A hard trick set by the brain

By Shigeru Shiraishi

Contents

Part I The apparent world

Chapter 1 Introduction

1-1 The answer to the problem that "What am I?"

1-2 Self-introduction

Chapter 2 The world which is seen before our eyes

2-1 Counterexamples

- (1) Counterexample of color
- (2) Counterexample of sense
- 2-2 How are the counterexamples considered?
- 2-3 The inverted retinal image
 - (1) Three steps of the act of looking at
 - (2)A double image
 - (3) Two verbs, "look" and "see"
 - (4) Dual meanings
 - (5) The answer to the inverted retinal image

Chapter 3 The apparent world

- 3-1 The apparent material world
- 3-2 The apparent physical body
 - (1) The boundary between the apparent physical body and the apparent material world
 - (2) The synchronization of the body which is seen before our eyes and the physical body
 - (3) Existence of senses around our body which is seen before our eyes

(4) The thought of "self" (self consciousness) coexists with the body which is seen before our eyes.

3-3 The apparent mind

- (1) What is the result of looking at?
- (2) The mind in a narrow sense and in a wide sense
- (3) The apparent mind
- (4) The difference between "the mind" and "the world of the mind"

Part 2 What am I?

Chapter 4 Three hurdles that disturb understanding of "self"

- 4-1 The trick1; "I am here, and I am looking at an object".
 - (1) The analysis about the thought "I am looking at".
 - (2) The analysis of the thought "I am listening to".
- 4-2 The trick2: "I am looking at an object and become to know the existence".
- the (1) Recognition
 - (2) Definition of the word "recognition"
- (3) Two steps of recognition
- (4) The first step: "I am looking at an object which is seen before my eyes"
- (5) The second step: "I become to know the existence"
- 4-3 The world of the mind which is shown from the viewpoint of "recognition"

Chapter 5 What am I?

- 5-1 Reconsidering of the existence of "self"
- 5-2 The answer to the problem that "What am I?"
- 5-3 Self-consciousness
- 5-4 Why do "I" exist in the world of my mind?

Epilogue

What am I?

A hard trick set by the brain

Part I: The apparent world

Chapter 1 Introduction

Judging from the title, "What am I?", you might think it is a kind of spiritual lecture, but it is not so. The purpose of this paper is to clarify "What am I?", neither from philosophy nor religion but from science. Of course, it does not aim to answer all of the questions about "What am I?" It just clarifies or shows the core of the problem.

We have been interested in the relation between human beings and machines for a long time. Now, as the research of the artificial intelligence is advancing, "the existence of self" is newly paid attention. However, we cannot approach the true feature of it, if we stay at the common knowledge. I think it is the time to clarify the true features of the mind and the existence of self, and to make it a new common knowledge.

By the way, a paper titled "Where is the mind?" has already been up-loaded on the internet by the form of PDF file, and the answer to the problem that "What am I?", is also logically explained there.

Japanese version: https://www.where-mind-j.com

English version: https://www.where-mind-e.com

The amount of PDF file is about 120 pages in the A4 form because it is very difficult to explain the answer to the problem. So, I have up-loaded a shortened version so that you are able to read it easily. Though it is a shortened version, it explains the core of the problem without omitting any important contents.

I would appreciate it if those who are interested in the problems would read this paper, and also appreciate it if the researchers whose specialty are psychology, cognitive science, and the artificial intelligence, etc., would read it.

1-1 The answer to the problem that "What am I?"

First of all, I would like to start the paper from the conclusion. Maybe, you would think, "That is impossible". But it is neither a hypothesis nor "There might be such an idea". It is the conclusion that we can reach by logically tracing the subject, as it were, by solving an equation. If we define "I" as being composed of "my body" and "my mind", "I" = my body + my mind [1]

we think "my body" is the physical body, and "my mind" is an abstract one that is shown as intellect, emotion and volition. Of course, there is no problem if we define "I" like that. That is, it will be shown as follows:

"I" = my physical body + my mind (intellect, emotion, and volition)" [2]

I never oppose to define "I" like that. However, what we think as "my body" and "my mind" are quite different from those of the common knowledge. Concerning my mind, intellect, emotion and volition are important parts of the mind and they play important roles, but they are not all of the mind.

The objects which are seen before our eyes, for instance, a coffee cup, a desk, a newspaper, etc., exist there as the results of information processing of the brain, according to "the act of looking at".

Though there might be various objections, if we define "the mind" as being the result of the information processing of the brain, not only the objects such as a coffee cup, etc., but also the external world which is seen before our eyes should be called as "my mind" or "the world of the mind".

The logic can also apply to "my body". "My body" which is seen before one's eyes is also the result of "the act of looking at", therefore it is the existence in "the world of my mind". In a word, the world which is seen before our eyes is not "the material world" but "the apparent material world", and the body which is also seen before our eyes is not "the physical body" but "the apparent physical body", as it were.

Let's consider "the mind" again. We would think that "the mind" exists in the inside of our face which is the opposite direction of our sight line. Please think it by the situation that you are reading this paper. I think you would have the impression, "There exists of "self" who am looking at this manuscript at the opposite direction of my sight line."

We have the thought that my mind exists with my body. However, as it has been told now, the body we think as my physical body is the apparent physical body. The mind which we think accompanies with the apparent physical body is not the true mind but "the apparent mind", so to speak. Therefore, the previous diagram [2] will be rewritten as follows:

"I" = the apparent physical body + the apparent mind [3] If change the expression,

"I am an existence which is created in my mind". It looks like, so to speak, a nested.

You would think it is meaningless because it is the conclusion at the stage without the detailed

explanation. Moreover, you might think, "You must have been lost in wild fancies", as it is too far apart from common knowledge. If I were you, I would surely think as you do.

Though it seems to be paradoxical, we cannot obtain any answer to the problem that "What am I?", if we pursue it from "the existence of self". We will fall into a hard trick, as the title of this paper shows.

First of all, we need to know the true feature of the world which is seen before our eyes. It is necessary for us to trace along a long way in order to reach the conclusion that "I am an existence which is created in my mind".

I will pursue the subject as concisely as possible. I would be greatly appreciated it if you would be interested in the subject and would read the paper. The amount of the manuscript is about 30 pages by A4 form. So, it is possible for you to go to "3 Dowmload, and download the manuscript.

1-2 Self-introduction

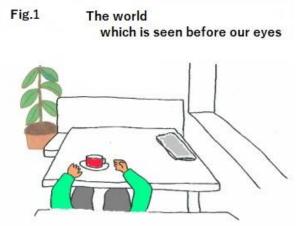
You might think the story is pseudo science because it seems to be far different from common knowledge. Therefore, please let me introduce myself briefly.

My name is Shigeru Shiraishi, graduated from Waseda University, doctoral course (psychology), and have served as a part-time lecturer at a university in Tokyo for a long time. I know well that even if a person who has received a professional training in his or her study, it doesn't necessarily assure that his or her idea is scientific. However, I have confidence in the logical pursuing of the question "What am I?", though it might be a little too boastful. I would appreciate it if you would read the paper critically.

Chapter 2 The world which is seen before our eyes

The expression, "the world which is seen before our eyes", was used in the previous paragraph, and the expressions, "the world which is seen before my eyes", and "the world which is seen before your eyes", will also be used frequently from now.

Please look at Fig. 1. It is a strange composition because parts of hands and feet of someone are drawn. If you overlapped yourself with the person, you would understand that it is the scene which is seen before our eyes. It is "the world which is seen before our eyes", "the world which is seen before your eyes" and "the world which is seen before my eyes".



When we open our eyes, it appears colorfully, and when we close our eyes, it instantaneously disappears. In addition, it changes continuously in response to the movements of our sight line. The expressions, "the objects which are seen before our eyes, my eyes and your eyes", will also be frequently used from now.

The long way to pursue the problem that "What am I?", begins from the understanding that "the world which is

seen before our eyes is not the material world".

It has been discussed for a long time which is correct, materialism or idealism. My standpoint is neither materialism nor idealism. I am based on the assumption that there is the material world, so my standpoint is not idealism. At the same time, as I recognize that "the world which is seen before our eyes is not the material world", I do not stand on materialism.

2-1 Counterexamples

There is a word "counterexample". It is used to deny definitions or propositions by showing contradictory examples against them. Let's examine some examples causing contradictions when assuming "the world which is seen before our eyes is the material world".

(1) Counterexample of color

Please look at the foliage plant colored green in Fig. 1 agaain. Color does not exist in the material world though you might be unexpected. It might be comprehensible when thinking it at the level of atoms or molecules. The surfaces of atoms or molecules are not green.

