Seminar "Reading Levy's *Neuroethics*" Session 3 (13:30-15:30, October 26, 2007) Presented and Reported by Kei Yoshida

In this session, we read from the section "The extended mind" to the end of Chapter 1 (pp. 29-68). The sections that we read are as follows: "The extended mind" and "The debate over the extended mind." I must confess my embarrassment in that I have to report what I presented in the session and I am not familiar with philosophy of mind. A usual disclaimer applies here.

Now, as you may discern, the main topic of these sections is the extended mind thesis. The thesis is this. The mind is not only what is within the skull, but also what is within the body and even something outside the body. It "includes the set of tools we have developed for ourselves—our calculators, our books, even our fingers when we use them to count—and the very environment itself insofar as it supports cognition" (p. 29).

Although he defends the extended mind thesis, Levy criticizes both proponents and critics of the extended mind thesis. In his view, they regard the extended mind thesis as something that gives a concrete criterion to distinguish between the mental and the non-mental. Levy argues that such a view is a mistake, and that the thesis should be regarded only as a heuristic device.

According to Levy, the extended mind thesis consists of two claims: philosophical and empirical. The philosophical claim is that "if we would count something as cognitive were it internal, we should count it as cognitive whether or not it is internal" (pp. 36-7). Levy calls this claim the parity thesis. The empirical claim is that "as a matter of fact elements external to the brain and to the body play a role in cognitive activity such that, were these elements internal, we would have no hesitation in concluding that they were mental" (p. 36). As mentioned above, Levy contends that the extended mind thesis, in particular, the parity thesis is not a criterion to differentiate the mental from the non-mental. In this regard, he disagrees with Clark and Chalmers who argued for the extended mind thesis and claimed that "several other conditions must be satisfied for a source of information to count as properly mental" (p. 37).

The fact that Levy disagrees with Clark and Chalmers does not mean that he agrees with critics of the extended mind thesis. In the section "The debate over the extended mind," Levy examines criticisms of the extended mind thesis. First, a state must involve intrinsic content. Second, "cognitive processes must be causally individuated" (p. 44; italics in the original). Third, "external information sources do not contain beliefs" in that only brain-based beliefs are informationally integrated (p. 53). It is beyond my ability to summarize and explain all of these criticisms and Levy's counterarguments against them. But what drew my interest most is the second criticism, namely, the problem of causal regularities-although I could not elaborate this point in my presentation. Critics such as Adams and Aizawa argue against the extended mind thesis. In their view, it allows many things to count as the mental, and thus a science of cognition would be impossible in that the science needs to include too many objects. Although Levy criticizes Adams and Aizawa for regarding the brain/mind as a natural kind, it seems to me that Adams and Aizawa are somewhat influenced by the so-called "unity of science" movement. In the unity of science, the ideal science was physics. The unity of science is now unpopular in philosophy of science, however. Rather, philosophers of biology such as John Dupré and Alexander Rosenberg discuss the disunity of science. What I mean here is that Adams and Aizawa might have physics as their ideal of science, and that examining my guess might be interesting.

Anyhow, Levy returns to the parity thesis at the end of Chapter 1, and argues that it does not matter whether we call the extended cognition "mind." In his view, "we need to rethink the *significance* of the boundary between inner and outer—including, perhaps especially, its *ethical* significance" (p. 59; italics in the original). To do so, Levy proposes an ethical parity principle (EPP). The EPP has two versions: strong and weak. The two versions correspond to the extended mind and the embedded mind respectively. By "embedded" Levy means that the mind heavily depends on the external environment, and that the mind is within the skull. That is, the embedded mind thesis is weaker than the extended mind thesis. The two versions of the EPP are as follows:

EPP (strong): Since the mind extends into the external environment, alterations of external props used for thinking are (*ceteris paribus*) ethically on a par with alterations of the brain. EPP (weak): Alterations of external props are (*ceteris paribus*) ethically on a par with alterations of the brain, to the precise extent to which our *reasons* for finding alterations of the brain problematic are transferable to alterations of the environment in which it is embedded (p. 61: italics in the original).

A strong version means that our ethical responses to interventions into the cognitive environment must be equivalent to our ethical responses to interventions into the brain. To be precise, if there is no problem with giving someone a PDA instead of a note, then we may want to intervene in the brain. A weak version means that after examining reasons we find interventions into the (narrowly construed) mind, namely, the brain problematic, if we think that the reasons apply equally to interventions into the environment, then such interventions are also problematic. For instance, if we find mind-reading problematic because of an invasion of privacy, then reading someone's diary is also problematic. Or if the enhancement of memory is wrong because of an unfair advantage over others, then giving a PDA to someone instead of a note is wrong. Conversely, if there is no problem with giving someone a PDA, we need to differentiate between giving a PDA and medical enhancement (if we want to criticize the latter). Levy contends that he personally accepts the strong version of the EPP; however, he says that his discussions will be based on the weak version. Prof. Nobuhara raised a concern in our discussion. That is this. Although there are metaphysical differences between the strong EPP (the extended mind thesis) and the weak EPP (the embedded mind thesis), it is not sure whether this distinction is so important given that we draw the same ethical conclusion. We have yet to see how Levy discusses concrete problems in neuroethics, relying on the weak EPP.