Becoming a Better Person:
Modifying Cognition and Emotion to Enhance Virtue

Institute for Ethics and Emerging Technologies

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Self-Control and Responsibility

• Understanding causes of behavior allegedly undermines personal accountability

• But enhancement technologies make us even more responsible
Taking Responsibility

“So who is to tell us that being human and having dignity means sticking with a set of emotional responses that are the accidental byproduct of our evolutionary history? ... why don’t we simply accept our destiny as creatures who modify themselves?”
- Francis Fukuyama, *Our Posthuman Future*
Better Tools than Willpower

CRAZY? YEAH, I'M CRAZY. THAT'S THE POINT.

THE SOURCE OF THE PROBLEM IS MY BRAIN.

TIME TO TAKE THE FIGHT TO THE ENEMY.

THE LOCATION OF THAT PROBLEM IS KNOWN.

AND BROther, THIS IS THE ONLY TOOL I'VE GOT.
Obliged to Attempt Self-Mastery

- Obligation to use or not use neurotechnology for self-mastery
- Immorality of intoxication when it endangers others
- Immorality of not drinking coffee or taking modafinil when it endangers others
Suppressing Vice, Enhancing Virtue

- Causes of auto accidents
- Alcohol
- Cell-phones
- Fatigue
“We may be able... to control our passions by some more direct method than fasting and flagellation... to deal with perverted instincts by physiology rather than prison.”

- JBS Haldane, “Daedalus, or Science and the Future”
Therapies for Drug Dependency

Alcohol aversion drugs
Buprenorphine for opiates
Vaccines and gene therapies to prevent or cure:
• Alcoholism
• Cocaine addiction
• Heroin addiction
• Nicotine dependency
Sex Addiction and Fidelity

• SSRIs used to treat sex addiction
• Changing one gene in voles makes them monogamous
• Modulated by vasopressin-dopamine connection: learning to associate pleasure with a mate
Matthew 19:11-12

Jesus: "Not everyone can accept this word, but only those to whom it has been given. For some are eunuchs because they were born that way; others were made that way by men; and others have renounced marriage because of the kingdom of heaven. The one who can accept this should accept it."
Xenophobia Disorder

• Attitudes toward immigrants has a genetic component
• Debate over pathological racism & homophobia as mental disorder
Five Personality Factors

- Neuroticism
- Extraversion
- Agreeableness
- Conscientiousness
- Openness to experience
Positive Psychology

\[ S + C + V = H \]

Character
- Wisdom and Knowledge
- Courage
- Humanity
- Justice
- Temperance
- Transcendence

Happiness

Health

Martin Seligman Ph.D.

Jon Haidt Ph.D.
# Personality, Virtues & Tech

<table>
<thead>
<tr>
<th>Personality Factors</th>
<th>Character &amp; Virtues</th>
<th>Potential Enhancers</th>
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<tbody>
<tr>
<td>Agreeableness</td>
<td>Humanity, Compassion</td>
<td>Oxytocin, Endorphins (PMS), Dilantin (aggression)</td>
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<tr>
<td>Conscientiousness</td>
<td>Temperance &amp; Self-discipline</td>
<td>ADD stimulants, testosterone, vasopressin, norepinephrine</td>
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<tr>
<td>Neuroticism</td>
<td>Equanimity, Transcendence</td>
<td>SSRIs, cognitive behavioral therapy</td>
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<tr>
<td>Extraversion</td>
<td>Courage, Diligence</td>
<td>Modafanil, testosterone, coffee</td>
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<tr>
<td>Openness to experience</td>
<td>Wisdom &amp; Knowledge Transcendence</td>
<td>Methylphenidate, meditation, psychedelics, MDMA</td>
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</table>
EQ, Agreeableness, Empathy

Enhancing the genetic and neurophysiological bases of EQ, empathy and agreeableness

Scientists find fear gene

Thu Nov 17, 3:32 PM ET

Scientists may have found a gene for fear -- a gene that controls pro-social responses.