Plants absorb electromagnetic waves and reflect only the specific wavelength. The reflected electromagnetic wave reaches the retinas, the information is processed by the brain, and the color of green is created.

We see "green", created in the brain, on the surface of the foliage plant which is seen before our eyes. Color is not created at the retinas. It is, of course, not correct to think the green is in our brain. The foliage plant which is seen before our eyes is green. It is a contradiction if we think the plant which is seen green exists in the material world.

It is called "the contradiction of color" and has been shown in philosophy for a long time.

The reason why using "electromagnetic wave" instead of "light" is because light has close

relationship with color. You could understand the reason if you paraphrase red light as red electromagnetic wave, because you would not have any image about color from the electromagnetic waves.

Some people may object to the conclusion by using the phenomenon of flame reaction, which is imagined from atoms or molecules. When metals are made into powder and are burnt, for example, copper shows green flame and lithium shows red flame, etc. When The electrons which compose atoms gain the thermal energy by combustion, they become the excited state, and they move to the outside electron orbit. But the state is originally unstable, so they return to the former energy level. At that time, they emit the electromagnetic waves of peculiar wavelength. It is the phenomenon of flame reaction.

It is true that there is an indirect relation between color and the electromagnetic wave. But, color is created after the information of the electromagnetic waves reach the brain and processed there. Color does not belong to the electrons, and it also does not belong to the electromagnetic waves.

In conclusion, color is a psychological phenomenon and does not exist in the material world. The fact that the foliage plant which is seen before our eyes is green is the proof that the world which is seen before our eyes is not the material world.

(2) Counterexample of sense

Next counterexample is the one about sense. Let's assume that the surface of a table which is seen before your eyes is smooth. Please rub it with your finger. A feeling of smoothness must have been felt at the tip of your finger or at the surface of the table. You would think it to be natural because there are some sense organs at the tip of your finger.

Next, please hold a pencil, etc., and rub the table with the tip of it. How was it? I think you must have felt smoothness at the tip of the pencil, and it must be the same as when you rubbed with your finger. However, the sense organs do not exist at the tip of the pencil. This must be the evidence that the world which is seen our eyes is not the material world, because "sense" is a psychological phenomenon and does not belong to the material world.

You might object the conclusion by saying, "I only felt it". However, the sense of smoothness doesn't exist in your brain but at the tip of the pencil or the surface of the table. You might have doubt against the expression, "There exists the sense of smoothness", but it surely exists. Moreover, it exists at the tip of the pencil or at the surface of the table, which you think are "matter".

In conclusion, if the world which is seen before our eyes is the material world, it must be contradiction because the sense which is "none-matter" exists in the material world.

Two counterexamples against common knowledge that "the world which is seen before our

eyes is the material world", were shown. Did you feel some doubts?

Some philosophers have already insisted for a long time that the world which is seen before our eyes is not the material world. However, their view has not been accepted because it is far from the common knowledge, and it has not been known to us so widely.

Some philosophers and a few scientists insist on such a view, but they have not explained the reason why it is so. That is because it is very hard task to explain it understandable.

2-2 How are the counterexamples considered?

Two counterexamples against common knowledge that "the world which is seen before our eyes is the material world" were shown. Have you felt some doubts? If you have not felt any doubts, you would not think about the problems.

Some philosophers have already insisted for a long time that the world which is seen before our eyes is not the material world. However, their view has not been accepted because it is far from the common knowledge, and as a result, it has not been known so widely.

There are a few scientists who insist on the same view as philosophers. But the tendency to seriously examine it has not arisen yet.

Though some philosophers and scientists insist on such a view, they have not explained the reason why it is so. That is because it is very hard task to explain it easy to understand.

2-3 The inverted retinal image

At the previous paragraph, it was explained that the world which is seen before our eyes is not the material world by using such counterexamples as "color" and "sense". However, most people do not accept the explanation. So, let's introduce the phenomenon of "the inverted retinal-image" for those people.

Our eyes are made of the convex lenses. Therefore, objects of the external world are reflected on the retinas upside down, and left and right reversed. But we see the objects of the external world upright. "Why?"

It is the problem called "the inverted retinal image". A lot of people feel doubts about it, because we don't think about it in daily life. It is very difficult to explain the reason of the problem.

First of all, it is necessary to analyze the two verbs; "look" and "see". They are generally explained that the verb "look" means "the action" and the verb "see" means "the state". However, the explanation is a little ambiguous. These two verbs are very important to clarify the true feature of "self". Let's pursue the analysis.

(1) Three steps of the act of looking at

Let's think about "the act of looking" by dividing it into three steps. The one is "the objects we are looking at", the second is "the body that does the act of looking at" and the third is "the results of the act of looking at". These words are not familiar with you. I hope you would get accustomed to them.

If we take a coffee cup as an example, "the object we are looking at" is the coffee cup which exists in the material world. "The body that does the act of looking at" means a series of processes of the information processing which starts by receiving information from the external world at our eyes and ends by producing a certain kind of physical or physiological condition at the cerebrum. By the way, "the body that does the act of looking at" is a little long, so let's shorten it to "the body acting to look at".

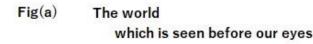
What does "the results of the act of looking at" mean? It is difficult to define it. It is neither the coffee cup which exists in the material world nor the information processing of the cerebrum. As a matter of fact, the coffee cup which is seen before our eyes is just "the result of the act of looking at".

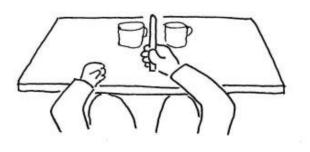
"The result of the act of looking at" is also a little long, so let's shorten it into "the result of looking at".

(2)A double image

Let's explain the reason why the coffee cup which is seen before our eye is "the result of looking at" by using a double image.

As shown in Fig. 2(a), please hold a pencil before your eyes and look at it. Naturally, you see

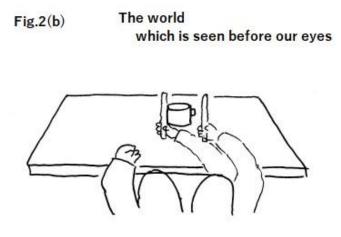




one pencil before two cups which are a little blurring.

Next, please pull your viewpoint backward and look at the coffee cup. Then, you will see two pencils which have been seen as one pencil. as shown in fig.2(b). These two pencils is the double image. When we look at a pencil, it focuses on the corresponding spots of both retinas,

and we see one pencil. On the contrary, when we turn our viewpoint, the pencil doesn't focus on the corresponding spots of the two retinas, and the information is carried to the cerebrum, and as a result, we see two pencil which are a little blurring.

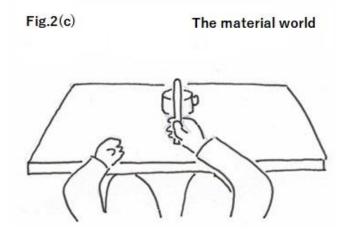


It is not correct to think that a double image is seen at the stage of the retinas. A double image is seen only after the information is carried to the cerebrum. In a word, a double image is "the result of looking at".

If two pencils are "the results of looking at", how about the pencil which is seen as one? When we return our viewpoint from the

coffee cup to the pencil, it is seen as one pencil again. As well as the two pencils which are "the results of looking at", one pencil is also "the result of looking at".

You might insist that "The two pencils are only images". However, both two pencils and one pencil are seen in the same space which is seen before our eyes. You would agree that the logic, "the one pencil is a real existence and the two pencils are images", doesn't hold good, if you pay attention to the fact.



Moreover, there might be a rebuttal, "We just see two pencils". However, it is necessary to connect the image at the retinas to the two pencils. In short, there is a relationship of cause and result between the images of the retinas and a double image. Therefore, we reach the conclusion that the objects which are seen before our eyes are "the results of looking at".

By the way, there exists only one pencil in the material world as shown in Fig. 2(c), whether we see one pencil or two pencils.

(3) Two verbs, "look" and "see"

I suppose there are a lot of people who do not accept the conclusion that "The world which is seen before our eyes is not the material world". I think there are two reasons why they would not accept the conclusion.

The one is "the existence of self" and the other is "the existence of my body". But, put them

aside now, and let's analyze another cause, that is, two verbs; "look" and "see".

Two verbs, "look" and "see", are used concerning "the act of looking". We use them properly and skillfully according to the situation in daily life. However, the problem lurks in the fact that we use both "look" and "see" to the same objects which are seen before our eyes.

The verb "look" is to focus our eyes on the object which exists in the material world, and it is exactly the event in the material world. On the other hand, the verb "see" means "It is possible to see" as a result of "the act of looking at".

