Seminar "Reading Levy's *Neuroethics*" Session 9 (12:30-14:30, December 21, 2007) Presented by Junichi Kushita Reported by Kei Yoshida

In this session, we read the chapter 6 "The 'self' of self-control" (pp. 197-221). In this chapter, Levy examines problems of self-control, ego-depletion, and addiction. What is interesting in this chapter is that Levy rarely mentions neuroscientific research.

Levy begins this chapter, asking the following question: "why is the self singular?" (p. 197). According to Levy, neuroscience suggests that the mind consists of different modules and mechanisms. More than that, if we accept the extended mind thesis, we can count external tools and objects as part of the mind. But it seems that we have the unity or consistency of our behavior. How is that possible? Some might want to answer this question, appealing to evolutionary theory. Yet Levy argues that such evolutionary explanations can explain not long-term unity, but short-term unity. To explain long-term unity, which is necessary for us to pursue human lives, we need to think about the self of self-control. Levy says that self-control is a puzzling idea. "When we say that someone has lost self-control, we don't mean that someone else is controlling them. But if they are acting intentionally and voluntarily, and no one else is controlling them, then they must be controlling themselves—or so it seems" (p. 199; Italics in the original). From Plato's Republic, Levy takes up the story of Leontion as an example, and argues that loss of self-control means someone's action does not reflect his/her self-image and endorsed values. But why is the loss of self-control a problem? In Levy's opinion, "self-control is instrumentally valuable to pursuing the kind of life we want" (p. 201; Italics in the original). Patients with utilization behavior and imitation behavior could have serious difficulty pursuing their life plans, for instance. That is why self-control is important.

How do we control ourselves? According to Levy, Walter Mischel's studies of children's ability to delay gratification suggest that "though we are each minimally unified simply by virtue of neurobiological mechanisms that ensure we can function as organisms, we do not achieve an optimal, or even (for living a decent human life) a sufficient level of unity of behavior without further effort and learning" (pp. 204-5). Then Levy goes on to suggest two hypotheses of how such disorders as obsessive-compulsive disorder (OCD), kleptomania, and trichotilliamania occur. One hypothesis is that these disorders make patients focus on the particular qualities of the objects of the attentions, and thus the patients' self-control as a depletable resource is exhausted. The other hypothesis is that although agents' ability to use self-control strategies is intact, their self-control resources are depleted, and thus they cannot resist. In either hypothesis, the point is that self-control is a depletable resource.

How is the idea of self-control as a depletable resource related to addiction? Levy argues that the so-called addiction hypothesis is mistaken. On this hypothesis, addictive desires are so strong that an agent cannot resist them. That is, the desires are compulsive in that they undermine the agent's will. By contrast, Levy contends that addictive desires are not compulsive. According to Levy, there are a lot of cases where addicts can resist addictive desires, using some self-control strategies such as self-distraction. This suggests that we need to consider a characteristic temporal pattern of addictive behavior. The addicts can resist addictive desires in the short term, but they cannot in the longer term. Furthermore, referring to Baumeister's studies on ego-depletion, Levy claims that self-control is a limited resource. "Self-control is like muscular strength: as we use it, it grows weaker, and can only be restored by rest" (p. 210). In Levy's view, the ego-depletion hypothesis can explain not only addictive behavior such as drug addiction, but also disorders such as OCD in terms of self-control as a depletable resource.

If the ego-depletion hypothesis can explain addictive behavior and disorders, then can we employ it to resist addictive desires? Levy here argues that we need to take the role of the environment more seriously. According to Levy, "[a]utonomy is *developmentally* dependent upon the environment: we become autonomous individuals, able to control our behavior in the light of

our values, only if the environment in which we grow up is suitably structured to reward self-control" (p. 215; Italics in the original). This means that others and we can control us by changing the environment. Social psychologists suggest that marketers already make use of the ego-depletion hypothesis to encourage consumption. Thus we have no special reason to worry about "neuromarketing." Now, Levy argues that given that our self-control is based on the environment, we can develop our self-control by changing the environment around us. True, changing the environment is sometimes costly. But it would help to alleviate addictive behavior.