

# The Cogito Proposition of Descartes and Characteristics of His Ego Theory

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## Introduction

As is well known, ego theory of René Descartes is constructed on the basis of the Cogito (I think). In the *Discourse on Method*, Descartes formulated the first principle of his philosophy as “je pense, donc je suis”.<sup>(1)</sup> The famous formula “cogito, ergo sum”, which has been traditionally attributed to Descartes himself, originated actually not in his writings, but in the Latin translation of “je pense, donc je suis”. Etienne de Courcelles, the translator of the *Discourse on Method* into Latin, translated it into the formula “Ego cogito, ergo sum, sive existo”.<sup>(2)</sup> Descartes himself did not write the phrase “cogito, ergo sum” anywhere in his writings except the *Search after Truth*,<sup>(3)</sup> so far as we can trace his writings. Also in the *Meditations on First Philosophy*, the most important work of Cartesian metaphysics, we find neither the formula “cogito, ergo sum”, nor the formula “ego cogito, ergo sum”, but only the formula “Ego sum, ego existo”.<sup>(4)</sup> In the *Principles of Philosophy* this proposition is formulated explicitly as “ego cogito, ergo sum”.<sup>(5)</sup> Taking consideration of Cartesian theory of continuous creation, which theory was developed especially in the *Meditations* and in the *Principles*, we would assure that “I am thinking, therefore I am/exist” is the most appropriate English translation of “ego cogito, ergo sum”. In relation to our study of the philosophy of Immanuel Kant, we would assert that particularly in the second edition of the *Critique of Pure Reason*, Kant substitutes “I think” (Ich denke) by “I am” (Ich bin) where “I think” is contextually more suitable, namely even in the chapter of “Of the Deduction of the Pure Concepts of the Understanding”.<sup>(6)</sup> Moreover, it is noteworthy that Kant uses the phrase “the singular representation, I am” (die einzelne Vorstellung, Ich bin).<sup>(7)</sup> “Einzelperson” is synonymous with “Individuum”. In the phrase “die einzelne Vorstellung, Ich bin”, the word “einzeln” is used explicitly in the meaning of “individuell”. Therefore “the singular representation, I am” means explicitly “the individual representation, I am”. And Kant’s expression “the singular representation, I am” suggests us clearly that he is distinctly conscious of the existential individuality of transcendental I. Not only “I think” (Ich denke), which is defined as the transcendental apperception, but also “I am” (Ich bin), which can be defined as the individual representation of one’s own existence, originated in Cartesian proposition “I think, therefore I am.” Descartes formulated the Cogito as an inferential proposition. We must notice that there are some subtle differences between the connotation of “I think” and that of “I am”. In order to clarify the differences between them, we would consider what is called Cartesian methodological skepticism and analyze the metaphysical meaning of Cartesian proposition “I think, therefore I am”.

## Chapter I. Twofold characteristic of the proposition “I think, therefore I am”

The proposition “I think, therefore I am” consists of two minor propositions: “I think” and “I am”. The former expresses the self-consciousness of I himself, and the latter expresses the existence of I himself.

The formula “I am, I exist” suggests the equality of “I am” with “I exist”. Nevertheless, as is implicitly stated in the “Second Meditation”, “I am, I exist” is formulated in its close relationship with “I think” or “I am thinking”. Without carrying out the methodological skepticism, it is sure, Descartes could not succeed in formulating the proposition “I am, I exist”. In the “Second Meditation”, Descartes states as follows:

... Nonetheless I convinced myself that there is nothing at all in the world, no sky, no earth, no minds, no bodies; is it not therefore also true that I do not exist? However, I certainly did exist, if I convinced myself of something. There is some unidentified deceiver, however, all powerful and cunning, who is dedicated to deceiving me constantly. Therefore, it is indubitable that I also exist, if he deceives me. And let him deceive me as much as he wishes, he will still never bring it about that I am nothing as long as I think I am something. Thus, having weighed up everything adequately, it must finally be stated that this proposition ‘I am, I exist’ is necessarily true whenever it is stated by me or conceived in my mind.<sup>(8)</sup>