For instance, when asked about the direction of the gap of the Randolph Ring at the visual acuity test, if it blurs, we answer, "I do not know", in a word, "I cannot see". That is not because the eye-test chart in the material world is being blurred, but because the image reflected at the retinas gets blurred and it is sent to the cerebrum. It is not an event of the material world. Whether our eyesight is good or bad, the state of the Randolph Ring in the material world is same and clear.

When we are looking at a pencil, and are asked, "What are you looking at?", we answer "The pencil which is seen before my eyes". And when asked "What do you see?", we answer "The pencil which is seen before my eyes".

We think the pencil which is seen before our eyes as "the object we are looking at" in one situation, and as "the result of looking at" in another situation. But the fact is that the pencil which is seen before our eyes is "the result of looking at". Therefore, it is correct to use "see" in the world which is seen before our eyes, but it is false to use "see" in the material world. The verb, "look", must be used only in the material world, because the world which is seen before our eyes is not the material world

The two verbs, "look" and "see", are skillfully and properly used in daily life to cover our misunderstanding that the world which is seen before our eyes is the material world. However, it occasionally reveals contradictions in the case like the inverted retinal image.

(4) Dual meanings

It is the starting point of clarifying "What is the mind?" and "What am I?" to make clear whether the objects which are seen before our eyes are "the objects we are looking at" or "the results of looking at". Therefore, let's think again about the pencil which is seen before our eyes from the standpoint of "matter".

Those who stand on the view that the world which is seen before our eyes is the material world would insist that the pencil which is seen as one is "the object we are looking at" and it is "matter". Now, how about the pencils which are seen as two pencils? They would insist, "They are only images".

But, if they move their sight line back to the pencil, one pencil is seen again. If the pencil

which is seen as one is matter, how does the pencil become when it is seen as two. It is necessary for us to admit that both one pencil and two pencils are seen in the same space which is seen before our eyes

The two pencils which are seen as two are not matter, and similarly, the pencil which is seen as one is not matter. The pencil which is seen as one is "the result of looking at" as well as the two pencils are "the result of looking at".

Though it is a similar story, let's return to a coffee cup. If asked, "What are you looking at?", you will reply, "The coffee cup which is seen before my eyes." If asked, "What do you see?", you would reply, "The coffee cup which is seen before my eyes".

As understood by the explanation up to now, both the coffee cup you say you are looking at and the coffee cup you say you see are "the results of looking at". The coffee cup which you say you are looking at is upright, and the coffee cup which you say you see is also upright. In a word, the coffee cup which is seen before your eyes is interpreted as "the result of looking at" at a certain situation, and as "the object of looking" at another situation. It has, as it were, dual meanings. But the truth is the coffee cup which is seen before our eyes exists there as "the result of looking at".

(5) The answer to the inverted retinal image

The reason why we feel doubt about the inverted retinal-image is that we interpret the object which is seen before our eyes as "the object we are looking at", but when we face the problem of the inverted retinal-image, we interpret it as "the result of looking at. It is correct to interpret the object which is seen before our eyes as "the result of looking at", however.

On the problem of the inverted retinal image, we must discuss the relation between the image reflected on the retina and the original object in the material world. In fact, in the material world the inverted phenomenon occurs between "the object of looking at" and "the retinal image of the physical body". It is surely true.

However, the object which is seen before your eyes and you are trying to compare with the retinal-image is "the result of looking at". On the other hand, the body which is seen before your eyes is not your physical body but your apparent physical body as "the result of looking at". Any retinas do not exist at the apparent physical body, and as a matter of course

You think the external world is reflected inversely on "your retinas of your apparent physical body", but it is not correct. You feel doubt by comparing "the apparent retinal image", which does not exist from the beginning, with the object which is the result of looking at.

In a word, it can be said that the doubt about the inverted retinal image is caused by the facts that we interpret the world which is seen before our eyes as having double meanings and interpret the body which is seen before our eyes as the physical body. We need to wait for "the interpretation of our body", which is talked in paragraph 3-2, in order to get rid of the doubt about the inverted retinal image. Therefore, if you read this paragraph again after paragraph 3-2, "The apparent physical body", you would understand the conclusion.

Chapter 3 The apparent world

The words, the apparent material world, the apparent physical body, and the apparent mind, have been used up to now. Let's explain the meaning of these three words again at this paragraph.

3-1 The apparent material world

Let's define again the world which is seen before our eyes as "the apparent material world", because the world is created by "the act of looking at".

Well, would you agree with the conclusion by the explanation which has been done until now? Perhaps, most people would not have accepted the conclusion. I would greatly appreciate it if you become to have doubt against the common knowledge that "the world which is seen before our eyes is the material world", even if you do not agree about it.

By the way, even if you would think that "The conclusion might be true", at the same time, you might think that "I cannot accept the conclusion". It is quite natural.

That is because there is no inconvenience in daily life, even if we think the world which is seen before our eyes as "the material world ", excluding some special cases. In fact, we have two wrong convictions which are hard tricks, and hide the contradictions such as color and sense of touch, etc.

One of the reasons is that "The world which is seen before our eyes is so wide, therefore, is it really created by the activity of the brain?

Those who have experienced VR (virtual reality) will understand. By looking at the sight which is projected onto the screen in the goggle, we mistake it as if a vast space surrounds us. There is a VR content to walk on a narrow board passed to the roof of high buildings Even if the user knows it is virtual, they instinctively cower because the feeling of height is so terrible It is the same as when we see the external world by using our eyes and when we see the sight by using a goggle, in the point of using the images that is reflected at the retinas. In a word, the brain processes the information based on the image of the retinas in both cases and creates the world which is seen before our eyes.

In addition to it, there are more troublesome reasons why we cannot accept the view that "the world which is seen before our eyes is not the material world."

That is because, we have two wrong convictions which are hard tricks, and hide the contradictions such as color and sense of touch, etc.

The one is "the existence of self", and the other is "the existence of my body". They are hard hurdles which disturb the understanding of the problem that "What is the mind?" and "What am I?" That is the reason why the subtitle of this paper is "A hard trick set by the brain". Let's pursue the subject.

From the thought of "the existence of self", the following conclusion is led, though it is wrong. "I am here and I am looking at the coffee cup which is seen before my eyes, therefore, the coffee cup must be "the object of looking at" and "matter". This is a very important point related to the problem that "What am I?" So, it will be explained in paragraph 4-1 and 4-2 of Part 2.

On the other hand, from the thought of "the existence of my body", the following conclusion is led, though it is also wrong. "The body which is seen before my eyes is my physical body. The world around my body is the material world. Therefore, the coffee cup which is seen before my eyes must be "the object of looking at" and "matter".

Even if you would realize that the objects which are seen before your eyes are the results which are obtained by the information processing of the brain, the following doubt would remain; Why does "the result of looking at" exist outside of my physical body?

It also took me considerably long time to clear the doubt. Actually, the body which is seen before our eyes is not the physical body existing in the material world, but "the apparent physical body" as "the result of looking at", which is created through "the act of looking at".

3-2 The apparent physical body

Now, let's think about our body which is seen before our eyes. We can easily reach the conclusion that our body which is seen before our eyes is "the result of looking at" as well as the coffee cup which is seen before our eyes is "the result of looking at", though it is unknown whether you would accept the conclusion.

By way of experiment, please put up one of your fingers before your eyes and look at it. You would see one finger. Next, please move your viewpoint forward or backward, and you will see two fingers now.

We reach the conclusion that the finger is "the result of looking at" and "the apparent finger" as well as the case of a pencil. Of course, it is not only a finger. We cannot see our face and back direct, but if we look around our body we can see almost all of it. It is "the result of looking at" and it can be called as "the apparent physical body".

Or, as another evidence, please look at your hands and feet which are seen before your eyes.

You would see flesh-color at the surface of them. Color doesn't exist in the material world as told in paragraph 2-1 "Counterexamples". Color is created after the electromagnetic wave which is reflected at the physical body reaches the retinas and the information is processed by the brain.

From the facts, we also reach the conclusion that our body which is seen before our eyes is not the physical body but "the apparent physical body" as "the result of looking at".

However, there would be few people who agree with the conclusion from the explanation up to now. "I can move my body by my will. When I get hurt, I feel pain, and it even bleeds. This must be my physical body." You would be convinced of your view.

There are still some reasons why we cannot consent to the conclusion.

(1) The first is that there is a boundary between our body and the external world which are seen before our eyes.

(2) The second is that our body which is seen before our eyes perfectly synchronizes with the external world.

(3) The third is that we feel some sensations at our body which is seen before our eyes.

(4) The fourth is that "the thought of self" belongs to our body which is seen before our eyes. The PDF file, which was introduced at the top of this paper, explains the details of them. Please check the PDF file. So, let's just explain them concisely here.

