# An Adaptive Ethic of Human Enhancement

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# First Basic Characteristic of the Anthropocene

- You live on a terraformed planet: the Earth has been, and is being, engineered by a single species for its own purposes.
  - N, P, H2O, and C cycles
  - Biodiversity
  - Radiation patterns
  - Technology and infrastructure systems (railroads, roads, energy systems, ICT)



## Second Basic Characteristic of the Anthropocene

- The Human is a design space
  - Augcog
  - Artificial telepathy technologies
  - Integrated robot/wetware systems (e.g., prosthetics; ASU/Duke monkey experiments; ratbot)
  - Genetic engineering/birthing Neanderthals
  - Engineered ethics by use of pharma or transcranial magnetic stimulation (<u>http://newsoffice.mit.edu/2010/moral-control-0330</u>)



#### Human Enhancement Categories

- Temporary (e.g., cognitive enhancement pharma)
- Permanent (e.g., designer IR eyesight)
- Permanent and heritable (e.g., germline modification for cognitive performance across population)
- Emergent integrated technological systems (e.g., radical life extension, which might combine elements of all three)
- Each category raises different issues, and acts over different time frames - important because ethical systems may be stable in short term, but unpredictable and contingent in long term.



## Path Dependency





## Observations

- The external environment is subject to design but so is the designer. Thus, a high level of reflexivity and compounding uncertainty and unpredictability.
- It is not just physical aspects of the human that are subject to design; it is cognitive and psychological aspects.
- Ethical systems are thus a design space as well, creating a classic self-referential spiral.



### **Four Perspectives**

Laissez-faire

Techno-optimism

#### Techno-pessimism

#### Cultural conservatism



# Main Approaches Fail

- Libertarian
  - Assumes little network and community effect of enhancements, ignoring tipping points
  - Assumes that enhancements that benefit individual are good (a Hitler who only needed 2 hours of sleep a night? Not so much.)
- Conservative
  - Ignores how popular enhancement actually is (e.g., plastic surgery in Scottsdale)
  - requires state to impose rules and restrictions on individual liberty in name of favored belief systems, hence profoundly anti-democratic and likely to fail in multi-cultural world.



## **Process-Based Macroethics**

- Problem is that both utilitarian and rule based systems fail, the former because of uncertainty and unpredictability of future states; the latter because of profound multiculturalism.
- Need to create process that dialogs with evolving system, and, on the other hand, evolving ethics and values.
- Need to create process that is not captured by particular worldviews and perspectives (be very wary of "universals")
- Need to avoid "relativism" (that is, no ethical system is better than any other) – in real world situations, some ways of behaving and decision-making are usually clearly more desirable than most alternatives