In this statement it is obvious that even the existential proposition “I am, I exist” is concluded being based on the most fundamental fact “I think” or “I am thinking”, which fact was found by I himself at the limit of the carrying out of the methodological skepticism. The evident fact “I think” or “I am thinking”, which fact expresses the self-consciousness of the very subject of carrying out the methodological skepticism, was found as a phenomenological result of Descartes’ intellectual action of philosophizing methodologically. But the above citation suggests to us that Descartes’ concern in the “Second Meditation” is directed essentially toward demonstrating the substantiality of mind and furthermore toward demonstrating the real distinction between mind and body. For this purpose, his intension has been directed especially toward deducing the existential proposition of thinking I, namely, the proposition “I am, I exist”. Descartes formulated the only one evident fact, which was found at the limit of the carrying out of the methodological skepticism, into the formula “I am, I exist”. As is well known, Descartes compared it to the “only one firm and immovable point in order to move the whole earth”, which point was looked for by Archimedes.

With regard to the procedure for demonstrating the substantiality of mind, we are aware of some subtle differences between the procedure in the *Discourse on Method* and that in the *Meditations on First Philosophy*.

In the *Discourse on Method*, immediately after the formulation of the first principle of his philosophy, Descartes states as follows:

Then, examining attentively what I was, and seeking that I could pretend that I had no body and there was no world or place that I was in, but that I could not, for all that, pretend that I did not exist, and that, on the contrary, from the very fact that I thought of doubting the truth of other things, it followed very evidently and very certainly that I existed; while, on the other hand, if I had only ceased to think, although all the rest of what I had ever imagined had been true, I would have no reason to believe that I existed; I thereby concluded that I was a substance, of which the whole essence or nature consists in thinking, and which, in order to exist, needs no place and depends on no material thing; so that this ‘I’, that is to say, the mind, by which I am what I am, is entirely distinct from the body, and even that it is easier to know than the body, and moreover, that even if the body were not, it would not cease to be all that it is.<sup>(9)</sup>

In this argumentation, not only the substantiality of mind, but also the real distinction between mind and body are demonstrated. But for the demonstrating of the real distinction between mind and body, the substantiality of body (*corpus*) must be antecedently demonstrated. For the demonstrating of the substantiality of body, it is necessary to demonstrate God’s existence and God’s veracity (*veracitas Dei*) antecedently. We must understand that the “Part Four” of the *Discourse on Method* as a whole is constructed for the demonstrating of the real distinction between mind and body.

In the *Meditations on First Philosophy*, Descartes insists on the close relationship between the proposition “I am, I exist” and the proposition “I think” or “I am thinking”. It is obvious that he intends thereby to demonstrate the substantiality of mind. He states as follows:

... What about the things, then, that I attributed to the soul? To be nourished or to walk? Since I no longer have a body, these are only fictions. To sense? But even this cannot be done without a body and I seemed to sense many things while dreaming that I later realized I had not sensed. To think? That’s it. It is thought. This alone cannot be detached from me. I am, I exist; that is certain. But for how long? As long as I think, for it might possibly happen if I ceased completely to think that I would thereby cease to exist at all. I do not accept anything at present that is not necessarily true. I am, therefore, precisely only a thinking thing, that is, a mind, soul, intellect or reason — words the meaning of which was formerly unknown to me. But I am a genuine thing and I truly exist. But what kind of thing? I just said: a thinking thing.<sup>(10)</sup>

In this argumentation, Descartes explains his procedure for demonstrating that mind is a thinking thing (*res cogitans*) or thinking substance (*substantia cogitans*). He insists that the action of “I think” is not other than the attribute of the thinking I (*res cogitans*). In the statement “I am, I exist; that is certain. But for how long? As long as I think, for it might possibly happen if I ceased completely to think that I would thereby cease to exist at all”, Descartes’ conception of the continuous creation (*creatio continua*), is actually mentioned. According to Descartes, without being sustained by the continuous creation, the existence of every finite substance could not be preserved.