(1) The boundary between the apparent physical body and the apparent material world

There is certainly a boundary between the physical body and the external world in the material world. The inside of the skin is our physical body, and the outside is the external world. The inside and the outside are surely divided.

However, there is no boundary between the body and the external world in the world which is seen before our eyes, because the body is the apparent physical body and the external world is the apparent material world. Both the body and the coffee cup which are seen before our eyes are the same kind of existence as "the results of looking at", though the meaning of them is certainly different from each other

(2) The synchronization of the body which is seen before our eyes and the physical body

The mechanism of the synchronization of both the apparent physical body and the physical body is not known, but they are designed to synchronize with each other. When our hand of the physical body begins to move toward a coffee cup in the material world, our apparent hand begins to move to the apparent coffee cup in the world which is seen before our eyes. The synchronization is maintained excluding some exceptions, for instance, when we use a comb looking at a mirror.

(3) Existence of senses around our body which is seen before our eyes

"We feel senses around our body which is seen before our eyes. Therefore, the body which is seen before our eyes must be the physical body", I think you have such a thought. Certainly, senses are located where it receives the stimulus. However, as shown in paragraph 2-1(2), the existence of sense doesn't become the evidence that the body which is seen before our eyes is the physical body, because we feel senses at the point of a pencil or at the surface of a table.

(4) "The thought of self" coexists with the body which is seen before our eyes.

"The thought of self" would connect with "self-consciousness". This is a core part of this paper, and it will be explained later in paragraph 5-3 "self-consciousnesses".

The number of the person who insists that the world which is seen before our eyes is "the apparent material world" is more than we think. They are not only philosophers but also some scientists.

On the contrary, the number of the person who insists that the body which is seen before our eyes is "the apparent physical body" is exceedingly few. It is certainly difficult to consent to the conclusion. But if we accept the facts that one finger is seen as two and it is flesh-colored, we surely reach the conclusion. We should not think, "It cannot be true". We should accept the conclusion to be true and pursue it logically.

From the conclusion that the world and the body which are seen before our eyes are the apparent material world and the apparent physical body respectively, we obtain new facts which are quite different from the common knowledge. Of course, it is the conclusion based on the assumption that the material world and our physical body exist. Let's consider, "What is the apparent mind?" before it advances to the explanation of the new facts.

3-3 The apparent mind

(1) What is "the result of looking at"?

As mentioned in paragraph 1-1, if we define the mind as the one being created by the brain, "the result of looking at" is part of the mind, though it is not the whole of the mind, because it is created by. the activity of the brain.

We might think the mind as "intellect, emotion, and volition" in common knowledge, but the objects which are seen before our eyes are also part of the mind. That is the reason why we have used a coffee cup, which is an ordinary object, as an example to analyze the mind. If we advance the conclusion that the coffee cup which is seen before our eyes is not "matter",

we obtain a new conclusion that the world which is seen before our eyes is not "the material world", but, as it were, "the apparent material world", and the objects which are seen before our eyes are "the apparent matter". They are part of "the mind" or part of "the world of the mind" because they are created by the activity of the brain, though it would not be acceptable to you.

We sometimes hear the problem that "Where is the mind?" The apparent material world including your apparent physical body which is seen before your eyes can be defined as the world of the mind, though it cannot be said to be the whole of the mind.

This is also explained in detail in the paper, "Where is the mind?", which was shown previously. I appreciate it if you refer to it.

(2) The mind in a narrow sense and in a wide sense

You would not agree to the conclusion that the world which is seen before our eyes is part of the mind. It would be because that "we should include the advanced conscious activities such as intellect, emotion and volition, and the information processing of the brain as the mind". Therefore, let's define the mind which includes both "intellect, emotion, and volition" and "the information processing of the brain" as "the mind in a wide sense".

On the other hand, let's define "the world, including our body, which are seen before our eyes" as "the mind in a narrow sense". This paper is going to deal with only "the mind in a narrow sense". And furthermore, it focuses on "the act of looking at" especially. Even on such a condition, new facts that are far different from common knowledge will be clarified.

(3) The apparent mind

You would not agree with the conclusion that the world which is seen before your eyes is part of your mind. You would say, "The mind is more advanced existence. Why is the coffee cup which is seen before my eyes part of the mind?" So, let's examine what the mind we think as common knowledge is.

It is said that there are some people who think the mind is located at the heart, but it would be about emotion among intellect, emotion and volition. Actually, all of the expressions relate to emotion, such as "My heart leaped for joy at the good news", "My heart almost burst with grief", and "He has a strong heart", etc.

Generally speaking, it would be thought that the mind as common knowledge exists behind the face of our apparent physical body, and plays such roles as intellect, emotion and volition. In a word, we would think that "the mind" exists behind our sight line. In fact, we have the thought that we are looking at the external world from the position, though it is the apparent material world. By another expression, we have the thought that "I who am looking at the external world exist there."

However, as having clarified by the story up to now, the body we think as our physical body is the apparent physical body. The brain which is assumed to create the mind doesn't exist there. Therefore, we cannot assume that "my mind" exists there.

Let's define again the mind which is assumed to be located behind the apparent face as "the apparent mind", which results from the thought that "I am looking at the external world". And, let's treat "the apparent mind" as being different from both "the mind" and "the world of the mind", which have been told in paragraph 3-3(1)

By the way, our thought that "I am looking at the external world" will be explained in detail in paragraph 4-1(1). And the relationship between "the apparent mind" and "I" will also be explained in detail in paragraph 5-4.

(4) The difference of meaning between "the mind" and "the world of the mind"

The story became a little difficult to understand. Up to now, the words "the mind" and "the world of the mind" have been used. They have been used as almost the same meaning. In a word, both of them have been used to indicate the existence which are created by the activity of the brain

However, it will be necessary to clarify their difference because they will be used as having different meanings because "the apparent mind" was defined in the preceding paragraph. The world including our body which are seen before our eyes is defined as "the world of the mind" under the assumption that "the mind is created by the activity of the brain". This becomes the answer to the problem that "Where is the mind?" Though it is different from "the mind of common knowledge," this becomes "the world of the mind" and "the world of my mind".

"The mind" and "my mind" will be used as the existence accompanied by "the thought of self" as talked in paragraph.3-3(3), namely, it exists at the reverse direction of our sight line. It is "my mind.", or "my apparent mind, in a word. "My mind" is the one based on common knowledge and, on the other hand, "the world of my mind" has the meaning quite different from common knowledge.

This will be explained again in paragraph 5-2.

Part 2 What am I?

Chapter 4 Three hurdles that disturb understanding of "self"

Have you felt some doubt about the common knowledge; "The world which is seen before our eyes is the material world", from the story up to now? What has been explained till now is neither a hypothesis nor "There is such a view". We reach the conclusion that the world, the body, and the mind which are seen before our eyes are "the apparent material world", "the apparent physical body" and "the apparent mind" respectively, by tracing the fact that the foliage plant which is seen before our eyes is green.

At Part 2, new facts are clarified from "the apparent material world", "the apparent physical body", and "the apparent mind", which have been led in Part 1.

There are three hurdles for reaching the answer that "What am I?" They are all hard, but let's get through each one. The first is to analyze our conviction that "I am looking at" (Paragraph 4-1). The second is to analyze the relationship between the objects, which are seen before our eyes, and the recognition (Paragraph 4-2). The third is to analyze "the thought of self". (5-3). By the way, the number in the parentheses shows the paragraph of the articles.

4-1 The trick 1; "I am here, and I am looking at an object".

The subtitle of this paper is "A hard trick set by the brain". We have strong convictions concerning the problem that "What am I?", just like a trick of card juggleries, and they disturb understanding of the true feature of "self".

The one is our wrong conviction about the existence of "self", which is explained in this paragraph 4-1, and the other is our wrong conviction about "recognition", which will be explained in paragraph 4-2. Let's correct these wrong convictions and clarify the important facts which are obtained from the results.

(1) The analysis about the thought that " I am looking at"

We have the thought that "I am here, and I am looking at objects which are seen before my (our) eyes". From the thought, we become to have a wrong conviction that "I" am looking at the coffee cup which is seen before my eyes, therefore, it must be "the object of looking at" and "matter".

In the material world, certainly, the light (electromagnetic wave) which reflects from the coffee cup reaches our retinas. Therefore, it is correct to express that "I am looking at the coffee cup" in the material world. There is no problem. It was explained in paragraph 2-3 "the

inverted retinal image" that the verb "look" means "the act of looking at" in the material world. It shows this situation.

But when we say, "I am here, and I am looking at the coffee cup which is seen before my eyes", it is not the event in the material world but the one in the world which is seen before our eyes. And, the world. which is seen before our eyes is not "the material world" but "the apparent material world" which is created by the act of the brain.

