#### Scientific Contribution

# Neuroscience and Epistemological Dualism: On Habermas' Thoughts

Shogo ASAMI

(Sophia University, E-mail : shogo-a@sophia.ac.jp)

#### Abstract :

This thesis aims to consider Habermas and neuroethics, attempts to sort out which of his thoughts can be supported and which seem vulnerable to counter opinion. Habermas takes the challenge from neuroscience, "Brain as subject<sup>1</sup>", very seriously. Then he proposes distinction of two perspectives. Observers' perspective and participants' perspective. These are distinguishable and should be distinguished, he argues. And his strategy to justify this lies in regarding participant's view as fundamental. But Habermas goes further and seriously tries to harmonize dualism with ontological monism. This is specific to Habermas, and is not an easy way. Some of Habermas' discussions are persuasive, but at least at the moment, he is not successful in eliciting inevitability of dualism in natural history. It is mere a project yet, and yet to be estimated.

Keywords : neuroethics, neuroscience, double aspect theory, epistemological dualism, ontological monism, Habermas, Libet

### 1. Preface

Advance in neuroscience leads to the birth of neuroethics. And it raises questions in many fields. One might wonder if one's privacy is properly secured when one's thoughts are read through brain activities. There may be pros and cons regarding the use of smart drugs. It might be questionable if freedom and fairness are compatible. Neuroethics is going to have influence in many fields. The biggest question of all, however, is that of responsibility and free will. Do we have free will at all?

Are we able to be responsible? It might sound like a fundamental question, but if there is no such thing as each person's free will, we could not be responsible legally and ethically. Should courts of justice use brain tests as well as psychic tests?

The situation above explains why philosophers and ethicists are now keenly interested in neuroethics. There are many active and enthusiastic discussions ongoing, and of all I am interested in the thoughts of Jürgen Habermas. It is well known that Habermas advocates communicative actions, communicative reason, and discourse ethics. He sees it natural that human beings are equipped with free will and the ability of responsibility. However, he does not unnecessarily deny that "Brain as subject". He takes the possibility of absence of free will quite seriously.

This thesis aims to consider Habermas's thought and neuroethics, tries to sort out which of his thoughts can be supported and which seem vulnerable to counter opinion. I will be trying to offer points to consider when we discuss neuroethics further.

### 2. Libet's Experimentation

The well-known Benjamin Libet's experimentation called attention to the question of free will in neuroethics. I am not going in detail, but will summarize that famous experimentation as follows:

Gazing at a clock with a lighting point moving in a circle, a testee is asked to move his wrist and record the point when he consciously decides to move his wrist. The tester observes the testee's brain activities and checks when the testee's electrical potential changes ("readiness potential" starts), which means the point when the testee's brain decides to move his wrist.

As a result, it was discovered that readiness potential starts 800-1000 milliseconds before the actual wrist movement. The testees are asked not

to decide when to move, but some confessed they actually intended to move at a certain point. 800-1000 milliseconds difference means the testee had had an intention, and readiness potential starts 550 milliseconds earlier than actual movement in the case of no intention. According to the testees' reports, the will to move occurs 150-200 milliseconds earlier than the actual motion.

This experimentation suggests that brain activities may start earlier than conscious motivation. Libet thought that one could deny moving during that 150 milliseconds, and this experimentation is often treated as evidence that no such thing as free will exists ever.

Many similar experiments followed Libet's and made grounds for the claims that conscious motivation or will is nothing but an illusion.

However, this is a very controversial topic and there are many opposing opinions.

Some people claim that gauging of readiness potential is incorrect. Others claim subjective reports from testees are not so reliable, and it is not reasonable to adopt testees' testimony as evidence of brain activities.

Testees are so susceptible that there is no wonder that they unconsciously try to follow testers' unspoken intentions. Free will is a serious and grand theme, and to explicate free will we need to consider experimentation as a whole, not only in limited scene of moving wrists.

There are problems of labeling, too. Libet et al., use the following words randomly. Wanting, urge, intention, decision, wish and desire. This blurs what should be distinct and will be discussed further. To make it clear which brain part has a role in moral judgment, we should define what a moral judgment is. It is impossible to know what kind of relation brain activities have to intention or wanting, when one does not know exactly what these words mean.