The I of “I am, I exist” is “a thinking thing”, to which Descartes applies the term “mind” (*mens*) in principle. We could characterize Descartes’ procedure for demonstrating the substantiality of mind as follows: the procedure in the *Discourse on Method* is substantial and that in the *Meditations on First Philosophy* is existential. That is why we emphasize the twofold characteristic of Cartesian proposition “I think, therefore I am”.

For Descartes, “I think, therefore I am” is ultimately not other than only one proposition by which he could grasp the substantiality of the thinking **I**. But we could not disregard the fact that “I think, therefore I am” is the first principle of his philosophy. In the chapter “Of the Paralogisms of Pure Reason” in the first edition, Kant radically criticizes the conception of soul of the rational psychology. In the history of Western philosophy a remarkable paradigm shift in metaphysics was achieved by Kant’s radical criticism of rational psychology.<sup>(11)</sup> The quest for the substantiality of soul or mind changed to the quest for the intellectual action of transcendental **I** (transzendentes Ich). Traditional metaphysical psychology, namely, the substantiality theory of mind, changed to the theory of transcendental **I**. According to Kant’s argumentation, we could characterize the latter as the existential theory of transcendental **I**. Especially in the chapter “Of the Paralogisms of Pure Reason” in the second edition, Kant explicitly assures that “I think” is not other than an existential proposition (ein Existentialsatz) by which the thinking **I** can perceive the existence or reality of the thinking **I** himself.<sup>(12)</sup> It is one of the chief reasons why Kant revised the chapter “Of the Paralogisms of Pure Reason” thoroughly.

## Chapter II. “I think, therefore I am” as an axiomatic proposition

Cartesian proposition “I think, therefore I am” can be interpreted as being formulated by inference. But it can be also interpreted as being formulated by intuition. This is one of the most difficult problems of interpretation of Cartesian metaphysics. Concerning this problem, Descartes himself presented various opinions. In the *Discourse on Method*, he formulated “I think, therefore I am” as it were an axiomatic proposition. “I think” can be substituted for “I doubt”. By the methodological skepticism, Descartes found the Cogito as an evident fact and formulated it as “I think, therefore I am”. He found and formulated the first principle of his philosophy at the limit of the carrying out of the methodological skepticism. The Sum (I am) means, of course, the actuality or existence of the thinking **I** himself. The subject of the methodological skepticism, namely, the **I** who is carrying out the methodological skepticism, cannot doubt the existence of the **I** himself. The actuality or existence of the thinking **I** is for the **I** himself an evident fact deduced by intuition, which fact is absolutely indubitable. In the “Second Meditation,” therefore, Descartes insists that the proposition “I think, therefore I am” can be formulated only by the “simple intuition of our mind”.

On the other hand, Descartes insists that the proposition “I think, therefore I am” must be formulated by using a syllogism, where “I think” is the minor premise and “I am” is the conclusion. In some writings, Descartes refers to a presupposed major premise and formulates it as “it is impossible that that which thinks does not exist”.

Such a syllogism opinion about the proposition “I think, therefore I am” has originally not come from Descartes’ proper thought. For Descartes himself, “I think, therefore I am” is never a proposition deduced by using a syllogism. The chief reason why Descartes thought on the need of major premise of this proposition and stated the syllogism opinion about this proposition is that he should defend his ego theory from the objections proposed by Pierre Gassendi in his “Instantia”, in which Gassendi had strongly criticized Descartes, pointing out that Cartesian proposition “I think, therefore I am” is deduced by using a syllogism of which major premise cannot be proved in any way. But Descartes assumed that it is not impossible for him to prove the so-called hidden major premise.

In the *Principles on First Philosophy*, Descartes concludes his antecedent argumentation concerning ego as follows:

And when I said that the proposition ‘I am thinking, therefore I exist’ is the foremost and most certain of all those that could occur to anyone who is philosophizing methodically, I did not thereby deny that, prior to that, one needs to know what thought is, what existence is and what certainty is; also, ‘that it is impossible that that which thinks does not exist’, and similar things. But because these are very simple notions and, on their own, provide no knowledge of anything that exists, I therefore did not think that they should be mentioned.<sup>(13)</sup>

The argumentation in this statement is seemingly somewhat complicated. But it is noteworthy that here Descartes thinks of the metaphysical proposition “that it is impossible that that which thinks does not exist” not as a synthetic *a priori* judgment, but as one of the “simple notions”.