In fact, when you see the coffee cup before your eyes and you say that " I am looking at the coffee cup", it is "an apparent coffee cup" as the apparent matter".

On the other hand, "I" showed by "I am here" is the thought concerning "the apparent physical body". Retinas do not exist in the apparent physical body, and it is not equipped with "the function of looking at", of course.

You might make a rebuttal; "When we look at an intense light such as a lamp we are dazzled." But that is because intense light reaches the eyes of our physical body, not because it reaches the eyes of our apparent physical body.

You might also make a rebuttal "If I look at a mirror, I see my eyes there". But they are "the apparent eyes" as "the result of looking at" in the apparent material world, not in the material world.

To begin with, in the apparent material world, there does not exist light (=electromagnetic wave). It doesn't occur that light transfers from a coffee cup which is an apparent matter to the retinas which doesn't exist originally. In a word, the act "I am looking at" doesn't occur in the world which is seen before our eyes. Nevertheless, we have the thought "I am looking".

The fact that we think "I am looking at an object" though we are not looking at the apparent object leads us to an important fact when thinking about "What am I?" It will be explained in detail in the paragraph 5-4.

It would be not easy to accept the conclusion. Being summarized again, the coffee cup which is seen before our eyes exists there as a result of "the act of looking at". In a word, it is "the result of looking at", and "the apparent coffee cup".

On the other hand, the body which we think is looking at is an apparent physical body. "The apparent physical body" is not equipped with the function of looking at. Therefore, it is impossible to look at "the results of looking at" once more.

It is possible to turn the direction of our eyes, which belong to the physical body, to the external world one after another. However, "the apparent physical body" is not equipped with the sight line. So to speak, it is "the apparent sight line" of "the apparent physical body". "The apparent external world" appears in response to "the apparent sight line". It must be one of the reasons why we have the strong, wrong conviction that "I" am located at the reverse

direction of "the apparent sight lines".

(2) The analysis of the thought "I am listening to".

The same logic can apply to our thought that "I am listening to". For instance, when we are listening to the piano playing, the vibration of air from the piano reaches our ears. There is no problem with expressing that "I am listening to the piano playing", in the material world. However, the sound of piano is located to the position of the piano in the world which is seen before our eyes. It is impossible to listen to the sound of piano which is "the result of listening to". It is the same logic, that is, "It is impossible to look at the object which is "the result of looking at".

4-2 The trick 2: "I look at an object and recognize the existence"

In the previous paragraph, it was explained that our thought that "I am looking at" becomes a trick to cover the fact that the world which is seen before our eyes is the apparent material world. And, it was also concluded that the act, "I am looking at", doesn't occur How the coffee cup which is seen before our eyes relates to the recognition in the apparent material world. This fact has an important meaning concerning the problem that "What am I?".

As well as it, our thought, "I look at an object, and recognize the existence", becomes a trick to make us misunderstand the true feature of recognition. It also becomes an important key about the question; "What am I?"

(1) Recognition

It is necessary for us to refer to "recognition" in order to clarify the problem that "What am I?" Until now, we have analyzed the act of looking at, and in addition to it, we must solve the problem, "How is the external world recognized by the act of looking at?".

Let's think about, for example, how a coffee cup is recognized by the act of looking at. If it is a machine like a humanoid robot, and it selects "a coffee cup" among some choices as a result of the information processing, it can be said that the machine has succeeded in getting a right answer.

However, if it is a human being who does conscious activities, the problem that "How is the coffee cup recognized?", remains unsolved.

The information from the external world is sent to the brain, and processed there, and as a result, a coffee cup appears in the world which is seen before our eyes as "the result of looking at". I become to know the existence" How the coffee cup which is seen before our eyes relates to the recognition of the coffee cup remains as an unsolved problem.

There is a word "Descartes' dwarf" which ridicules the dualism of Descartes. He is said to have

had a view that the information of the external world was carried to the pineal corpus, which looks like a pinecone, and the external world was recognized.

However, his idea could not explain "recognition", because he only assumed that the information of the external world was carried to the corpus pineal. His idea was criticized because a person, who recognize the external world, is necessary in the corpus pineal. Considering the level of physiology at that time, it might be natural that his idea was such a level.

Even today when the system of the brain is gradually being clarified, the problem that "What is recognition?", still remains as a mystery.

(2) Definition of the word "recognition"

First of all, let's define "recognition" concisely. It is not such a precise definition as that of philosophy. It is only a proposal to classify recognition into two levels, and to pursue the subject. Namely, for convenience's sake let's pursue the subject based on the assumption that there are two levels on recognition; "the high-level recognition" and "the low level recognition."

"The high-level recognition" means that we can understand what objects or events which are seen before our eyes are. For example, we can understand who the person is, what time it is, and what the word "society" means, etc.

On the other hand, "the low-level recognition" means that we can know the existences of the objects which is seen before our eyes whether we can understand what they are. For example, when we see a coffee cup before our eyes we can know the existence of the coffee cup whether we understand what it is for. As another example, when we hear a certain foreign language being spoken, we can know the existence of the sound even if we do not understand what the meaning is.

In this paper, we are going to examine only "the low-level recognition". Though it is so, it surely leads us to an important result about recognition which is the subject of this paragraph.

(3) Two steps of recognition

As clarified in paragraph 4-2, our common view that "I am here and I am looking at an object" is a hard trick, and makes it difficult for us to understand that the body and the world which are seen before our eyes are the apparent physical body and the apparent material world respectively.

On the other hand, our thought that "I am looking at an object which is seen before my eyes, and I become to know the existence", becomes a hard trick concerning "recognition", and makes it difficult for us to realize the true feature of recognition. As understood by the expression, we assume that we become to know "the existence of the object which is seen before our eyes" after "the information about the object which is seen before our eyes" is taken into "the apparent mind". From our thought that "the information about the object which is seen before our eyes" enters into "our apparent mind", we become to have the view that "recognition" is abstract.

Though there are certainly such abstract parts in the mind as intellect, emotion and volition, as mentioned in the previous paragraphs, there are also such concrete parts in the mind as a coffee cup, a desk and a wall, etc., which are seen before our eyes. Similarly, there are also concrete parts concerning recognition.

Now, let's examine the following expression that "I look at an object which is seen before my eyes, and I recognize the existence."

There are two steps in this expression, namely, the first step is "I look at an object which is seen before my eyes", and the second step is "I recognize the existence". In other words, it means that "I can know the existence of the object which is seen before my eyes after I look at it". You would think; "It is natural. How can we know the existence of the object without looking at it?" However, a trick about recognition lurks in this conviction of ours.

(4) The first step: "I look at an object which is seen before my eyes"

Let's think about the expression in the situation where we are looking at a coffee cup. There is a coffee cup (the object of looking at in the material world. Light reflected at the coffee cup reaches our retinas, and it focuses on the retinas.

There is the relation of "the object of looking at" and "the body of looking at" between the coffee cup and the physical body. The first step that "I lam looking at a coffee cup" can be confirmed in this situation. It is undoubtedly correct.

However, what we must pay attention is that when expressed as "I am looking at a coffee cup", it is not the event in the material world but the one in the world which is seen before our eyes, namely, the event in the apparent material world. In a word, the object which is shown by "I am looking at a coffee cup " is the coffee cup which is seen before my eyes, not the one in the material world.

As it was explained in paragraph 4-1, "It is impossible to look at the coffee cup which is seen before our eyes", or as another expression, "It is impossible to look at the result of looking at". In conclusion, the first step of recognition that "I am looking at an object" does not occur in the world which is seen before our eyes.

(2) The second step: "I recognize the existence"

Next, what does the second step, "I recognize the existence of the coffee cup.", mean? It has been known that the information from the retinas arrives at the visual cortex at the back of the cerebrum and finally reaches the visual association cortex of the frontal lobe by tracing two routes. However, it does not explain "How do I recognize the existence of the coffee cup?" Descartes assumed that the visual information of the external world is carried to the pineal corpus and the external world is recognized there. The visual cortex and the visual association cortex are certainly the areas which process the visual information, but it does not explain how the external world is recognized, because the pineal corpus is only paraphrased by the visual cortex and the visual association cortex.

Though it is a repetition, we think in common knowledge the coffee cup which is seen before our eyes as "the object of looking at", and the body which is seen before our eyes as "the body of looking at". Therefore, we think that we can define the relationship "I am looking at an object which is seen before my eyes" between them, namely, "the object of looking at" and "the body of looking at".

However, it is not true, as shown now. The relationship between "the object of looking at" and "the body of looking at" cannot be defined in the world which is seen before our eyes. That is because, in the world which is seen before our eyes, the coffee cup is an apparent object and the body is an apparent physical body. It is impossible that light travels from "an apparent object" to "an apparent physical body".

