The Politics Of Life In The Twenty First Century:

Girona

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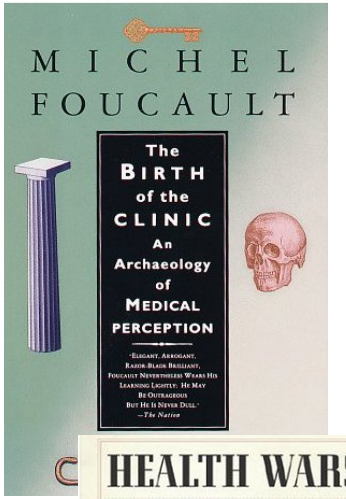
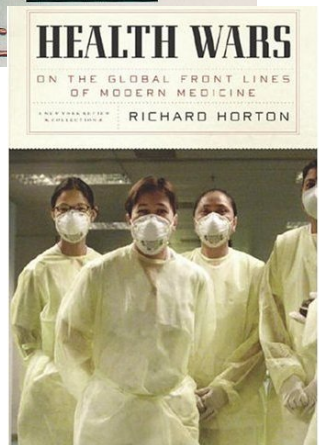
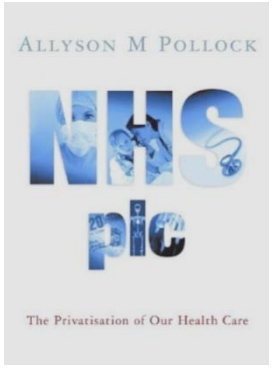
Medicine – key changes in last 50 yrs

- Biomedicine itself
  - Belief that capacity to cure grounded in knowledge of basic biology
  - New 'molecular' gaze – body (and brain) as engineerable machine
  - Massive investment in biomedical research (public and private)
  - BUT translational gulf between promises and reality
- Health for all
  - Extended of medicine – from curing disease to managing health
  - An individual aspiration – an ethic of life
  - Consumerization of health
  - The active and responsible consumer of medicine
- Capitalization and Globalization
  - Intense capitalisation of biomedicine
  - Market driven paths of innovation
  - Globalization of biomedical research
  - Of market for drugs and devices
  - Of therapies and access to them (health tourism)
- Governance and regulation
  - Management by regulators, insurance, HMOs…
  - Perception of novel challenges (eg ELSI and genomics)
  - Enwrapping the practice of the cure and the practitioners of medicine







Biopolitics

‘Life itself’ (not just how it is lived) has entered politics

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Political contestations about the management of our very vitality as human living human beings, and the forms it could or should take.

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A field of transactions between each and all,

Between the one and the many

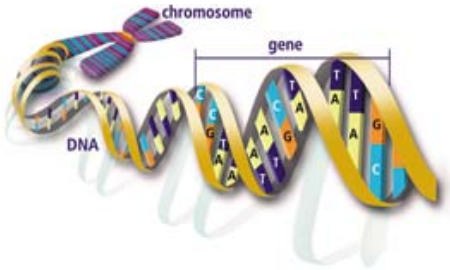
Biopower and Biopolitics

- The ways in which 'vitality' of human beings as living creatures, individually and collectively enters political calculation and contestation
- Three elements for an analysis
  - **Truth** – knowledge of life, in particular generated by biology, biomedicine and neuroscience
  - **Power** – authorities of life and vitality, who articulate the truths and advise us how to live
  - **Subjectivity** – reshaping our very ideas of who we are as human beings, personhood, identity, belonging, and our vital similarities and differences from others

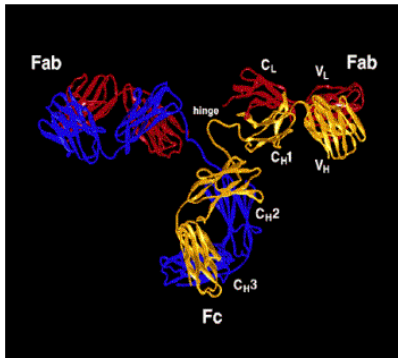
Biopolitics in C21

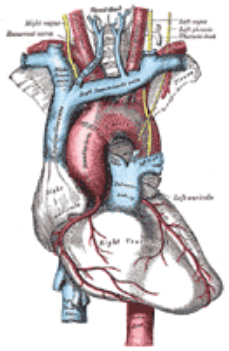
- The Politics of Life Itself
  - Molecularization
  - Optimization
  - Subjectification
  - Expertise
  - Bioeconomics
- The Somatic Ethic and the Spirit of Biocapital