So far as we take account of the statement cited above, the term “simple notion” is not used in the meaning of “simple intuition”. In the same writing, Descartes uses the phrase “a common notion or action”. He states as follows:

Now we consider all the above as things or qualities or modes of things. When, however, we recognize that it cannot happen that something is made from nothing, then the proposition ‘nothing is made from nothing’ is considered, not as if it were some thing that exists or even as a mode of a thing, but as some kind of eternal truth that is present in our mind, and it is called a common notion or an axiom.<sup>(14)</sup>

And Descartes explains “a common notion or an axiom” as follows:

Among the axioms are as the following: ‘It is impossible for the same thing to be and not to be at the same time’, ‘whatever was done cannot be undone’, ‘whoever thinks incapable of not existing while thinking’, and innumerable others. It is not easy to list all of them, but it is also impossible not to know them when we have an opportunity to think about them and are not blinded by prejudices.<sup>(15)</sup>

It is clear, therefore, that Descartes thinks of “[the notion] that it is impossible that that which thinks does not exist” as one of the metaphysical “axioms”. But “axiom” means here not axiom which can be proved by intuition, but the axiom which can be proved by the intellectual action of the philosophizing correctly.

When Descartes refers to his syllogism opinion of the proposition “I think, therefore I am”, he insists, although implicitly, that a major premise, which can be formulated as “everything which thinks is or exist” or “it is impossible that that which thinks does not exist”, must be antecedent to the inference “I am thinking, therefore I am”. But so far as the statement in *the Principles of Philosophy* concerned, “that it is impossible that that which thinks does not exist”, i. e. “whoever thinks is incapable of not existing while thinking”, is “a common notion or an axiom”. So far as we concern the argumentation about the Cogito in *The Principles of Philosophy*, it is not necessary for us to guarantee the proposition “I am thinking, therefore I am” with any metaphysical proof. Without any antecedent premise, we can recognize that “I am thinking, therefore I am or exist”, because we are cognizant that “every thing which thinks necessary exists” is a metaphysical axiom, namely, a proposition which needs not to be proved. For Descartes himself, who is philosophizing correctly, it must be a self-evident truth “that the proposition ‘I am thinking, therefore I exists’ is the foremost and most certain of all those that could occur to anyone who is philosophizing methodically”. And in a certain aspect, “I am thinking, therefore I am” is not other than a tautological proposition, as is pointed out also by Kant. We can immediately deduce “I am” or “I exist” from “I think” or “I am thinking”. But it must be noticed that Descartes formulated “I am thinking, therefore I am” as a proposition which expresses the self-consciousness of the philosophizing subject himself.

In Euclid’s *Elementa* it is presumed that axiom is intuitionally evident proposition which needs not to be geometrically demonstrated. Equally, Cartesian proposition “I think, therefore I am” is an intuitionally self-evident metaphysical proposition which immediately expresses the self-consciousness of the existence of **I** himself who is carrying out the methodological skepticism. So far as Cartesian proposition “I am thinking, therefore I am” concerned, it is very reasonable to emphasize the aspect of “I am thinking” of this proposition. But in relation to the second edition of the *Critique of Pure Reason*, we would take notice of the aspect “I am, or I exist” of this proposition. For Descartes himself, “I think, therefore I am” is an intuitive truth found at the limit of the carrying out of the methodological skepticism. Consequently, it is sure that Cartesian proposition “I think, therefore I am” is an axiomatic proposition. And Descartes’ argumentation on the deducing of the proposition “I am, I exist” illustrates most obviously that the proposition “I am thinking, therefore I am or exist” is essentially an existential proposition, which expresses the self-consciousness of the existence of **I** himself who is carrying out the methodological skepticism.