In a word, "the act of looking at", namely, "I am looking at an object which is seen before my eyes" does not occur in the world which is seen before our eyes. Nevertheless, we use the expression that I look at an object which is seen before my eyes, and I recognize the existence." What does it mean?

It leads us to the conclusion that "The object which is seen before our eyes is the recognition". I do not think that it is understandable easily. Let's explain it by using another expression. You would be thinking that you recognize the existence of the coffee cup because you are looking at the coffee cup which is seen before your eyes. However, it is not correct in reality. The body which you are thinking to be your physical body is "an apparent physical body", and the coffee cup which you are thinking to be "matter" is "an apparent coffee cup". The causal relationship of "the body acting to look at" and "the object you are looking at" doesn't exist there. The coffee cup which is seen before your eyes exists there as "the result of looking at". It is wrong to think that you are looking at the coffee cup which is seen before your eyes. In fact, as told in paragraph 4-1(1), it is impossible for you to look at "the result of looking at" again. The coffee cup which is seen before your eyes is "existence" and "recognition" as well,

because you are able to know the existence of the coffee cup though you are not looking at it.

"A coffee cup does not exist before your eyes?"

"Yes, it exists there."

"You are looking at the coffee cup?"

"No, I am not looking at it."

"You do not know that a coffee cup exists before your eyes?"

"Yes, I know it."

Since you are able to know the existence of a coffee cup though you are not looking at it, the coffee cup which is seen before your eyes is "existence" and at the same time it is "recognition". Our view that "I am looking at an object which is seen before my eyes" is one of the causes that lead us to the misunderstanding about "recognition". The low-level recognition might be different from the high-level recognition, but it is impossible to assume that "I am looking at an object which is seen before my eyes, and I recognize the existence", concerning the low-level recognition at least.

It would be possible to reverse the order of the expression, namely, "recognition is existence" as well in the world which is seen before our eyes". Of course, the meaning of existence in the world which is seen before our eyes or in the world of the mind would be different from that of existence in the material world.

4-3 The world of the mind which is viewed from the viewpoint of "recognition"

It is wrong to think that "I am looking at an object which is seen before my eyes, and I become to know the existence". The fact is that "The object which is seen before my eyes is the existence and at the same time the recognition". It would easily be understandable that the conclusion can apply to other sensations such as sound, touch, etc.

It is wrong to think that "I am listening to the sound, and then I become to know the sound." The fact is that the sound which is now being heard exists at the position where it is now being heard and it is the recognition of the sound at the same time.

For example, the sound of a piano playing is the existence, and it is the recognition of the sound at the same time. It is wrong to think that "I am listening to the sound of the piano playing which is being heard now, and as a result, I become to recognize the sound of the piano playing." The truth is that the sound which is now being heard is the existence and the recognition.

Our pleasant impression created by hearing a piano playing is the event in "our apparent mind", and similarly, the sound of the piano playing is the existence and the recognition in the world of our mind. The same logic can also apply to the sensation of touch. It is not correct to think that "I feel the sensation of touch, and become to know it." The truth is that the sensation of touch itself exists at the position where our apparent body meets the apparent object, and it is the recognition at the same time.

We have the view that we can recognize the objects after the information about them are taken from the external world (the material world) into the brain. It is certainly correct. However, the problem is that we are wrongly convinced the world which is seen before our eyes is the external world (the material world). The expression, "I am looking at an object which is seen before my eyes, and I become to know the existence", clearly shows the situation.

Namely, we think that it is necessary to take the information from "the apparent external world" into "the apparent mind" once in order to recognize them, because we assume recognition is born in "the apparent mind". However, it is not correct. It is the recognition that objects exist in the world which is seen before our eyes.

The common knowledge that we can recognize the objects after the information about them is taken from "the apparent external world" into "the apparent mind" has influence on the wording. As for apparent objects and sounds existing outside our apparent physical body, we say "I am looking at an object, and I become to know the existence" or "I listen to the sound, and I become to know the existence of the sound." Namely, we think that the information about the apparent object in the apparent external world is taken into "the apparent mind" once.

On the contrary, as for our feelings which are thought to be the phenomena in "the apparent mind", we do not say "I feel my sadness, and I become to know my sadness", though we say, "I read a person's facial expression, and I become to know the person's sadness."

That would be because we assume feelings such as sadness and pleasure are events in "the apparent mind" and it is unnecessary to take them into "the apparent mind" again. In common knowledge, feelings such as sadness, pleasure, etc., are thought to be recognition, but a coffee cup which is seen before our eyes is not thought to be the recognition.

However, if it is taken into consideration that the world which is seen before our eyes is the world of the mind, it would not be strange that the objects existing in the world which are seen before our eyes are the recognition as well as the existence.

Chapter 5 What am I?

We have traced a long way up to now, and so let's show the answer to the problem that "What

am I?" It is not enough to clarify all of it, of course. Though it is only a first step, it shows the core of the question "What am I?".

5-1 Reconsidering of the existence of "self"

We defined "self" as the following diagram [1] in paragraph 1-1.

"I = my body + my mind" [1]

Though it is the repetition, let's make sure again what we assume my body and my mind as common knowledge. We think my body is my physical body. On the other hand, we think that my mind, which is composed of intellect, emotion and volition, is created by the act of the brain, therefore, we think the mind is abstract.

As it is under the common knowledge, it is just a common view. Therefore, the previous diagram can be defined as

"I = my physical body + my mind which consists of intellect, emotion and volition"[2]. Certainly. there is no problem in defining "self" as the diagram. It can be said to be a correct interpretation.

However, when comparing the diagram [2] with the results which we have obtained up to now, it is doubtful if we really think "self" as such an existence.

So, let's reexamine the diagram [2] from the standpoint of the analysis about the world of the mind which has been carried out up to now, not from common knowledge.

First of all, it is doubtful whether the body we think as "my body" is really the physical body. The body we think as "my body" must be the body which is seen before our eyes. It is not the physical body existing in the material world but the apparent physical body existing in the world of the mind, as had already been proved in paragraph 3-2. We wrongly assume that the apparent physical body is our physical body. We only know the existence of our physical body as just knowledge.

On the other hand, concerning "my mind", we have already known that the world of the mind is quite different from that of common knowledge, as it was proved in paragraph 3-4. The world which is seen before our eyes, including our apparent physical body, is the world of the mind, and it is just "my mind".

However, you would think that "my mind" exists behind the face of your body which is the apparent physical body. It is "the apparent mind" as common knowledge shows, which is located at the opposite direction of your sight line. The brain doesn't exist there, naturally.

As clarified in paragraph 4-1(1), it is impossible to look at "the result of looking at". Our thought that "I am looking at" is just located at the inside of "the apparent face". Therefore, it is only the mind of common knowledge, and it cannot be said to be the true mind. It is what should be named "the apparent mind" so to speak, though it has been used up to now. The

apparent mind is also part of the mind, but it does not coincide with the world of the mind.

In conclusion, "my body" is "the apparent physical body" and "my mind" is "the apparent mind" which belongs to "the apparent physical body", which are the components of "self". Both of them are the existences in the world of the mind. Therefore, the diagram [2] which was shown previously can be defined as

"I = the apparent body + the apparent mind" [in the material world. However, we must not overlook the fact that3].

Please be careful that the mind defined here is "the mind as the narrow sense", which was told in paragraph 3-3(2).

5-2 Answer to the question "What am I?"

We started to reexamine the problem that "What am I?", from the diagram [1];

"I" = my mind + my body. [1]

And through a consideration of the previous paragraphs, it was clarified that the diagram [1] is rewritten as follows;

"I" = my apparent physical body + my apparent mind [3]

The story which has been told up to now is about the mind in a narrow sense which is restricted to "the phenomena of being conscious", and about the low-level recognition which is restricted to "knowing the existence of the objects which are seen before our eyes". It has not referred to the world of the mind in a wide sense including the information processing of the brain and not examined the high-level recognition such as the meaning of objects.

I know it is certainly not appropriate to answer the problem that "What am I? under such a condition. However, considering the results of the preceding paragraphs, we will reach the following conclusion, namely,

"I am an existence which is created in the world of my mind."

Common knowledge says that "my body" is the physical body which exists in the material world and "my mind" is created by the brain which is located at the head of the physical body. In fact, it is true that we have our own physical body and the body including the brain supports us from the physiological side.

It is also true that "my mind" consists of both the information processing by the brain and the conscious phenomena which are the results of it. Therefore, it is possible to define "self" by the diagram,

"I" = my physical body + my mind, [2]

and it is not wrong.

