

An Essay on Language Learning in Terms of the Philosophy of Organism

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有機体の哲学と言語習得論

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Whitehead, in discussing the concept of Order in his philosophic system, gives an example of acquiring the Greek language in terms of Society and Occasions in reference to knowledge of the Greek language. I quote the relevant passage,

That set of occasions, dating from his first acquirement of the Greek language and including all those occasions up to his loss of any adequate knowledge of that language, constitutes a society in reference to knowledge of the Greek language. Such knowledge is a common characteristic inherited from occasion to occasion along the historic route. (PR 108)

The term Society represents one of the central concepts in Whitehead's system. We should note, however, that the word society is used with the widest possible area of meaning beside its ordinary use. Also, the word Occasion in the above can be interpreted as referring to another central concept of his philosophy, Actual Entity. The point we should also note is that both Society and Actual Entity belong to the *physical pole*, while Eternal Object, Creativity and God, which are crucial in Whitehead's system and with which we shall deal in due course, are the notions which belong to the *mental pole*. The purpose of this paper is to consider problems of language learning in the light of what we call Whiteheadian synthesis concerning these opposite poles.

Greek has presumably been a required subject of study for most students of Western culture. English at present enjoys a privilege as a common means of communication among the nations of the world. Whitehead significantly uses an example of the acquirement of a foreign language, Greek in this case, for the purpose of explaining some of the key ideas in his philosophic system. He says the metaphysical first principles can never fail of exemplification, and as to the importance of observing a particular example, he says,

The true method of discovery is like the flight of an aeroplane. It starts from the ground of particular observation; it makes a flight in the thin air of imaginative generalization; and it again lands for renewed observation rendered acute by rational interpretation. (PR 7)

We are, therefore, justified to consider some of Whitehead's metaphysical first principles in reference to our particular experiences such as the learning process of a foreign language. At the same time we may be able to attain some understanding of his philosophic system by looking into our particular experience of language learning, as well as to throw light on a solution of the problems in education in general and of foreign language learning in particular.

(1) SOCIETY

One of Whitehead's metaphysical principles is that every entity is in its essence *social* and requires the society in order to exist (RM 104), that there are no single occasions in the sense of isolated occasions, that actuality is through and through togetherness. (SMW 157)

As stated earlier, the meaning of the word Society used here covers a much wider area than the ordinary use of the word. It is applied to a microcosmic world of atoms, molecules, cells, as well as to the macrocosmic universe like planets or the Milky Way. Between these extremes are multifarious societies of the creatures on the earth or the things of the human beings. The society of occasions of foreign language learning is only a trivial example.

Thus, society as a set of occasions in the process of acquiring Greek is only one example 'purposely chosen for its reference to a somewhat trivial element of order, viz. knowledge of the Greek language.' (PR 108) The point of the concept Society in this connection is that it always carries with it the concept of Order in the togetherness of actual occasions. To quote Whitehead's own words, 'The term society will always be restricted to mean a nexus of actual entities which are *ordered* among themselves.' (PR 107) (Emphasis mine)

As applied to the theory of language learning, a set of occasions of speech activity involving individual learners may be said to form a society in which those occasions are ordered in the grammatical system of the language. The order as the condition for excellence in language learning is realized by exact knowledge of the basic grammar and thorough training in skills by which to manipulate the language. It is also the order that lays the basis for creative advance in language activities.

(2) ACTUAL ENTITY OR OCCASION

Actual entities are likened to building blocks of the actual world. This metaphor, however, is not quite appropriate in that it suggests a lifeless substance. Another metaphor is that an actual entity is a drop of experience, which is more true to its real nature, for an actual entity is not a lifeless material, but a living organism that grows and matures, interacting with its environment and appropriating it to itself. 'The final facts are, all alike, actual entities; these actual entities are drops of experience, complex and interdependent.' (PR 23)

Like the concept of society, that of actual entity has also a very wide application, ranging from such microcosmic particles as atoms, molecules, cells, to the macrocosmic universe of the heavenly bodies. All these actual entities are involved with the concept of society and order. The society presupposes many individual actual entities which are ordered in some way, and each actual entity presupposes the society. 'The individual is formative of the society and the society is formative of the individual.' (RM 85)