### Chapter III. Differences in the formulation of the proposition “cogito, ergo sum”

We would consider more precisely the reason why in the *Meditations* the ego proposition is formulated not into the formula “I think, therefore I am”, or “I am thinking, therefore I am”, but into the formula “I am, I exist.” Also in “Second Meditation” Descartes was clearly conscious of the formulation “I think, therefore I am”, or “I am thinking, therefore I am”. In the process of deducing the substantiality of thinking thing, Descartes states as follows:

To think? That’s it. It is thought. This alone cannot be detached from me. I am, I exist; that is certain. But how long? As long as I think, for it might possibly happen if I ceased completely to think that I would thereby cease to exist at all. ... I am a genuine thing and I truly exist. But what kind of thing? I just said: a thinking thing.<sup>(16)</sup>

In this statement, it is clear that Descartes is distinctly cognizant that he founded the fact “I am, I exist” can be found in a close connection with the fact “I am thinking,” namely, “I am doubting”.

In the “Second Meditation”, Descartes formulated the proposition “I am, I think” as the result of the carrying out of the existential skepticism. “I am, I exist” is an indubitable fact found at the limit of the carrying out of the methodological skepticism, at which limit Descartes recognized that the existence of the subject who is carrying out the methodological skepticism cannot be doubted in any way. And Descartes deduced the concept of “a thinking thing” and its attribute “thought” (being thinking). Logi-

cally it is not impossible to deduce the fact “I am, I exists” from the fact “I think.” The fact “I think” and the fact “I am, I exist” are inseparably related. We can deduce the fact “I am, I exist” from the fact “I think” by immediate inference (*per consequentiae immediatae*). But as is evident in the “Second Replies”, Descartes hesitates somewhat to accept the opinion that the so-called supposed proposition must be presupposed if we would deduce “I think, therefore I am or exist” by using a syllogism. In the “Second Replies”, Descartes states as follows:

Even if someone says, ‘I think, therefore I am or exist,’ they do not deduce existence from thinking by using a syllogism, but they recognize it by means of a simple mental insight as something that is self-evident. This is evident from the fact that, if they deduced it by using a syllogism, they would first have to have known the major premise, ‘that everything which thinks is or exist’. But they learn that more from the fact that they experience, in themselves, that it is impossible to think without existing. The nature of our mind is such that it generates general propositions from its knowledge of particulars.<sup>(17)</sup>

In this statement, Descartes insists that it is not possible for our mind to prove the proposition “that everything which thinks is or exist.” But so far as we “philosophize correctly”, we can virtually recognize the principle “I think, therefore I am” “by means of a simple mental insight” as “something that is self-evident”. Descartes assert therefore the significance of “the fact that they experience, in themselves, that it is impossible to think without existing”. Antecedent to the statement cited above, Descartes states as follows:

... I explicitly claimed that I was speaking only about knowledge of those conclusion that we can remember when we no longer consider the premises from which we deduced them. But knowledge of principles is not usually called ‘scientific knowledge’ by logicians. However, when we avert to the fact that we are thinking things, that is a primary notion, which is not deduced from a syllogism.<sup>(18)</sup>

It is certain that for Descartes “knowledge of principles” is not necessarily essential for his metaphysical argumentation. Descartes aims to introduce into the metaphysics “a primary notion”, which was once defined as the first principle of philosophy, substituting for the “principles” mentioned above.

Here we would make an interpretation of the statement: “The nature of our mind is such that it generates general propositions from its knowledge of particulars.” In one aspect, “that it is impossible to think without existing” is a proposition which is deduced by the subject of the carrying out of the methodological skepticism as a result of his reflective experience. Therefore it can be defined as a “knowledge of particulars”. But we should not understand that the proposition “I am thinking, therefore I am or exist” can be deduced as a result of generalization of “the fact that they experience much more from the fact that they experience, in themselves, that it is impossible to think without existing”. So far as “that it is impossible to think without existing” is “a primary notion”, i.e. a fact experienced phenomenologically (*phänomenologisch*) “by means of a simple mental insight”, we should accept also the fundamental proposition of Cartesian metaphysics formulated as “I think, therefore I am or exist” as a phenomenologically evident proposition which can be immediately deduced from “the fact ... that it is impossible to think without existing”. Consequently, we could insist that “I think, therefore I am” is essentially an existential proposition. The **I** of “I think” is not merely the **I** who is logically postulated as the subject of carrying out of the methodological skepticism, but the **I** who is actually carrying out the methodological skepticism. Moreover in the “Fifth Replies”, Descartes states as follows:

... The inference is certain only when applied to thought but not when applied to the motion of the body [e. g. walking], which is something non-existent in dreams during which, nonetheless, it seems to me that I am walking. Thus from the fact that I think I am walking, I infer most properly the existence of the mind that thinks this thought but not the existence of the body that walks. The same applies to other actions.<sup>(19)</sup>

In this statement, “I think” is conceived clearly as an “action” of the mind, and the action of the mind is conceived clearly as a thinking action. “I think” is conceived here not merely as a logical function. We should add to Descartes’ statement cited above our following opinion: if we would draw the conclusion “I am or exist” from “the major premise, ‘that everything which thinks is or exists’”, we must necessarily use the fact “I think”, i. e. the “action” of my mind, as the minor premise of the syllogism. The proposition “I think, therefore I am” is, therefore, formulated essentially as an existential proposition, although it is certain that Descartes emphasizes sometimes the axiomatic characteristic of this proposition. Hence, the **I** of “I think, therefore I am” is the singular **I** which actually exists, i. e. the **I** of “the singular representation, I am”.

## Chapter IV. Significance of the cognition of the existential ego

One of the ultimate purposes of Descartes' *Meditations on First Philosophy* is, of course, to demonstrate the substantiality of mind and body, and thereby to demonstrate the real distinction between mind and body. But it must be noticed that the way of demonstrating the real distinction between mind and body is furthermore the way of separating mind from body, i.e. the way of releasing our mind from our body. Moreover, the way of clarifying the distinction of our mind from our body is for Descartes also the way of releasing our mind from the prejudices which originate from Aristotelian philosophy. Particularly in *the Principles of Philosophy*, Descartes insists explicitly the correspondence of the methodological skepticism with releasing our mind from scholastic idols. He states as follows:

Thus in order to philosophize seriously and to seek the truth about all things that can be known, all prejudices should first be set aside or we should watch carefully that we do not believe any of the opinions that we formerly accepted unless we find that they are true when we subject them to a new test. Then, we must consider in an orderly way all the notions that we have in ourselves, and all and only those should be judged to be true which, considering them in this way, we know clearly and distinctly. Having done this, we shall first of all realize that we exist, insofar as we have a thinking nature.<sup>(20)</sup>

In regard to Descartes' critical position against the doctrinal teachings by Aristotelians, see the following statement. In "Letter from the Author to the Translator of the *Principles of Philosophy*, to serve as a preface" Descartes states as follows:

... For lack of knowing this truth [i. e., the 'sovereign good, considered by natural reason without the light of faith', i.e. 'the knowledge of truth through its first cause, that is to say wisdom, of which philosophy is the study'], or – if there were some who knew it — for lack of making use of it, most of those who, in these last centuries, have aspired to be philosophers, have blindly followed Aristotle, with the result that they have often corrupted the sense of his writings, by attributing to him various opinions which he would not recognize as being his if he were to come back to this world; and those who have not followed him (among whom have been many of the best minds) did not yet fail to be imbued with his opinions in their youth, since these are the only opinions taught in the schools, and these opinions so prejudiced their minds that they were unable to arrive at the knowledge of true principles.<sup>(21)</sup>

Therefore we can state that Descartes has performed his criticism against the philosophy of Aristotelians, by formulating his ego proposition as "I am, I exist", or "I am thinking, therefore I am or exist".