It is correct that we think we have our own physical body. But which do we think our physical

body is?, the body which is seen before our eyes or the physical body which exists in the material world. It must be the body which is seen before our eyes. But, it is the apparent physical body which exists in the world of the mind, not the physical body existing in the material world.

It would also be correct to think that the mind is created by the activity of the brain. Then, where do we think the mind exists? We would answer, "It seems to be behind our face." However, the face which we refer to is not the one of the physical body, but the one of the apparent physical body. Therefore, the brain does not exist behind the face of the apparent physical body.

Even if we examine the inside of the apparent face, we cannot find the mind which we are looking for. It is "the apparent mind" that is located there. It is certainly part of the world of the mind, but it is only part of it.

Our thought shown by such words as intellect, emotion and volition is apparently located there, but their high function does not exist there. The inside of the face of the apparent physical body is also part of the world of the mind.

In a word, it is true that we have our physical body in the material world, however, what we think our body is not the physical body but the apparent physical body existing in the world of the mind. And it is also true that the mind is supported by the brain, however, what we think our mind is "the apparent mind" in the world of the mind.

The coffee cup which is seen before our eyes exists in the world of the mind, being accompanied by the meaning of "a container to drink coffee". Similarly, "I" exist in the world of the mind, being accompanied by the thought of "self".

You would have felt some doubts against such a conclusion. There would be some reasons, but the most doubtful one would be the following: "You say that the body which is seen before our eyes is the apparent physical body, then, where does our physical body exist?"

We certainly have the physical body as it has been told repeatedly. We have pursued the subject based on the assumption that the material world exists whether we human beings exist or not. Therefore, our physical body surely exists in the material world. However, we must not overlook the fact that it seems possible to press only indirectly

For example, even if a coffee cup as matter exists in the material world, we cannot talk about it if we cannot recognize it. In this case, of course, it is also based on the assumption that a coffee cup as matter exists in the material world whether we recognize it or not. However, it is not possible to talk about the coffee cup if it is not recognized, though it is also a repetition.

What we recognize is not the coffee cup as matter existing in the material world. The coffee cup which exists before our eyes is the recognition of the very coffee cup, and the coffee cup which is seen before our eyes is not the one as matter but the one as "apparent matter".

It is the recognition that a coffee cup exists before our eyes through a series of process of "the act of looking at". The coffee cup which is seen before our eyes is not the coffee cup as matter but the one as the apparent matter.

The same logic can also apply to our physical body. Though it is also a repetition, our physical body certainly exists in the material world prior to our recognition of it. Though, even if the physical body exists in the material world it is impossible for us to talk about the body unless it is recognized. It becomes possible to talk about the body only after it exists in the world which is seen before our eyes because it is the recognition, and it is not the physical body but the apparent physical body.

In a word, what we can recognize as "my body" is "the apparent physical body" which is seen before our eyes, not "the physical body" in the material world.

At first, we defined "self" by the diagram;

"I" = my body + my mnd [1]

In this diagram, "my body" and "my mind" are expressed as if they are independent of each other. If it is the diagram,

"I"=my physical body + my mind which is composed of intellect, emotion and volition, my physical body and my mind are certainly different from each other. However, since "my body" is "the apparent physical body" and "my mind" is "the apparent mind", both of them exist together in the world of the mind.

It is not correct to think that "I" consist of the two different elements, "my mind" and "my body". Both of them are the same kind of existence. They exist in the world of the mind, and are harmonious with each other. In fact, we feel "my body" and "my mind" cannot be separated from each other. Our feeling of the unity of "my body" and "my mind" seems to originate from the fact that both of them exist in the world of the mind, and they are the same kind of existence.

5-3 Self-consciousness

Next, let's examine "self-consciousness" which is another important factor when we pursue the question; What am I?

The concept of "self-consciousness" is very difficult to define it clearly. Therefore, as well as the definition of the mind and recognition, let's define it at the level which can endure the discussion here without going too far into it.

If we interpret it literally, it would mean "to recognize self" or "self is recognized". But in other words, it would be expressed as "to recognize the existence of self" or as "the existence of self is recognized". It is the expression of "self-recognition", but "self-consciousness" might

be treatable though "consciousness" is merely replaced by "recognition".

Then, what is the recognition of the existence of self? Does it mean to recognize the existing of my body? Or, is it to recognize the existence of the mind, which is thought to rule perception, memory, study, thinking, language, emotion, and the intention, etc.? It would be appropriate to think that it is to recognize both of them under the diagram,

"I" = my body + my mind [1]

So, let's define "self- consciousness" as "recognizing both of my body and my mind".

Let's pursue the subject under this definition, though I know it is not enough.

The self-consciousness is defined as being recognized both of my body and my mind. As they are clarified as the apparent physical body and the apparent mind, the self- consciousness means to recognize both the apparent physical body and the apparent mind.

It is easy to understand how "the apparent physical body" is recognized. As told in the previous paragraph, it is the recognition of the object that the object exists in the world which is seen before our eyes. When we turn our eyes to our physical body, "my apparent physical body" appears in the world which is seen before our eyes. Therefore, it means the recognition of "the apparent physical body", that is, the recognition of "my body".

Of course, the high-level recognition must be involved in realizing that the apparent physical body is "my body". Therefore, it will be necessary to study the high-level recognition in order to clarify how we recognize it as "my body". However, it would not be so difficult to guess that the existence of "the apparent physical body" leads to the recognition of "my body".

On the contrary, it is difficult to clarify how we can recognize "the existence of the apparent mind". That is because "the apparent mind" is extremely abstract and we can neither see nor touch it, though we assume it to be located behind the face of the apparent physical body.

On what is our assumption based?, that is, "the apparent mind" exists behind the face of our apparent physical body". As told in the previous paragraph, the opposite direction of our sight line must be crucial. Namely, since various apparent objects appear in the world which is seen before our eyes by following the movements of our sight line, if we assume "my mind", which is assumed to be looking at them, exists at the opposite direction of the sight line, it would be reasonable.

Our view, "I am here, and I am looking at an object", clearly shows the situation. "I" in the expression of "I am here" can be interpreted to mean "my body ", and "I" in the expression of "I am looking at an object" can be interpreted to mean "my mind". Therefore, our view, "I am here, and I am looking at an object", will be paraphrased into the view, "I have my body, and I who stay at my body am looking at an object".

But it is only our conviction as common knowledge, of course. We are wrongly convinced that the apparent physical body is the physical body and we are looking at the apparent material world from the inside of the face of our apparent physical body. Our thought that "I am looking at an object", which can be paraphrased as "the apparent mind", seems to belong to "the apparent physical body", and to be always dependent on "the apparent physical body".

Thus, "the apparent mind" seems to be an existence which cannot be directly shown without referring to "the apparent physical body". That is because the true world of the mind shown by the word "my mind" is originally the world which is seen before our eyes, including our apparent physical body itself. Therefore, the recognition of "my mind" must be the same as the recognition of the world which is seen before our eyes, including our apparent physical body.

It seems to be expressed only indirectly.

it seems to be able to be expressed only indirectly

But, as a matter of fact, what we think to be "my mind" as common knowledge is "the apparent mind". "The apparent mind" is not recognized itself, and it seems possible to express only indirectly, such as "I am looking at", "I am listening to", "I am feeling", "I am memorizing", "I am speaking" and "I am thinking", etc.

Our thought that "I am doing such activities" would be "the apparent mind", and it would be the recognition of "the apparent mind" at the same time. These thought of ours about "my mind" depends on "our apparent physical body", and It seems possible to express it only with our apparent body.

It is just the same as a coffee cup which is seen before our eyes, which is accompanied by the meaning of "a container to drink coffee". "The apparent mind" also obtains the meaning of "my mind" and it is assumed to be located behind the face of the apparent physical body, and it is the recognition of "the apparent mind".

As known from the story up to now, it would be concluded that "the apparent physical body" existing in the world which is seen before our eyes is the recognition of "the apparent physical body", and such activities accompanying with the apparent physical body as "I am looking at an object", etc., are the recognition of "the apparent mind".

5-4 Why do "I" exist in the world of my mind?

The apparent material world, the apparent physical body and the apparent mind exist in the world of the mind. We wrongly interpret them as the material world, the physical body and the mind respectively.

Why is such a trick set by the brain, cheating even ourselves? Of course, even if it is said to be cheating ourselves, it is different from the trick of juggleries. It is not intentional. The truth

is that we cannot see through the true feature of the mind, because the apparent material world and "I" are artfully constructed in the world of the mind.

The reason why the apparent material world and "I", who am composed of the apparent physical body and the apparent mind, exist in the world of the mind seems to be that they play an important role in the system which controls our behavior. Namely, when we human beings take the information from the external world, analyze it and decide our behavior, the apparent material world and "I" seem to play an indispensable role in the information processing.