This is a fundamental criticism of denial of free will, compared to the lack of credibility of the testees' reports. Some say this is a contradiction strong enough to be the denial of free will. Others might find it not so a fundamental criticism; we could pursue more accurate experimentation with more precisely conditioned situations. Habermas, however, offers fundamental contradiction to the denial of free will. He is a one of the philosophers who firmly advocates free will.

## 3. Distinction of Two Perspectives

Habermas proposes a distinction of two perspectives. The "observers' perspective" (Beobachterperspektive) and the "participants' perspective" (Teilnehmerperspective). These are distinguishable and should be distinguished, he argues. Further, observers' perspective means the third person perspective, while participants' perspective is that of the first person. Also the observers' perspective relates to the reason or causation, i.e., "Ursachen", participants' perspective to the ground, i.e., "Gründe".

It is quite understandable that Habermas proposes such a distinction of different perspectives. After publication of "The Theory of Communicative Action" in 1981, Habermas pursues confrontation between communicative action and strategic action, life world (Lebenswelt) and system. This framework covers distinctions between the third person's perspective and the first person's perspective, observers' perspective and participants' perspective, reason (causality) and ground.

The development of Habermas' theory naturally approaches neuroethics in dual perspectives or the distinction of two perspectives.

This approach is attractive. Many philosophers in Germany follow Habermas and try to advocate free will with distinction of two perspectives and that of ground and reason. Dieter Sturma proposes Doppelaspekttheorie (double aspect theory<sup>2</sup>), emphasizing the importance of distinction of perspectives. Julian Nida-Rümelin also attaches importance to the distinction of perspectives and that of ground and reason, vindicating free will<sup>3</sup>. Science dominates in the space of reason, where the world is viewed and described objectively, however, in the space of ground, where we try to view and describe the world subjectively as a first person, there is room for free will. The problem is how we can justify the distinction which allows free will to exist. How can we tell this distinction is untranscendable (unhintergehbar)? This is a big question unanswered in many ways. For example, Nida-Rümelin says that "Life world is ready for some correction if science demands"<sup>4</sup>, but this not so convincing. Ptolemaic theory is replaced with Copernican theory, and life world is dominated by Copernican views. Then, one might ask, why do accomplishments of neuroscience not take root in life world?

Do we, after all, have anything that justifies the distinction of perspective? Yes, we do. We have Kantian approach. The distinction of perspectives, spaces of reason and ground, are similar to Kant's thoughts. Kant's thoughts gave birth to this distinction. His Phenomenon and the thing in itself, Phenomena and Numena, founded base for duality. Many philosophers try to advocate free will, morality and human dignity, emphasizing that human nature lies in duality. According to Wolfgang Wieland. for example. humans born with moral are ability (Moralfähigkeit), equipped with righteous criterion, and being a member of virtuous community by nature<sup>5</sup>. Eberhard Schockenhoff claims personality and nature (Natur), body and self (Ich), biological existence and moral individual are always inseparable<sup>6</sup>. Human beings are born to live in two worlds, that of nature and that of morality, they claim. But it is not clear how each philosopher assents to Kant's thoughts, his metaphysical proposal, transcendental time and space. They all seem to accept the fact that a human being lives in two worlds simultaneously, but there is no further discussion of justification. And this tendency is not limited in the field of neuroethics, but seen various areas, liable to doubtful opinions from many academics, and some call it "Embryological Kantianism"7.

On the contrary, Habermas tries to define that there are two perspectives and they are untranscendable (unhintergebbar). At least, he is ready to deepen the discussion. He is prominent here. Journal of Philosophy and Ethics in Health Care and Medicine, No.7, pp.81-92, December 2013

### 4. Anti-reductionism

As to how far the untranscendable (unhintergehbar) reaches, Habermas does not seem to be in a solid position. He does not bestow unchangeable features to the untranscendable. Disagreements with Karl Otto Apel, who gives strong position to "the untranscendable presupposition of arguments" (die unhintergehbaren Präsuppositionen der Argumente) confirm this. It is worth pursing what kind of position Habermas gives to the untranscendable, as he tries to save free will in the context of neuroethics. Habermas starts authenticating dual perspectives by criticizing reductionism. It is obvious that he does not support simple materialism (Materialismus). He does not think that human mind is entirely explainable by neuroscience. But one cannot agree with total panpsychism (Panpsychismus), if he claims dual perspectives. How human beings think and act is a complicated phenomenon, and it should not be understood from only one perspective, neither physically nor mentally. And Habermas also does not support simple epiphenomenalism (Epiphänomenalismus), as it does not take human mind into consideration sufficiently. Habermas claims as follows<sup>8</sup>.