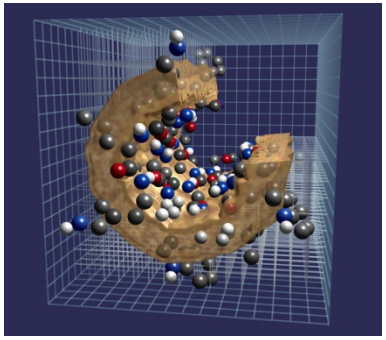
Molar to Molecular



- From ‘molar’ to ‘molecular’ image of li
- A molecular style of thought (Fleck)
- Life as mechanism, not mystery
- Vitality open to engineering at this scale
  - Reproductive technologies
  - Pharmaceuticals
  - Genomics
  - Biotechnology
    - Synthetic biology
    - Genetic engineering
- Biology not destiny but opportunity
- The Age of Biological Control?



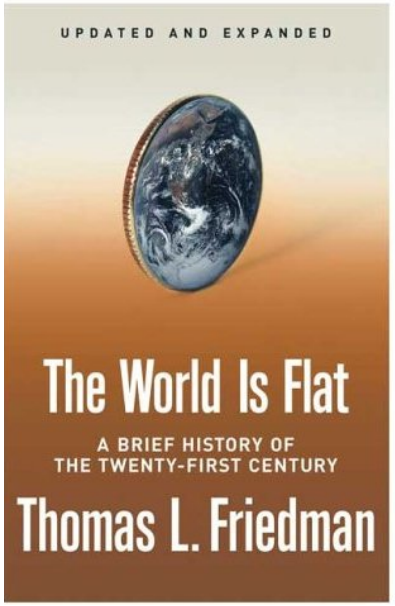


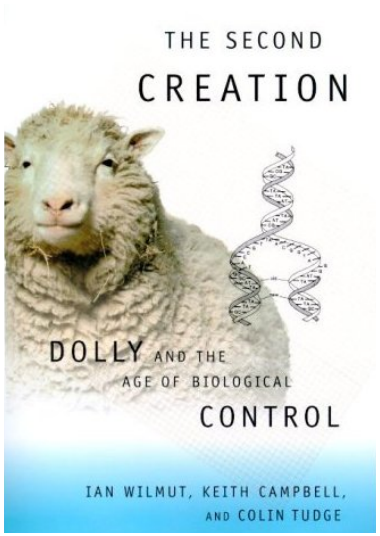


Protemic image from National Cancer Research Insitute: http://ccr.nci.nih.gov/tech_initiatives/bpp/;
3D image of ions in a calcium channel from http://www.itg.uiuc.edu/exhibits/iotw/1999-11-11/

Technologies of optimization

- A flattened biology
- From cure to control
- Technologies of life
- Bringing the vital future into the vital present and making it calculable and manageable
- Optimization
  1. Susceptibility
  2. Enhancement