Except the description of the system of his metaphysics in the "Part One: The Principles of Human Knowledge", Descartes' intention in *the Principles of Philosophy* is entirely assigned to the description of the system of his physics. In the statement cited above, Descartes criticizes the "opinions taught in the schools", namely Aristotelianism in Scholasticism. But his criticism of Aristotelianism is directed essentially not against Aristotelian metaphysics, but against Aristotelian physics based on his teleological metaphysics. In the same paragraph, Descartes goes on to state:

And although I esteem all philosophers and do not to wish make myself odious by criticizing them, I can give a proof of my assertion which I do not believe any one of them will reject, namely, that they have all put forward as a principle something they have not known perfectly. For example, I know none of them who did not suppose heaviness to be a property of terrestrial bodies; but, although experience shows us very clearly that bodies we call heavy fall towards the centre of the earth, we do not on that account know what is the nature of this thing we call heaviness, that is to say, of the cause or principle which makes them fall in this way, and we must learn about it from another source. ...<sup>(22)</sup>

Furthermore Descartes goes on to state:

But the conclusions deduced from a principle that is not evident cannot themselves be evident, although they may be deduced from it evidently; from which it follows that none of the reasonings based on such principles could give them certain knowledge of anything, nor consequently advance them one step in the search for wisdom. ...<sup>(23)</sup>

Descartes' criticism is directed here against the "principles" of Aristotelian physics. As is well known Descartes applied the concept of circular motion to the inertial motion on the earth. According to Galileo Galileo's law of inertia, every inertial motion must be a circular motion. The conception of circular motion originates in Aristotelian physics. According to Aristotelian physics, every motion in the celestial world must be a circular motion. Galileo formulated the law of inertia on the basis of Aristotelian

physics. In the history of physics, Descartes formulated the law of inertia, namely, the law of a straight-line motion of inertia, correctly for the first time. Also Descartes' ego theory is influenced by the modern physics which attaches great importance to correctness of thinking and strictness of argumentation. <sup>(24)</sup>

Though Descartes' ego theory is a substantiality theory of ego, it is constructed on the basis of modern philosophical thought. Descartes emphasizes not only the substantiality of ego, but also the actuality (existence) of thinking ego. "I think, therefore I am" is not other than Descartes' statement of his discovery of the **I** who is actually thinking, namely the discovery of actuality (existence) of the thinking **I**.

## Conclusion

At the limit of the carrying out of the methodical skepticism, Descartes found the most fundamental fact which can be formulated as "I am thinking, therefore I am". The formula "I am thinking, therefore I am" has twofold characteristic. In one aspect it can be characterized as an axiomatic proposition, but in the another aspect it can be characterized as an existential proposition. Analyzing Descartes' writings, we concluded that "I think, therefore I am" is essentially an existential proposition. Descartes' main purpose is, of course, to deduce the substantiality of mind from the evident fact "I am thinking, therefore I am" and to demonstrate thereby the real distinction between mind and body. Our study concerning the metaphysical significance of Descartes' Cogito proposition clarified the characteristics of this proposition and its close relationship with his methodological skepticism. And we got the results stated above.

## Notes

1. AT VI, 32, 33.
2. AT VI, 558.
3. AT X, 523.
4. Descartes, René, *Meditations and Other Metaphysical Writings*, translated with an Introduction by Desmond M. Clarke, p. 24.
5. AT VIII-1, 7, 9.
6. Kant, Immanuel, *Kritiki der reinen Vernunft*, B 138 etc.
7. *Ibid.*, A 405.
8. Descartes, René, *Meditations and Other Metaphysical Writings*, translated with an Introduction by Desmond M. Clarke, pp. 23–24.
9. Descartes, René, *Discourse on Method and The Meditations*, translated with an Introduction by F. E. Sutcliffe, p. 54.
10. Descartes, René, *Meditations and Other Metaphysical Writings*, p. 25.
11. The paradigm shift of ego theory was accomplished, of course, on the basis of Kant's conception of "the transcendental subject" (das transzendente Subjekt). Through the so-called Copernican revolution of the way of thinking (Denkart), Kant clarified that all objects of our cognition, i. e. appearances (phaenomena), are the transcendental products of "the transcendental apperception" (die transzendente Apperzeption). Surely "I think" (Ich denke) is in one aspect the logical formula of the function of the transcendental or pure apperception. But the actuality or reality (die empirische Wirklichkeit) of everything which actually exists in the sensible world (in der Sinnenwelt), therefore also the actuality or reality of the sensible world itself, is transcendently founded upon the faculty of the subject of cognition. And the transcendental apperception is the most fundamental action of human intellectual faculty. Consequently, we would emphasize the actuality or reality of the **I** of transcendental apperception "I think". The transcendental **I** (das transzendente **Ich**) and the **I** of transcendental apperception "I think" are originally one and the same **I**. Therefore the **I** of transcendental apperception "I think" is not other than the transcendental subject (das transzendente Subjekt) as "the psychological idea". Of course, the psychological idea is one of "the transcendental ideas". The psychological idea, i.e. the transcendental idea of rational psychology, has the peculiarity in that the transcendental **I** himself is the transcendental idea as the research object of rational psychology. And the transcendental **I** is not other than the **I** who is actually conducting recognition of the objects in the sensible world, namely, the **I** of transcendental apperception "I think". Therefore we can affirm that the paradigm shift of ego metaphysics from the substantiality theory of mind to the actuality theory of ego was achieved on the basis of Kant's conception of the transcendental subject. Kant's theory of the transcendental **I**, of which existence we can actually cognize through our intellectual faculty, can be characterized as the existential theory of the transcendental **I**.

