大學九十四學年度碩士班甄試入學招生考試試題

系別：英文學系(B組)　　　　　科目：英文(含英語語言學議題)

| 准帶項目請打「○」否則打「×」 | |
|---|---|
| × | 簡單型計算機 |

本試題共 ２ 頁 P ）

The following article is by Noam Chomsky from the book *Language and Problems of Knowledge*. Summarize the main points made by the author in your own words. Then write a personal response to the article.

---

*The View Beyond:*
*Prospects for the Study of Mind*　　　/33

---

I began these lectures by posing four central questions that arise in the study of language:

1. What do we know when we are able to speak and understand a language?
2. How is this knowledge acquired?
3. How do we use this knowledge?
4. What are the physical mechanisms involved in the representation, acquisition, and use of this knowledge?

The first question is logically prior to the others. We can proceed with the investigation of questions 2, 3, and 4 to the extent that we have some understanding of the answer to question 1.

The task of answering question 1 is basically descriptive: In pursuing it, we attempt to construct a grammar, a theory of a particular language that describes how this language assigns specific mental representations to each linguistic expression, determining its form and meaning. The second and much harder task carries us beyond, to the level of genuine explanation. In pursuing it, we attempt to construct a theory of universal grammar, a theory of the fixed and invariant principles that constitute the human language faculty and the parameters of variation associated with them. We can then, in effect, deduce particular languages by setting the parameters in one or another way. Furthermore, given the lexicon, which also satisfies the principles of universal grammar, and with the parameters set in a particular way, we can explain why the sentences of these languages have the form and meaning they do by deriving their structured representations from the principles of universal grammar.

Question 2 is the special case of Plato's problem that arises in the study of language. We can solve the problem to the extent that we succeed in constructing the theory of universal grammar, though other factors are also involved, for example, the mechanisms of parameter setting. Other special cases of Plato's problem, in other domains, will have to be addressed in much the same fashion.

Language learning, then, is the process of determining the values of the parameters left unspecified by universal grammar, of setting the switches that make the network function, to use the image I mentioned earlier. Beyond that, the language learner must discover the lexical items of the language and their properties. To a large extent this seems to be a problem of finding what labels are used for preexisting concepts, a conclusion that is so surprising as to seem outrageous but that appears to be essentially correct nevertheless.

Language learning is not really something that the child does; it is something that happens to the child placed in an appropriate environment, much as the child's body grows and matures in a predetermined way when provided with appropriate nutrition and environmental stimulation. This is not to say that the nature of the environment is irrelevant. The environment determines the way the parameters of universal grammar are set, yielding different languages. In a somewhat similar way the early visual environment determines the density of receptors for horizontal and vertical lines, as has been shown experimentally. Furthermore, the difference between a rich and,

/35

stimulating environment and an impoverished environment may be substantial, in language acquisition as in physical growth or, more accurately, as in other aspects of physical growth, the acquisition of language being simply one of these aspects. Capacities that are part of our common human endowment can flourish or can be restricted and suppressed, depending on the conditions provided for their growth.

The point is probably more general. It is a traditional insight, which merits more attention than it receives, that teaching should not be compared to filling a bottle with water but rather to helping a flower to grow in its own way. As any good teacher knows, the methods of instruction and the range of material covered are matters of small importance as compared with the success in arousing the natural curiosity of the students and stimulating their interest in exploring on their own. What the student learns passively will be quickly forgotten. What students discover for themselves when their natural curiosity and creative impulses are aroused not only will be remembered but will be the basis for further exploration and inquiry and perhaps significant intellectual contributions. The same is true in connection with questions that I have been addressing in the concurrent series of lectures on social and political issues (see preface). A truly democratic community is one in which the general public has the opportunity for meaningful and constructive participation in the formation of social policy: in their own immediate community, in the workplace, and in the society at large. A society that excludes large areas of crucial decision-making from public control, or a system of governance that merely grants the general public the opportunity to ratify decisions taken by the elite groups that dominate the private society and the state, hardly merits the term "democracy."

Question 3 has two aspects: the perception aspect

◀ 注意背面尚有試題 ▶

136

and the production aspect. Thus we would like to know how people who have acquired a language put their knowledge to use in understanding what they hear and in expressing their thoughts. I have touched on the perception aspect of the question in these lectures. But I have said nothing so far about the production aspect, what I called Descartes's problem, the problem posed by the creative aspect of language use, a normal and commonplace but quite remarkable phenomenon. For a person to understand a linguistic expression, the mind/brain must determine its phonetic form and its words and then use the principles of universal grammar and the values of the parameters to project a structured representation of this expression and determine how its parts are associated. I have given a number of examples to illustrate how this process might take place. Descartes's problem, however, raises other issues that lie beyond anything we have discussed.

As for question 4, I have said nothing. Inquiry into this problem is largely a task for the future. Part of the problem in undertaking such inquiry is that experiments with human subjects are excluded for ethical reasons. We do not tolerate experimental study of humans in the manner regarded as legitimate (rightly or wrongly) in the case of animal subjects. Thus children are not raised in controlled environments to see what kind of language would develop under various experimentally devised conditions. We do not permit researchers to implant electrodes in the human brain to investigate its internal operations or to remove parts of the brain surgically to determine what the effects would be, as is done routinely in the case of nonhuman subjects. Researchers are restricted to "nature's experiments": injury, disease, and so on. To attempt to discover brain mechanisms under these conditions is extremely difficult.

In the case of other systems of the mind/brain, the

137

human visual system, for example, the experimental study of other organisms (cats, monkeys, etc.) is highly informative because the visual systems are apparently quite similar among these species. But as far as we know, the language faculty is a distinctive human possession. Study of the brain mechanisms of other animals tells us little if anything about this faculty of the mind/brain.

The answers to these four questions that we would be inclined to give today (or at least, that we *should* be inclined to give today, in my view) are quite different from those that were accepted with little controversy as recently as a generation ago. To the extent that these questions were even posed, the answers offered would then have been something like the following. Language is a habit system, a system of dispositions to behavior, acquired through training and conditioning. Any innovative aspects of this behavior are the result of "analogy." The physical mechanisms are essentially those involved in catching a ball and other skilled performances. Plato's problem was unrecognized or dismissed as trivial. It was generally believed that language is "overlearned"; the problem is to account for the fact that so much experience and training are needed to establish such simple skills. As for Descartes's problem, it too was unrecognized within academic circles, the applied disciplines, and the intellectual community at large.

Attention to the facts quickly demonstrates that these ideas are not simply in error but entirely beyond any hope of repair. They must be abandoned, as essentially worthless. One has to turn to the domain of ideology to find comparable instances of a collection of ideas accepted so widely and with so little question, and so utterly divorced from the real world. And, in fact, that is the direction in which we should turn if we are interested in finding out how and why these myths achieved the respectability accorded to them, how they came to dominate such a large

138

part of intellectual life and discourse. That is an interesting topic, one well worth pursuing, but I will not undertake this project here, apart from a few comments later on. If we were to pursue it, we would, I think, find ourselves in the domain of the second series of lectures that I have been giving here in Managua (see preface).