Enhancement and Improving positional traits: Distributive Concerns

Norman Daniels
T H Chan School of Public Health
Richmond, VA., April 8, 2016
Overview

• The Problem
• Genetic Enhancement
• Environmental Enhancement
• Distribution and Enhancement
• Research Ethics
The Problem

• Relevant Distinctions
  – Germ plasm vs not: changing an individual vs changing all offspring of an individual
  – Changing an individual vs human nature
  – Genetic vs environmental modifications

• Who gets the intervention?
  – Individuals who can afford its cost vs everyone

• What does distributive justice require?
  – Worries about positional traits
  – Prohibition vs access to all
Genetic enhancement

• Change of individual (vs offspring) capabilities
  – Where the capabilities without the intervention are “normal” (not treatment of pathology or severe deficit (severe cognitive disability)

• Change induced by biological intervention that delivers new RNA or DNA (as opposed to education or practice (weight lifting)
Environmental enhancement

• Does it change capabilities?
• The rich can and do invest more in developing capabilities
• If inclination is to prohibit enhancement, the rule out advantage of rich we ordinarily accept
Distributive justice

• Concern is about letting rich have greater access to a new technology that can increase advantage— not only greater income but greater chance to improve traits that convey advantage
  – Worry is largely about positional traits
  – But rich already have advantage in enhancing traits through existing technologies (so it is new technology that many find troubling
Research Ethics

• “You can’t get there from here”– the old Maine joke

• In human subject research, benefits must significantly outweigh risks—
  – Disease imposes a harm we think individual can be efit from treating
  – If individual has “normal” trait, what benefits can experimentation convey that outweigh risks of bad outcomes?
Norms of Reaction for viability of 4\textsuperscript{th} chromosome homozygotes of \textit{drosophila pseudoobscura} Lewontin from Dobzhansky and Spasky—Genetics 1944
Non distributive cautions about enhancement

• We should learn from norms of reaction to think about gene-environment interaction and not genetic or environmental determinism—do we know what to enhance?

• Be careful what you wish for: not every trait we may enhance will produce the outcome we want— the traits that make a good social worker also make a good a con-artist