12. Kant, Immanuel, *Kritik der reinen Vernunft*, B 422–423, footnote.
13. Descartes, René, *Meditations and Other Metaphysical Writings*, p. 115.
14. *Ibid.*, p. 130.
15. *Ibid.*, p. 130.
16. See note 10.
17. Descartes, René, *Meditations and Other Metaphysical Writings*, translated with an Introduction by Desmond M. Clarke, pp. 80–81.
18. *Ibid.* p. 80.
19. *Ibid.* p. 96.
20. *Ibid.* p. 143.
21. Descartes, René, *Discourse on Method and The Meditations*, translated with an Introduction by F. E. Sutcliffe, pp. 177–178. In quotation marks, see *ibid.*, p. 175.
22. *Ibid.* p. 178.
23. *Ibid.* p. 178.
24. On the formation of modern physics, metaphysical thought of so-called natural philosophers played important roles. Descartes' conception of material things (namely “*res extensa*”), which founded the basis of modern mathematical physics, was deduced through deconstruction of Aristotelian physics, especially deconstruction of Aristotelian matter theory which insists that matter contains within itself *forma*. But Descartes' contribution to the development of modern physics is in fact rather restricted. In comparison to Galileo's physics, Descartes' physics is not constructed on the basis of *experientiae*. In the early modern natural philosophy, in which Galileo' physics and Descartes' physics are included, “*experientia*” was the term which implies not only experience, but also observation and experience. How Galileo attached importance to *esperienza* (*experientia*), see Galileo's books generally called Two Dialogues. As clearly stated in the “Preface to the Second Edition” of the *Critique of Pure Reason*, Galileo and also his younger disciple Evangelista Torricelli played great roles in the formation of modern physics, of course by using the experimental method (i.e. experiment and observation). Except the significant influences of Newtonian physics, Kant's thought of physics is essentially under the influence of Galileo's method of physics. Galileo generally applies the discipline name “physics” to his own physics. Sometimes Descartes applies to his physics the discipline name “mathematical physics”. In such a case, “mathematical physics” means not only physics constructed on the basis of mathematics, but also physics constructed on the basis of experiment and observation. By introducing the method of experiment and observation into physics, Galileo and his followers contributed greatly to the epoch-making advancement of science defined as the Scientific Revolution in the Seventeenth Century, through which the absolute supremacy of the Aristotelian physics and the Ptolemaic Astronomy gradually changed to the supremacy of the modern mathematical physics based on experiment and observation. The Scientific Revolution in the Seventeenth Century was completed by Isaac Newton. Also Newton attached great importance to experiment and observation. In order to solve the problems of the lunar motion, he eagerly strived to be provided by John Flamsteed, the most excellent observational astronomer at that time, with as many observation data as possible. Moreover, Newton himself earnestly performed various scientific experiments, in which also his alchemical experiments are contained.

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(Received September 16, 2011)