In a process of language learning, actual entities can be interpreted as so many occasions of speech activities, or according to Whitehead, occasion to occasion in its historic route. For example, an infant is exposed to a series of such occasions, each of which is provided with the essential conditions as an actual entity. In other words, such an occasion is a concrete experience full of life to the infant, who absorbs the data provided for him in his natural acquisition of the language. The set of these accumulated occasions forms a society in reference to the knowledge of the language. Thus, actual speech utterances are the building blocks, or actual entities of a language.

As for the process of the adult learning a foreign language, it can be simulated to the natural process of the infant's acquisition of the language. There are of course some important considerations in an adult's process of foreign language learning, for there are inherent differences between the two processes. The former may involve stimulating motivation and interest on the part of the learner, as well as providing the basic knowledge of grammar and training in skills by means of the best materials conceivable.

Actual entities are the real, basic matters of concrete experiences. But man has the power of abstraction and intelligent analysis to control these experiences of actual entities. The adult has more power of such intelligent analysis, and this should be exploited in order to achieve more effective learning in the forms of generalized knowledge. For example, Whitehead says:

The paradox is now fully established that the utmost abstractions are the true weapons with which to control our thought of concrete fact. (SMW, Chapter on Mathematics)

Now every subject of study should be presented as in the abstract and in the concrete. Both sides are wanted. We learn them in the abstract, we feel them in the concrete.

(Essays in Science and Philosophy, Part III, Historical Changes)

These considerations naturally lead to the concept of eternal objects that are in their nature abstract and form the hierarchy of abstractions, which is yet another of the central concepts of the philosophy of organism.

(3) ETERNAL OBJECTS

In the philosophy of organism, there are three formative elements from which the universe of actual entities emerges. They are Creativity, God and Eternal Objects. (RM 88) To understand the functioning of the eternal objects is to understand more clearly the nature of actual entities. If this unfamiliar term Eternal Objects is disliked, Whitehead suggests that the term Potentials should be suitable. Thus,

In such a philosophy the actualities constituting the process of the world are conceived as exemplifying the ingression (or participation) of other things which constitute the potentialities of definiteness for any actual existence. The things which are temporal [actual entities] arise by their participation in the things which are eternal [eternal objects]. (PR 53)

The eternal objects are the pure potentials of the universe. Actual entities do not arise, apart from the mediation of the eternal objects. The definiteness of an actual entity arises by the selected eternal objects which determine the definiteness. Thus, actual entities and eternal objects are in essential relation with each other. The value of an actual entity is realized by the definite limitation made by the ingression of selected eternal objects.

As to the notion of limitation or definiteness which is frequently used in Whitehead's system, note the following quotation from Whitehead.

Another view of the same truth is that every actual occasion is a limitation

imposed on possibility, and that by virtue of this limitation the particular value of that shaped togetherness of things emerges. (SMW 157)

I do not pretend that I have achieved any full understanding of the concept of eternal objects. It is with some diffidence, therefore, that I propose an application of this concept to the process of language learning. I presume, however, that the abstractive hierarchy of the grammatical system of a language, can be a limited exemplification of the abstractive hierarchy of eternal objects. (SMW, Chapter on Abstraction) For instance, any speech utterance arises by some selected grammatical abstractions; in other words, it is realized by a definite limitation by the ingression (or participation) of selected grammatical abstractions. Here we may confirm the important role of precise knowledge of grammar, which should be so thoroughly learned as to be made unconscious. Just as any values of actual entities are realized by ingression of eternal objects, so any communicative speech utterances can be realized by participation of selected grammatical abstractions. We should take note, however, of Whitehead's advice concerning the essential balance between abstraction and concreteness.