Their finding, published on Thursday, could lead to new treatments for generalized anxiety.
Oxytocin and Trust

• Breastfeeding
• Orgasm
• Bonding and trust
• “Neuroactive hormones and interpersonal trust: International evidence” Zak & Fakhar, Economics and Human Biology
Oxytocin & Phytochemicals

- Stigmasterol
- Campesterol
- β-Sitosterol
- Quercetin
- Myricentin
- Kaempferol
- Boron
Trust & Happiness

- Trust supports happiness and social cooperation
Social Anxiety Disorder

- Cognitive-Behavioral Therapy
- SSRIs
- Beta-blockers
- Benzodiazepines
- Monoamine oxidase inhibitors
Electronic Community

Online Games Provide Social Connection
Researchers Say Players Are Socializing, Not Shunning People
Aug. 18, 2006

(WebMD) Online video games may have some social perks, a new study shows.

The study, published in the July edition of the Journal of Computer-Mediated Communication, focuses on large, collaborative games called MMOs (massively multiplayer online games).

Players may spend hours absorbed in those games. But that doesn't necessarily mean they're antisocial, write Constance Steinkuehler, Ph.D., and Dmitri Williams, Ph.D.

QUOTE
"Spending time in these social games helps people meet others not like them, even if it doesn't always lead to strong friendships."

Steinkuehler is an assistant professor of educational...
Open-Mindedness & Coffee

- Caffeine improves mental function, and makes people more likely to change their beliefs
Coffee and the Enlightenment

Beer was a “Foggy Ale” that “besieg'd our Brains”

Coffee:
...that Grave and Wholesome Liquor, that heals the Stomach, makes the Genius quicker, Relieves the Memory, revives the Sad, and cheers the Spirits, without making Mad.

Anonymous 1674

Coffeehouses: “penny universities”
Conscientiousness and Emotional Control

- Emotional self-control
- Ability to suppress conditioned responses
- Ability to carry through on commitments
- Too much conscientiousness can make you stuffy and unspontaneous
Intermittent Explosive Disorder

- 6% prevalence?
- Brain lesions, genetically linked
- an average of 43 attacks in their lifetime resulting in $1,359 of property damage
- Treatments: antidepressants, antipsychotics, beta-blockers, alpha(2)-agonists, phenytoin and mood stabilizers.
Expert Moral Reasoning Systems

Kohlberg's Levels of Moral Development

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<th>LEVEL</th>
<th>STAGE</th>
<th>CHARACTERISTICS OF STAGE/LEVEL</th>
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<tbody>
<tr>
<td>A Preconventional</td>
<td>Stage 1</td>
<td>PUNISHMENT-OBEDIENCE ORIENTATION</td>
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<tr>
<td></td>
<td>Stage 2</td>
<td>INSTRUMENTAL RELATIVIST ORIENTATION</td>
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<td>B Conventional</td>
<td>Stage 3</td>
<td>INTERPERSONAL CONCORDANCE ORIENTATION</td>
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<td>Stage 4</td>
<td>AUTHORITY AND SOCIAL-ORDER MAINTAINING ORIENTATION</td>
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<td>C Postconventional</td>
<td>Stage 5</td>
<td>SOCIAL-CONTRACT LEGALISTIC ORIENTATION</td>
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<tr>
<td></td>
<td>Stage 6</td>
<td>UNIVERSAL ETHICAL PRINCIPLE ORIENTATION</td>
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Morality PDAs

• Remind us of relevant principles and similar cases

• Behavior-triggered warnings: e.g. email flame filters
Moral Self-Direction

- Having an internal locus of control
- Becoming aware of external influences
- Turning off submission to authority
- Steve Mann’s spam filters
Better Citizens and Persons...

- More happy & intelligent
- More self-aware & independent
- More socially minded
- Better moral & political decision-making
...or Neuro-Authoritarianism?

- Brain fingerprinting and e-collars on thoughtcriminals
- Blissed-out citizens
- Amoral workers and soldiers
- Corporate-owned brain operating systems: Microsoft Brain 9.0
- Self-enforced cognitive uniformity: - transgenders fix brain or body?
- Enhanced authoritarian China
- Neuro-enforced patriarchy and theocracy
Defense of Basic Rights…

• Importance of cognitive liberty
  Every person controlling their brain in self-determined ways

• Defense of liberal and social democracy
  - Liberté, égalité, solidarité
  - celebration of diversity
A Positive Liberal Model of the Good Personality

- Liberal but still positive normative model of the good life
- Some ways of thinking and feeling should be discouraged and others encouraged