"Therefore, reductionism pays high cost. If neurobiology assumes there is no room for grounds and logical processing of grounds, it is not understandable from evolutionary standpoint, why then, after all, did nature give us luxury, 'the space of grounds' (Wilfrid Sellars). Grounds are not a drop of oil which flows on the surface of a dish of soup, named conscious life activities. For a participating subject who judges and acts, the process is always inseparable from grounds. If giving and taking of grounds is nothing but an epiphenomenon, very little will remain of biological function of self-understanding of human beings, equipped with language ability and acting capacity. ... John Saul's counterargument to the idea that conscience is an epiphenomenon is prominent. 'The processes of conscious rationality are such an important part of our lives, and above all such a biologically expensive part of our lives, that it would be unlike anything we know in evolution if a phenotype of this magnitude played no functional role at all in the life and survival of the organism.<sup>9</sup>"

Habermas thus denies materialism, panpsychism, and epiphenomenalism. But he highly values Donald Davidson's anomalous monism. However, he does not totally agree with anomalous monism and contradicts it as follows. "To secure room for mental activities in a world explained physically in a rigorous manner, this anomalous monism is not persuasive enough. In a space where things interact with each other, where everything is understood physically, assuming some existence with special properties which make no causal difference would be in vain. Davidson tries to save mind from reductionism, while his conclusion actually deletes the existence of mind.<sup>10</sup>"

Habermas denied anomalous monism, bade a farewell to reductionism, and tried to find dual perspectives as something positive.

#### 5. Fundamentality of participant's view

"epistemological dualism" Habermas calls dual perspectives (epistemischer Dualismus). His strategy to justify this lies in regarding participant's view as fundamental. This shows that Habermas estimates natural science and its outcome highly, otherwise he would not need to emphasize that the first person's perspective is more fundamental. Then, how does Habermas claim that the dual perspectives are untranscendable and participant's view is more fundamental than the other? Initially Habermas tries to describe free will phenomenologically. He pursues to explain what kind of phenomenon free will is. In an essay to advocate free will, he puts "Phenomenon of Free Will" as first chapter and begins as follows.

"As to spontaneousness to act, we assume animals do have that. However, only human beings, namely persons, do act intentionally, and we start preposing free will here. ... Asked the ground of action, we soon notice that we had preposed as follows: We could have done otherwise, but we chose to do what we did. It was important for us to do so. Two distinctive elements belong to the contents of a consciousness of freedom which acting persons do have performatively in the background. To choose from various options as a result of deliberation or consideration, and to get hold of the spontaneous initiative. The idea that we could have acted differently draws our attention to the cognitive dimension of weighing or deliberateness of grounds, i.e. the self-determination and the volitive dimension of authorship, i.e. self as an original author of actions.<sup>11</sup>"

As we can see, free will for Habermas is something you cannot deny subjectively, and only the decision-making processes after deliberation or consideration on various grounds are entitled to be called free. Only intention or will produced by deliberation or consideration on various grounds can understand free decision in the space of rational explanation of actions.

This shows distinction of Habermas' thoughts on freedom. Freedom is brought about by comparison of various grounds, so Libet's experimentation does not reach the domain of free will. And Habermas proposes fundamentality of participant's views to save free will from natural science and neuroscience. I want to summarize his arguments or reasons.

The first is sociopsychological and developmentalpsychological viewpoint. He argues that one needs to be a participant to acquire an objective perspective. Axel Honneth is enthusiastic in this argument<sup>12</sup>, and Habermas also unfolds his ideas. A child has no objective views, no third person's perspective and he cannot be an observer. His communication is limited to the very close people, sees the world as a merely a participant and not an observer. A child acquires observer's viewpoint, the third person's perspective, as he grows, and only grown-ups can be observers. Habermas comments briefly, quoting Martin Seele. "We cannot ignore participant's view. Because 'one cannot observe, if he does not participate, even in a latent manner'<sup>13</sup>".