Our behavior consists of conscious parts and unconscious parts. The former is very small, though the latter is far bigger. For example, when we are going to hold a coffee cup which is seen before our eyes, we do most of the acts automatically, though we are conscious of the key points such as the position of the coffee cup and the direction of stretching our hand, etc.

The apparent material world and "I" are phenomena of being conscious. There is surely the backup of the information processing of the brain behind our behavior, but the physiological process of the brain is not conscious.

The reason why the phenomena of being conscious, the apparent material world and "I", exist in the world of the mind in addition to the physiological process would be that they are playing a necessary and indispensable role as the recognition in the information processing.

One of the facts which support the assumption is that the world which is seen before our eyes is the copy of the external world, and the apparent physical body is that of our physical body. Namely, it will be very efficient in order to analyze and judge the information of the external world that the apparent material world and the apparent physical body exist in the world of the mind as the copies of their original.

For example, if it is a robot controlled by a computer and is trying to stretch its arm and hold a coffee cup, it will rely on the information converted into numeric data, and there would not be a conscious phenomenon, being different from our human beings.

However, as for us human beings, the copies of both a coffee cup and our physical hand exist in the world which is seen before our eyes, and they are the recognition of them at the same time. It would not be wrong to think that the existence of both an apparent coffee cup and our apparent physical hand in the world which is seen before our eyes is useful to stretch our physical hand and to hold the cup in the material world, though the mechanism is unknown.

Or rather, it would be almost correct to think that they themselves are useful in the information processing because of both existence and recognition, not because "I" am looking at the coffee cup, or "I" recognize the coffee cup. In fact, under the system of synchronization, the movement of our apparent hand toward the apparent coffee cup synchronizes with that of our physical hand toward the coffee cup in the material world.

We have only to turn our eyes to an object which is seen before our eyes when we are going to obtain the information about it. As a result, the apparent object itself, not the information converted into numeric data, will appear in the world which is seen before our eyes.

As for the utility of information such as the distance and the direction of our hand and the coffee cup, the copy of the external world exists in the world which is seen before our eyes and at the same time it is the recognition of the external world must be much more useful than the data converted into numeric form.

"I" that is expressed in the problem that "Why do I exist in the world of the mind?", is "I" who am shown by the following diagram,

"I" = my apparent physical body + my apparent mind [3].

Therefore, the one part of this question is related to "the apparent physical body". The answer, as it has been explained now, would be that it is very useful in the information processing that the apparent physical body exists in the apparent material world as the copy of the physical body.

The other part of the question is related to "the apparent mind", and it would be paraphrased as: Why does the apparent mind exist in the world of the mind? It would be because "the thought of self" makes our behavior reach a new stage which is quite different from the one in which "the thought of self" does not exist.

"The thought of self" exists in the world of the mind, being accompanied by various thoughts such as "I am looking at", "I am listening to", "I am feeling", "I am memorizing", "I am speaking", "I am thinking" and "I am judging", etc. However, as had told in paragraph 4-1, it is impossible that "I" look at the objects which is seen before my eyes, "I" listen to the sounds around me and "I" feel the sensations at my apparent physical body, etc. They are "apparent acts", so to speak.

Nevertheless, there is a system which makes us assume that "I" exist in the material world and do such apparent acts, being accompanied by the apparent physical body. What can we obtain under such a system?

Let's think about the act of stretching our hand to a coffee cup and of drinking coffee, for example. If "the thought of self" is got rid of, a series of the acts will be expressed as follows. A desire to drink coffee arises.

Based on it, a hand stretches toward a coffee cup.

The position of the hand and the cup is being recognized because they exist in the world which is seen before one's eyes.

The cup is drawn nearby.

Coffee is sipped.

The aroma of coffee arises, and a feeling of relaxation is induced.

Thus, the acts become extremely mechanical if "the thought of self" is erased.

Next, if "the thought of self" is taken into consideration, a series of acts will be expressed as follows:

"I" want to drink coffee.

"I" decide to stretch my hand to a coffee cup by my will.

"I" know the position of the coffee cup and my hand, because "I" am looking at them.

"I" touch the coffee cup.

"I" draw the coffee cup to my mouth.

"I" sip coffee.

"I" feel the aroma of coffee and relax.

In this way, our behavior develops to a new stage by having "the thought of self", in other words, by having "the thought of an actor" that does such acts as "I want", "I decide, "I" drink, and "I" feel, etc.

"I" have only to turn my eyes to the object which is seen before my eyes to get the information about it. As a result, "I" can get the information about the object. It is "I" that analyze the information. It is "I" that determine to act toward the object.

In this way, by the existence of "the thought of self", a series of our acts, such as collecting and analyzing information, determining and executing our behavior, become to be smoothly carried out.

Such our view is just the same as our common knowledge about the mind, the body and the external world. We believe the view without doubting, but it is wrong, as already told in the previous paragraphs.

The copy of both the physical body and the material world is created in the world of our mind, and we believe them the physical body and the material world without noticing them to be the copy. As a result, we become to think that "I" stay in the physical body, and am acting in the material world.

It is certainly the physical body that actually acts in the material world. However, the physical body itself can only behave mechanically. It is necessary for us to be equipped with a system of controlling our behavior so as to highly adjust ourselves to a complex environment.

The system would be composed of the following two functions. One of them is the neural network of the brain, and it supports "our behavior" from the physiological side. The other is that the apparent material world and "I", who consist of the apparent physical body and the apparent mind, exist in the world of the mind, and they support "our behavior" from the side of "recognition". Namely, the scheme as common knowledge that "my mind" stays in my

physical body and "I" exist and act in the material world, comes to be established in the world of the mind.

Our behavior would be being performed by the system that "the neural network of the brain" supports the information processing from the physiological side and "the phenomena of being conscious" supports the information processing from recognition. Both the apparent material world and "I" would exist as part of the system that controls our behavior. Such a system would be expressed as "the evolution of the information processing" or "the evolution of the mind".

Epilogue

Many people would have been interested in the problem that "What am I?", for a long time. For instance, the artist Paul Gauguin left the words, "Where did we come from? what are we? and where do we go?" There seem to be a lot of people who feel sympathy for his words. However, this question is very difficult.

Though it might sound paradoxical, we cannot obtain any answer, if we try to consider it from "the existence of self", because such a strategy makes us fall into a trick. It is necessary for us to be away from "the thought of self", and to start from the problem that "Is the world which is seen before our eyes is really the material world?", though you would think it is far from the common knowledge.

The fact is that "The world which is seen before our eyes is not the material world." This paper is based on the assumption that "The material world surely exists", as having been mentioned in the text. And by tracing the subject logically, it reaches the conclusion that "I am an existence in the world of my own mind". The conclusion is neither a hypothesis, nor such a view that "There would be such an idea, too".

A lot of people are interested in the mind, the consciousness, and furthermore, "What am I?". As for the mind and the consciousness, a lot of researchers, not only psychologists but scientists whose specialty is the cognitive science and the artificial intelligence, etc., are advocating various ideas.

However, I always wonder what assumption these people stand on and how they pursue their ideas. Now it is the time to construct the basic knowledge about the mind and the consciousness everybody agrees with, I think.

I think the most important thing is the common view that "The world which is seen before our eyes is not the material world", and we should accept the results, which are obtained by being logically traced, as facts.

If I were asked whether I am living everyday life under the view I have talked up to now, I am

not so. "The objects which are seen before my eyes are the apparent objects, my body which is seen before my eyes is the apparent physical body, the persons who are walking this way are apparent persons. They are all the existences in the world of my mind." I don't think like that. As common knowledge, I think that the objects which are seen before my eyes are matter, my body which is seen before my eyes is my physical body, and the persons who are walking this way are the persons themselves.

However, when I think over the mind and the consciousness, it is another. I well remember when I noticed that I am an existence in the world of my mind, I was so shocked that I was quite at a loss for words.

However, it did not last so long. When seeing a beautiful and magnificent scenery, staying with people of a warm heart, and seeing animals living peacefully and bravely, and when I know that they are the existences in the world of my mind, I feel the wonderfulness of the world of the mind and the preciousness of lives.

Thank you for looking over my poor sentences. I would appreciate it if you have felt some doubts about the common knowledge; "The world which is seen before our eyes is the material world", though I do not think you would agree with my conclusion.

A more detailed explanation is in the paper, "Where is the mind?", which was introduced at the first page of this paper. I would also appreciate it if you would refer to it.

2021 August, by Shigeru Shiraishi

Copyright©2021 Shigeru Shiraishi All Rights Reserved