My own criticism of our traditional educational methods is that they are far too much occupied with intellectual analysis, and with the acquirement of formularised information. What I mean is, that we neglect to strengthen habits of concrete appreciation of the individual facts in their full interplay of emergent values, and that we merely emphasise abstract formulations which ignore this aspect of the interplay of diverse values. (SMW, the last chapter)

In spite of such advice and warnings, the fact remains that for any communicative language activity it is essential that the learner has the exact knowledge of grammar and basic skills of the language, and that this knowledge and these skills are so thoroughly learned and trained that 'they must pass out of the sphere of conscious exercise, and must have assumed the character of unconscious habit.' (See the last Section of Order and Novelty)

(4) CREATIVITY

The philosophy of organism is also called process philosophy, and the concept of creativity is essential to a complete understanding of it. Here again, let me quote Whitehead's own words.

'Creativity' is the universal of universals characterizing ultimate matter of fact. It is that ultimate principle by which the many, which are the universe disjunctively,

become the one actual occasion, which is the universe conjunctively. It lies in the nature of things that the many enter into complex unity. (PR 25-26)

It is clear that the notions Creativity, Many, One are involved with one another in a crucial way. The universal principle is the advance from disjunction to conjunction, creating a novel entity; hence the oft-quoted passage 'The many become one, and are increased by one.' (PR 26) Again an instance of language learning may help us understand this difficult notion.

In the process of an infant's language acquisition as well as an adult's language learning, occasions of speech activity are *actual entities* which are involved in creative advance. Observations of the infant's process of language acquisition have proved that infants do create novel speeches. One example of such utterances is:

Daddy better go work, bettern't he?¹⁾

This is, of course, an incorrect speech utterance which is eventually to be corrected by some adult nearby. It is, however, significant that what the infant has learned is more than what he has actually experienced. He has uttered what he has not heard, which means that he has created a novel speech of his own. Thus, advocates of cognitive language learning may well insist on creativity in the process of language learning.

No less significant is the fact the infant has obviously achieved some level of order as unconscious skills and knowledge of grammar. The infant is simply following the rules of order he has acquired. This exemplifies a metaphysical first principle that creativity presupposes order, as Whitehead says, 'There is an order laid upon creativity.' (RM 108) There will be no creative activity without the prerequisite order.

Thus, the language learning process of the infant can be interpreted in terms of those notions so far developed; namely, Society, Order, Abstraction, Creativity, Many, One. At the back of the infant's creation of such a novel utterance as cited above, there is a set of actual occasions of speech activities, which forms a society ordered by common characteristics of occasion to occasion in its historic route. The society of many occasions of the infant's language experiences is the reason for creating a novel utterance as the result of the unification of the many. The creation of *one* novel utterance *bettern't he?* is an outcome of *many* past experiences of similar tag questions.

(5) SUBJECTIVE AIM

Whitehead defines this term as follows:

The 'subjective aim,' which controls the becoming of a subject, is that subject feeling a proposition with the subjective form of purpose to realize it in that process of self-creation. (PR 30)

Whitehead also quotes the prophet Ezekiel in this connection:

They (subjective aims) clothe the dry bones with the flesh of a real being, emotional, purposive, appreciative. The miracle of creation is described in the vision of the prophet Ezekiel: "So I prophesied as he commanded me, and the breath came into them, and they lived and stood up upon their feet, an exceeding great army." (PR 103) (parenthesis mine)

Thus, the notion of subjective aim involves God and creativity, which control the becoming of the subject of an actual entity. This means that the subject feels a proposition for creative advance with the purpose of realizing its own self-creation. As Sherburne puts it, 'Subjective aims constitute the means by which God works in the world.'²⁾

As we saw, God is one of the formative elements of the universe. Whitehead's idea of God is, however, considerably different from that of the traditional Western view of God. He conceives of God 'rather in the spirit of the brief Galilean vision of humility that dwells upon the tender elements in the world, which slowly and in quietness operate by love,' and not under the image of the ruling Caesar, 'an aboriginal, eminently real, transcendent creator, at whose fiat the world came into being, and whose imposed will it obeys.' (PR 404)

Essentially, education is not an imposition from without. Its true aim is to stimulate and guide students' self-development; in a deeper sense it is the call of *élan vital* within the child, which is here called subjective aim, the means by which God works in the child. Education is a cooperative art like the art of horticulture, and the essential task of the teacher is to help the child have a normal, healthy self-development in close cooperation with the child's own power of growth. 'I have planted, Apollos watered; but God gave the increase.' 'Wherefore, if God so clothe the grass of the field, which to day is, and to morrow is cast unto the oven, shall he not much more clothe you?'