Habermas explains this idea that an infant is learning social

acknowledgement on the basis of primatology. Being a non-primatologist he relies on Michael Tomasello to develop a theory, rather than bringing his own ideas in theorization. He refers to Tomasello often.

And discover and proof are made by community of scientists, so observers are at the same time participants of discussion. Therefore, participants' viewpoint is essential, or one could say it is fundamental. For example, he argues as follows. "Personal self-understanding puts up a strong resistance to self-description from a naturalistic viewpoint. This is because dual perspectives are unavoidable and untrascendable. Two perspectives must cross and influence each other, so that we, i.e., the mental in a world, can take an overview and orientation of our situation. It is falsely believed that observer's viewpoint is absolute, but one cannot abandon being a participant. One must always be a member of a community of argumentation which is idealistically expanded. <sup>14</sup> " Habermas refers to de-transcendentalization of scientific community, quoting George Herbert Mead<sup>15</sup>, introducing the following discussion and showing his agreement.

"Nature itself is not explained fully by causation, so it is appropriate to pay attention to the relation of theorization and the function of research system. Researchers' community sets categories, agrees on how to collect data and how phenomenon should be described, and sets up domains of target.... Transcendental pragmatism on natural science is born here. According to this, basic conception of domain setting and forming of observation data are also rooted in pre-science practice.<sup>16</sup>"

Habermas thus tries to find fundamentality of partisipants' views.

#### 6. Possibility of Ontological Monism

Is Habermas' proposal so far persuading enough? We could say yes, as, for example, we cannot deny his discussion on developmental psychology.

However, we cannot fully support his opinions. Some of them depend too much on a specific scientist, as we see in the case of Michael Tomasello. And it is not clear if free will is a collection of comparisons or deliberations of grounds, as Habermas claims. We are sure that deliberation of grounds lies on the basis of free will, and Habermas' claim on phenomenology of free will is convincing. But we have to pursue free will further. We need a clearer explanation on what kind of relation Libet's free will has to free will as a collection of deliberations of grounds, for example.

Most of all, we need to clarify how Habermas estimates the results of natural science. Dual perspectives seem only to trace to that of Kant's.

We cannot deny the fact that modern science brings us fruits, whereas we cannot readily support simple dualism. Then, what should we do? It seems that here Habermas proceeds further.

He wrote an essay entitled "Freedom and Determinism", and in the midst of discussion on neuroscience, especially on possibilities of free will, he wrote a disquisition entitled "The Language Game of Responsible Agency and the Problem of Free Will: How Can Epistemic Dualism Be Reconciled with Ontological Monism? (Das Sprachspiel verantwortlicher Urheberschaft und das Problem der Willensfreiheit: Wie lässt sich der epistemische Dualismus mit einem ontologischen Monismus versöhnen?))" That means that Habermas knows dual perspectives and epistemological dualism are not persuasive enough and may end in return to Kant, so he emphasizes that epistemological dualism has to be elicited from ontological monism.

This is the most important feature of Habermas' discussion of neuroethics. Dual perspectives have various versions and are seen elsewhere, including the theory of dual aspects (Doppelaspekttheorie). But Habermas stands out as a philosopher who is trying to deduct epistemological dualism from ontological monism.

And what does it mean "to elicit from ontological monism", specifically? It is to elicit from evolution of human beings. Habermas makes it clear that he has no intention to go back to Kant's dualism, saying "we need not to reconcile Kant with Newton; we need to reconcile Kant and Darwin<sup>17</sup>". He is not going back to metaphysical framework, but trying to form epistemological dualism in human revolution and natural science. In other words he is trying to show us that participants' view is included in the theory of evolution itself. He says: "Theory of evolution must use nonphysical basic concepts like self-conservation, the fittest and adaptation. These concepts rely on the experience of existence who knows what to be body, and at the same time get knowledge from cultural praxis ....<sup>18</sup>"

These discussions from Habermas are yet to be specifically established, but are mere projects yet. He uses the word project in the above essay<sup>19</sup>. There is no persuading theory of harmonizing epistemological dualism with ontological monism yet.

