

## SIXTH CLASS: NOVEMBER 3 NEUROETHICS AND ETHICAL DETERMINISM

**Resume:** Up to this point, we have examined two prominent ethical theories, deontology and teleology (consequentialism). These two theories are not mutually exclusive but connect with each other. Deontology notes that all ethical discourse contains reference to certain rules that oblige regardless of one's personal choice, as well as certain factual features of the situation, particularly, the consequences of choices. Every moral choice arises from a weighing of the importance of the rules and from an evaluation of the impact of consequences on personal and social welfare. The problem of justice exemplifies this linkage between rule/obligation and factual circumstances. In thinking about a problem of justice, we must distance ourselves from our own interests and, at the same time, consider what contributes to the interest of all persons in a society.

Moral choice is an art, partially learned by teaching and experience, and partially associated with some "natural" features of humans. John Rawls suggested that moral thinking is something like language (as conceived by Chomsky): there is a prelearned grammar of moral concept and structure and a learned "vocabulary" of values. Not a bad simile!

If morality is, in some part, natural, associated with the structure of human organism, consciousness and social collaboration, our contemporary understanding of the neurosciences must have some relevance to morality. Thus, we ask How are moral responses, choices, judgments, attitudes, emotions related to the brain? Is Morality anything more than the responses of the human neural system to various stimuli? If moral choices and behavior are processes of the physical neuropsychological system, how do we deal with determinism? Is there Free Will (without which morality is implausible)? See Jonsen, Topic 10, Neuroscience.

1. Moral philosophy has traditionally been a **reflective, introspective discipline**: philosophers using the powers of reason to explain human conduct as they experience it in themselves and those they observe. Only in recent years, have the traditional questions of moral philosophy been subject to **empirical study** by using the methods of **cognitive science, anthropology and neurobiology**. See W. Sinnott-Armstrong, *Moral Psychology*. Vol. 1. *Evolution of Morality*, Vol. 2. *Cognitive Science of Morality*, Vol. 3. *Neuroscience of Morality*. MIT Press, 2008.
2. This lecture focuses on the contribution of neuroscience to ethics, or "**neuroethics**." The primary idea is that we can now visualize activity of the brain as persons think about moral problems; the primary problem is what this brain activity means in relation to moral reflection, deliberation, intention, choice and action.
3. **Neuroimaging** reveals that the brain is a very busy place when morality is in play. "Brain regions activated in moral judgment tasks have been implicated in experiencing emotions (amygdale and ventral striatum), semantic memory

(anterior temporal cortex), perception of social cues (superior temporal sulcus) and decision making (orbitofrontal cortex,...the coactivation of prefrontal cortex and temporolimbic networks corresponds to the cognitive-emotional states associated with 'moral sensitivity,' a critical mechanism by which humans automatically attribute moral significance to ordinary events and behaviors." J. Moll, "The Cognitive Neuroscience of Moral Emotions," in Sinnott-Armstrong, III, 4-5.

4. **Neuroimaging and the Cable Car Dilemmas.** Brain imaging studies show that the "up close and personal" sort of moral dilemma, like pushing the stout man, in which a strong intuitive deontological prohibition against harm is dominant, produce relatively greater activity in three emotion-related areas: posterior cingulate cortex, medial prefrontal cortex and amygdala. Impersonal moral dilemmas, like diverting the cable car, in which a "moral calculus" takes place between alternative permissible options produce relatively greater activity in two classically 'cognitive' brain areas, the dorsolateral prefrontal cortex and inferior parietal lobe.' Adapted from J Greene, in Sinnott-Armstrong, III, 43-4.
5. **Deontological** (Emotional-Affective) or **Consequentialist** (Cognitive, Rational) may dominate in certain situation but also may compete, and override, e.g. stout man/crying baby/torture and catastrophe.
6. **Moral Pathology.** Psychopathic or sociopathic personalities=profound lack of empathy, guilt or remorse, poor behavior control, due to psychopathology or trauma. Lack of "moral compass."

### 7. Phineas Gage: A Provocative Case

In early May, 1860, a drifter died on the streets of San Francisco. His name was Phineas Gage. Unknown in his life, except to the curious few, he has become famous in modern neuroscience. Thirteen years before his death, he was the victim of a freak accident. At that time, he was an explosions expert for a railway. A mistimed blast drove an iron bar into his left cheek, through the frontal lobe of his brain, and out the top of his head. Gage lived with his physical capacities intact and his cognitive faculties unimpaired—with one significant exception: he became incapable of making moral choices. Neuroscientist Antonio Damasio says of him. "Gage had once known all he needed to know about making choices conducive to his betterment. He had a sense of personal and social responsibility. He was well adapted in terms of social convention and appears to have been ethical in his dealings. After the accident, he no longer showed respect for social convention, ethics were violated, the decisions he made did not take into account his best interests. There was no evidence of concern about his future, no sign of forethought." (Damasio, *Descartes' Error: Emotion, Reason, and the Human Brain*, p.11)

So is "morality" located somewhere in the brain, in the ventromedial region of the frontal lobe? Again, Damasio: "Gage's example indicated that something in the brain was specifically concerned with unique human properties, among them the ability to anticipate the future and plan accordingly within a complex social environment; the sense of responsibility toward the self and others; and the ability to orchestrate one's survival deliberately, at the command of one's free will" (p. 10). What is the relation between the physical brain and the moral conscience? Same? Different?

**8. One of Philosophy's Perennial Problems:** Is there **Free Will**, the ability to do otherwise than we have done or are about to do? Are human choices wholly determined by the confluence of internal and external causes? Is choice a delusion? Without free will, what is responsibility?(See "Free Will," Google: *Stanford Encyclopedia of Philosophy*)

A young man from Chatham said 'Damn!'  
It grieves me to think that I am  
Predestined to move  
In a circumscribed grove,  
Not at all like a bus, but a tram.

At the heart of most "free will debates" is the contention that human reflection casts up multiple, diverse possibilities, some rooted in reality, others invented, each tinged with duty/selfishness, pleasure/ pain, advantage/disadvantage, etc. and that, in turning these over, comparing, estimating probabilities, etc. one possibility is chosen and made real.

Listen to William James: "In every outwardly verifiable and practical respect, a world in which the alternatives that now distract your choice were decided by pure chance would be *by me* absolutely undistinguished from the world in which I now live...To *yourselves*, those very acts of choice, which to me are so blind, opaque, and external, are the opposite of this, for *you* are within them and effect them. To you they appear as decisions; and decision, for those who make them, are altogether peculiar psychic facts. Self-luminous and self-justifying at the living moment at which they occur, they appeal to no outside moment to put its stamp upon them or make them continuous with the rest of nature. Themselves it is rather who seem to make nature continuous; and in their strange and intense function of granting consent to one possibility and withholding it from another, to transform an equivocal and double future into an inalterable and simple past." *The Dilemma of Determinism*, 1884. In McDermott, JJ (ed). *The Writings of William James*. 1977, p.595.

### **READING FOR SEVENTH CLASS (MAKEUP WEEK): NOVEMBER 10 MORAL RELATIVISM**

In Jonsen, Topic 13, Cultural Bioethics.

Is Morality anything more than the customs of place and time, with penalties for aberration? Should we judge or attempt to reform morals of other cultures? Why morality? Supplemental Reading: Steven Lukes, *Moral Relativism*. Picador, 2008