

## **Introduction to Neuroethics**

**Dr. Michael Madary**

**Voraussetzungen / Organisatorisches:**

Language of instruction will be English, but assignments may be completed in German.

**Inhalt:**

Neuroethics is a new and rapidly growing area of research at the intersection of Ethics and Cognitive Neuroscience. Technological and theoretical advances in our understanding of the brain enable new clinical and practical applications. Neuroethics investigates whether and how these new applications should be implemented. We will consider what brain science reveals about our folk understanding of the causes for our actions. Also, we will investigate the ethics of the so-called persistent vegetative state, cognitive enhancement, and the use of neurotechnology in a court of law.

**Empfohlene Literatur:**

Main texts:

Damasio, A. *Descartes' Error* Penguin, 2005.

Metzinger, T. *The Ego Tunnel Basic*, 2009.

All other readings will be available from Ilias.

**Ort: Philosophicum, P204**

**Zeit: 12.15-13.45**

**27 Okt. 2010: Introduction, Syllabus**

**3 Nov. 2010: Reasons and Causes I**

Farah, M.J. "Neuroethics: the practical and the philosophical" Trends in Cognitive Science vol. 9 (2005) 34-40.

Damasio chapters 1 – 4

**10 Nov. 2010: Reasons and Causes II**

Damasio chapters 5 – 11

**17 Nov. 2010: Reasons and Causes III**

Fodor, J. Psychosemantics. MIT Press, 1987. Chapter 1

Churchland, P. "Eliminative Materialism and the Propositional Attitudes" Journal of Philosophy, 78, no. 2, Feb., 1981

**24 Nov. 2010: Reasons and Causes IV**

Nietzsche, F. selections from *The Twilight of the Idols*

Haidt, J. "The Emotional Dog and Its Rational Tail" *Psychological Review* vol. 108 (2004) 814-834.

### **1 Dez. 2010: Neural Correlates of Consciousness and the Persistent Vegetative State I**

Chalmers, D. "What is a Neural Correlate of Consciousness?" online URL =  
<http://consc.net/papers/ncc2.html>

Rees, G., Kreiman, G., Koch, C. "Neural correlates of consciousness in humans"  
*Nature Reviews Neuroscience* vol 3 (2002) 261-270.

Noë A., and Thompson, E. "Are there Neural Correlates of Consciousness?"  
*Journal of Consciousness Studies* 11(2004) 3-28

### **8 Dez. 2010: NCC and the Persistent Vegetative State II**

Farah, M. "Neuroethics and the problems of other minds: Implications of neuroscience for the moral status of vegetative patients and nonhuman animals" *Neuroethics* (2008) URL =  
[http://repository.upenn.edu/cgi/viewcontent.cgi?article=1036&context=neuroethics\\_pubs](http://repository.upenn.edu/cgi/viewcontent.cgi?article=1036&context=neuroethics_pubs)

Owen, A., et al. "Detecting Awareness in the Vegetative State" *Science* vol. 313 (2006) 1402.

Laureys, S. et al. "Brain function in coma, vegetative state, and related disorders" *The Lancet Neurology* vol 3 (September 2004) 537-546.

### **15 Dez. 2010: NCC and the Persistent Vegetative State III**

Laureys, S. "Death, unconsciousness and the brain" *Nature Reviews Neuroscience* vol. 6 (2005) 899- 909.

Merker B. "Consciousness without a cerebral cortex: A challenge for neuroscience and medicine" *Behavioral and Brain Sciences* (2007) 63-81

Andrews, K. et al. "Misdiagnosis of the vegetative state: retrospective study in a rehabilitation unit" *British Medical Journal* vol. 313 (1996) 13 – 16.

### **22 Dez. 2010: Cognitive Enhancement I**

Metzinger, T. *The Ego Tunnel* Chapter 9

Rose, S. "'Smart Drugs': Do they work? Are they ethical? Will they be legal?"  
*Nature Reviews Neuroscience* vol. 3 (2002) 975-979.

Fukuyama, F. *Our Posthuman Future: Consequences of the Biotechnology Revolution* Farrar, Straus and Giroux, 2002. Selected readings.

### **12 Jan. 2011: Cognitive Enhancement II**

Singh, I. "Will the 'Real Boy' Please Behave: Dosing Dilemmas for Parents of Boys with ADHD" The American Journal of Bioethics vol. 5 (2005) 34-47  
Flower, R. "Lifestyle drugs: pharmacology and the social agenda" Trends in Pharmacological Sciences vol. 25 (2004) 182-185.

### **19 Jan. 2011 (RESCHEDULE): Cognitive Enhancement III**

Clark, A. Natural Born Cyborgs Oxford University Press, 2004. Selected readings.  
Birbaumer, N. et al. "A spelling device for the paralysed" Nature vol. 398 (1999) 297-298.

### **26 Jan. 2011: The Brain and the Law I**

Haynes, J.D., and Rees, G. "Decoding mental states from brain activity in humans" Nature Reviews Neuroscience vol. 7 (2006) 523-34  
Wolpe, P. "Emerging neurotechnologies for lie-detection: Promises and perils" The American Journal of Bioethics vol 5. (2005) 39  
Grafton, S. et al. "Brain Scans Go Legal" Scientific American (December 2006)  
Morse, S. "Brain and Blame" Seminars in Clinical Neuropsychiatry vol. 1 (1996) 222-235

### **2 Feb. 2011: The Brain and the Law II**

Annas, G. "At Law: One Flew over the Supreme Court" The Hastings Center Report vol. 20 (1990) 28-30  
Garland, B. Neuroscience and the Law Dana Press, 2004. Selected readings.  
Clockwork Orange (film) directed by Stanley Kubrick (1971)

### **9 Feb. 2011: The Brain and the Law III**

Hyman, S. "The Neurobiology of Addiction: Implications for Voluntary Control of Behavior" The American Journal of Bioethics vol. 7 (2007) 8-11  
Hall, W. et al. "Neuroscience research on the addictions" Addictive Behaviors vol. 29 (2004) 1481-1495  
Roskies, A. "Neuroscientific challenges to free will and responsibility" Trends in Cognitive Sciences vol. 10 (2006) 419-423

### **16 Feb. 2011: Neuroscience and Self Understanding**

Metzinger, T. selections from *The Ego Tunnel*

Noe, A. selections from *Out of Our Heads*