#### 7. Conclusion

What do we learn from Habermas' discussion?

Habermas takes the challenge from neuroscience, "Brain as subject", very seriously. There are denouncements of Libet's experimentation, but Habermas acknowledges neuroscience and neuroethics have great impact on the question of free will. Some philosophers are not so concerned with the challenge from neuroscience or discussions of neuroethics, but Habermas is different in this point and deals with it face to face.

We also learn that justifying dual perspectives and epistemological dualism is not easy, though it is necessary to do so, to save free will. Bringing Kant along is not persuasive enough, and Habermas admits that. This is what we should bear in mind, whenever we discuss free will in neuroethics. We need new tools, not only Kantian tools.

Habermas goes further than simple dualism, but seriously tries to harmonize dualism with ontological monism. This is specific to Habermas, and is not an easy way. Some of Habermas' discussions are persuasive, but at least at the moment, he is not successful in eliciting inevitability of dualism in natural history. It is mere a project yet, and yet to be estimated. We cannot give affirmative answers to Habermas, we cannot accept his claims as reasonable in full scale, but his discussions bring us a lot to learn, filled with ideas to good to miss, if we study neuroethics.

# Notes

 $^1~$ See Hans-Peter Kruger<br/>(Hrg.), Hirn als Subjekt? Philosophische Grenzfragen der Neurobiologie, Akademie Verlag<br/>, 2007

<sup>2</sup> Dieter Sturma, Philosophie des Geistes, Reclam, 2005

<sup>3</sup> Julian Nida-Rümelin, Über menschliche Freiheit, Recklam, 2005

<sup>4</sup> Ibid., p39

<sup>5</sup> Wolfgang Wieland, "Pro Potentialitätsargument: Moralfähigkeit als Grundlage von Würde und Lebensschutz", Gregor Dasmschen, Dieter Schönecker(Hrsg.), *Der moralische Status menschlicher Embryonen*, Walter de Gruyter, 2002

<sup>6</sup> Eberhard Schockenhoff, "Pro Speziesargument: Zum moralischen und ontologischen Status des Embryos", Gregor Dasmschen, Dieter Schönecker(Hrsg.), op.cit.

<sup>7</sup> Alexandre Mauron and Bernard Baertschi, "The European Embryonic Stem-Cell Debate and the Difficulties of Embryological Kantianism", The Journal of Medicine and Philosophy , 2004, Vol.29, No.5

 <sup>8</sup> Jürgen Habermas, "Freiheit und Determinismus", Hans-Peter Kruger(Hrg.), op.cit., 2007, p109-110. Translation of passages from this paper is my own.
<sup>9</sup> John Searle, Freedom And Neuropiology, Columbia University Press, 2007.

<sup>9</sup> John Searle, Freedom And Neurobiology, Columbia University Press, 2007, p69-70.

<sup>10</sup> Jürgen Habermas, "Das Sprachspiel verantwortlicher Urheberschaft und das Problem der Willensfreiheit: Wie lässt sich der epistemische Dualismus mit einem ontologischen Monismus versöhnen?", Hans-Peter Kruger(Hrg.), op.cit., p289. Translation of passages from this article is my own.

<sup>11</sup> Ibid. p265.

<sup>12</sup> See Axel Honneth, *Kampf um Anerkennung. Zur moralischen Grammatik* sozialer Konflikt., Suhrkamp, 1992

<sup>13</sup> Jürgen Habermas, "Das Sprachspiel verantwortlicher Urheberschaft und das Problem der Willensfreiheit: Wie lässt sich der epistemische Dualismus mit einem ontologischen Monismus versöhnen?", Hans-Peter Kruger(Hrg.), op.cit., p295.

- <sup>15</sup> Ibid, p292.
- <sup>16</sup> Ibid. p296-297.
- 17 Ibid. p298.
- <sup>18</sup> Ibid. p303.
- <sup>19</sup> Ibid. p304.

<sup>&</sup>lt;sup>14</sup> Ibid, p292.