This is not a place to delve into the problem of God and religion, important as it is, but it

is evident that the working of God operating by love involves the whole process of the philosophy of organism, and synthesizes all its key ideas, namely, actual entity, society, order, creativity, eternal objects.

Whitehead does not explicitly refer to God and religion in his writings about education, presumably because 'Thou shalt not take the name of the Lord thy God in vain.' However, I cannot but feel the profound sense of reverence revealed in all of his writings about education. 'Pray, what is religious education? A religious education is an education which inculcates duty and reverence.' (AE 23)

(6) ORDER AND NOVELTY

There is a passage in *Process and Reality*, where Whitehead explicitly refers to education. What he expounds in this passage is particularly relevant to the problems of foreign language learning (the teaching and learning of English in Japan is the case in point). Let me quote the passage at some length.

Another contrast is equally essential for the understanding of ideals--the contrast between order as the condition for excellence, and order as stifling the freshness of living. This contrast is met with in the theory of education. The condition for excellence is a thorough training in technique. Sheer skill must pass out of the sphere of conscious exercise, and must have assumed the character of unconscious habit. The first, the second, and the third condition for high achievement is scholarship, in that enlarged sense including knowledge and acquired instinct controlling action.

The paradox which wrecks so many promising theories of education is that the training which produces skill is so very apt to stifle imaginative zest. Skill demands repetition, and imaginative zest is tinged with impulse. Up to a certain point gain in skill opens new paths for the imagination. But in each individual, formal training has its limit of usefulness. Beyond that limit there is degeneration: 'The lilies of the field toil not, neither do they spin.'

It is striking to see that Whitehead takes up problem of education as an introduction to the discussion of the ideal opposites of Order and Novelty. Order in education is exact knowledge (or discipline), whereas novelty is an essential condition for creative advance. These contrastive opposites correspond to those of *precision* and *romance*, which form the basis of his proposition, the Rhythm of Education. We also find Whitehead expressing the same tenet in a terse expression like the following:

The art of progress is to preserve order amid change, and to preserve change amid order. (ibid)

Order is definite, concrete, limited, and comparatively easy to handle, while novelty (or change) is by nature ill-defined, impulsive, free and imaginative. In foreign language learning, order pertains to linguistic skills and the basic knowledge of the fundamental matters of grammatical structures. These should be made unconscious habits, acquired instinct, as Whitehead puts it.

It is a paradox that there is a tendency for order to kill the spirit or romance of novelty, or imaginative zest. This is the problem that bothers those who are engaged in formal, mechanical drills for techniques. The fact remains, however, that the contrastive features of order and imagination are both *sine qua non*; hence Whitehead's proposition of 'Rhythmic Claim of Romance and Precision.'³⁾

In the case of the teaching and learning of English as a foreign language, *order* is thorough knowledge and skills in the fundamental matters of both the sound and grammatical system of the English language. These should be mastered at the initial stage of learning the language, although there may be later occasions for supplemental review of these fundamental matters. Here we recall what was advocated a few decades ago by Charles C. Fries, an exponent of Oral Approach. Notice the similarity between Whitehead and Fries in their emphasis on habit formation through the training of techniques or skills as the basis of order and discipline.

The so-called audio-lingual habit-formation theory of language learning of Fries⁴⁾, which is based on behaviourism and structuralism, emphasizes the inherited order in the structure of the language, whereas the exponent of cognitive-code learning theory⁵⁾ emphasises novel and creative activities of communication. Both schools have denounced each other from a narrow outlook, but the truth of the matter is that, from a wider perspective, both the advocate of order and that of novelty are equally justified, order and novelty being in mutual requirement.⁶⁾

My point is that reconsideration of what Fries advocated, viz. that initial mastery of order as acquired instinct, is necessary in the new context here developed. For example, consider the notion of limitation, for these matters of Order are by nature limited and can be mastered, theoretically at least, 'within a limited time.' And once mastered, too much attention should not be paid to them; the lilies of the field toil not, neither do they spin. We should not, however, lose sight of the other end of the pole, the element of novelty or creativity. Note

what Whitehead says later in the same section:

Order is not sufficient. What is required is something much more complex. It is order entering upon novelty; so that the massiveness of order does not degenerate into mere repetition; and so that the novelty is always reflected upon a background of system. (PR 400)

We are fond of talking about education in terms of creativity, romance or novelty. It is true that these things belong to the very *soul* of education. But the theme of the discussion developed so far is that equal attention should be paid to the *body* of education. For example, Lindsay of Birker, Master of Balliol College of Oxford, says 'Education is a thing of the spirit. But we cannot educate our children without giving the spirit a body, and body a skeleton.'⁷⁾

(7) WHITEHEAD'S EMPHASIS ON THE PHYSICAL POLE IN EDUCATION

Whitehead also says, 'I lay it down as an educational axiom that in teaching you will come to grief as soon as you forget that your pupils have bodies.' (AE 78) This passage is representative of Whitehead's insistence on concrete seeing not only in technical education but in other fields of education. This neglect of concrete experience, he says, has arisen from two disastrous antitheses, namely that between mind and body, and that between thought and action.(ibid)

The sense of importance of concrete appreciation also led Whitehead to his insistence on art and aesthetic education. For example, he says, 'There is no substitute for the direct perception of the concrete achievement of a thing in its actuality.' (SMW 178) By art and aesthetic education, he means 'art in such a general sense of the term that we hardly like to call it by that name.' (ibid) Art in this general sense is 'any selection by which the concrete facts are so arranged as to elicit attention to particular values which are realisable by them.' (ibid)

The reason for Whitehead's emphasis upon concrete appreciation seems to come from his dislike of mere rhetoric of education that enthusiastic reformers naturally dwell on, to the neglect of paying attention to patient school-teachers' daily tasks. He recognizes the fact that successful education consists in practical teachers accomplishing a succession of detailed tasks, hour by hour, day by day. And there always remains the requirement that every subject of study should be presented not just in the abstract but rather in the concrete.

In reference to foreign language teaching, I repeat that the problem of concrete learning entails basic training in skills and imparting precise knowledge of grammar, especially at the initiating stage, as the foundation of creative progress in learning. The order as in acquired skills and basic knowledge should belong to the physical pole, which is presupposed as an essential condition for creative advance. In this connection, we would like to draw attention to Whitehead's practical suggestion as follows:

There is, however, one practical consideration which is largely neglected.... The area of precise knowledge, as exacted in any general educational system, can be, and should be, definitely determined. ...

Surely, in every subject in each type of curriculum, the precise knowledge required should be determined after the most anxious inquiry. (AE 56)

A certain ruthless definiteness is essential in education. I am sure that one secret of a successful teacher is that he has formulated quite clearly in his mind what the pupil has got to know in precise fashion. (AE 57)

One may suspect that knowledge is always in the abstract which must belong to the mental pole. But the level of abstraction in such a basic knowledge as is required in the initial stage of language learning is at a much lower level in the abstractive hierarchy. It should be the outcome of concrete appreciation of actual individual occasions. What is acquired through concrete experiences can be regarded as belonging to the physical pole.

We practical teachers are engaged in a succession of detailed tasks of training in skills and imparting precise knowledge, toiling 'by the sweat of their brows.' Whitehead would have likened us to the early Benedictine monks who 'rejoiced in their labours because they conceived themselves as thereby made fellow-workers with Christ.' (AE 67) Those Benedictine monks could transform their toilsome labours into a joy with their religious vision. Our wearisome works as toiling teachers may also be transfused with some vision, triumphing over its weariness and its pain, and turning it into a joy.

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- 3) See Chapter III, *The Aims of Education* by Whitehead.
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〔1992年12月10日受理〕