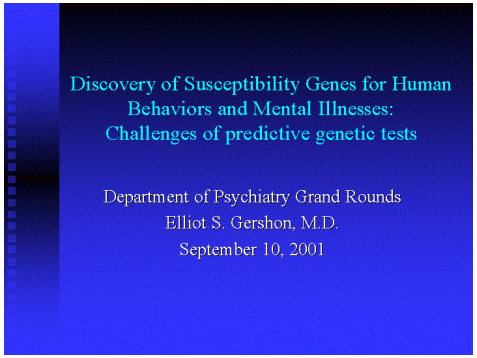




1. Susceptibility

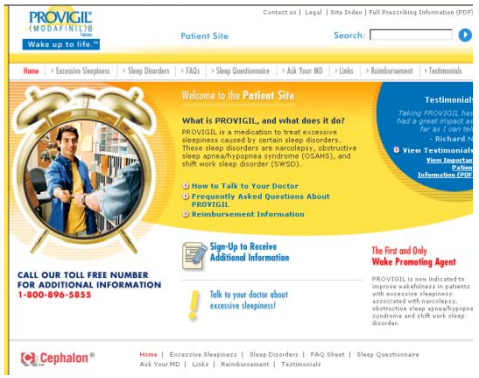
- Rewriting human difference (individual and population) at the molecular level
- From mutations – "the gene for" to SNPs for susceptibilities to common complex disorders, e.g. depression.
- From genetics (single genes/determinism) to genomics (multiple protective and disposing sites/probabilism)
- Predisposition, risk, susceptibility
- Presymptomatic and asymptomatic illness
- Presymptomatic testing
- Risk, prevention, precaution

Affymetrix GeneChip® probe array., and data from an experiment showing the expression of thousands of genes on a single GeneChip® probe array
Images courtesy of Affymetrix

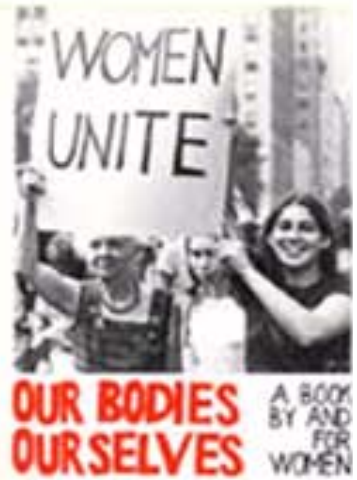


2. Enhancement

- From normalization to customization (Clarke)
- From serendipity to precision
- From cyborgs (less biological)
- To the re-engineering of life from the inside (more biological)
- Life becomes mechanism
- Cartesian bodies (Hacking)?
- Mind as brain, and brain as machine?



Subjectification



- Citizenship since C18 in Europe linked to 'biological' notion of subjects
  - actual, potential, impossible citizens.
- 'Biosociality'
  - citizens define themselves, affiliations, obligations and rights in terms of their biology.
- Making up biological citizens
  - Citizenship projects
- Forms of biological citizenship
  - Passive citizenship of rights
  - Active citizenship of campaigning groups:
- Somatic individuality
  - Our bodies (our brains) ourselves?
- Biology NOT destiny
- Political economy of hope (Novas)
  - Hope as psychological, biosocial, commercial and cultural

Experts of life itself

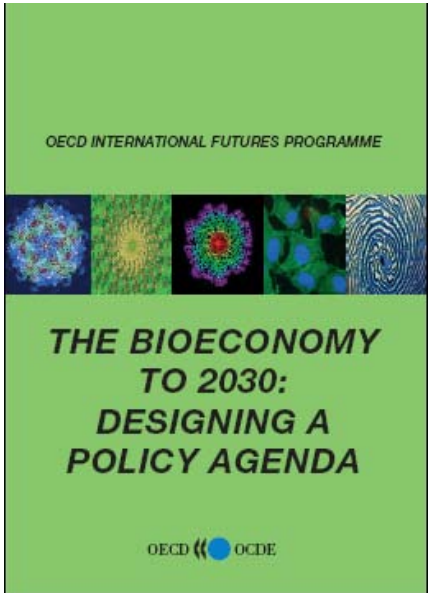
- Medics as experts of life
- New relations between medical expertise and its subjects
- Premonitory knowledge (Lock)
- Pastoral power in biomedicine and genetics
  - Ethical principles of informed consent, non-directiveness etc. translated into normative micro-technologies for the management of communication and information.
- Biological responsibility:
  - Reactivated 'biological prudence': obligations to take responsibility for personal and familial health and illness, consequences of reproduction
  - New 'ethical pioneers' - pragmatic ethics of vitality
- Bioethics:
  - Ethics once inscribed in the medical personage him/herself
  - Now medic surrounded by regulatory apparatus of distrust
  - Ethics as value: corporate ethics:: "Life is our life's work…"
  - Why (how) bioethics today?
- Governance and regulation
  - Anticipatory governance and the government of the future
  - Scenario planning and foresight
  - Upstream engagement
  - Real or symbolic – in the face of the forces of innovation?

The President's Council on Bioethics

Capitalizing vitality

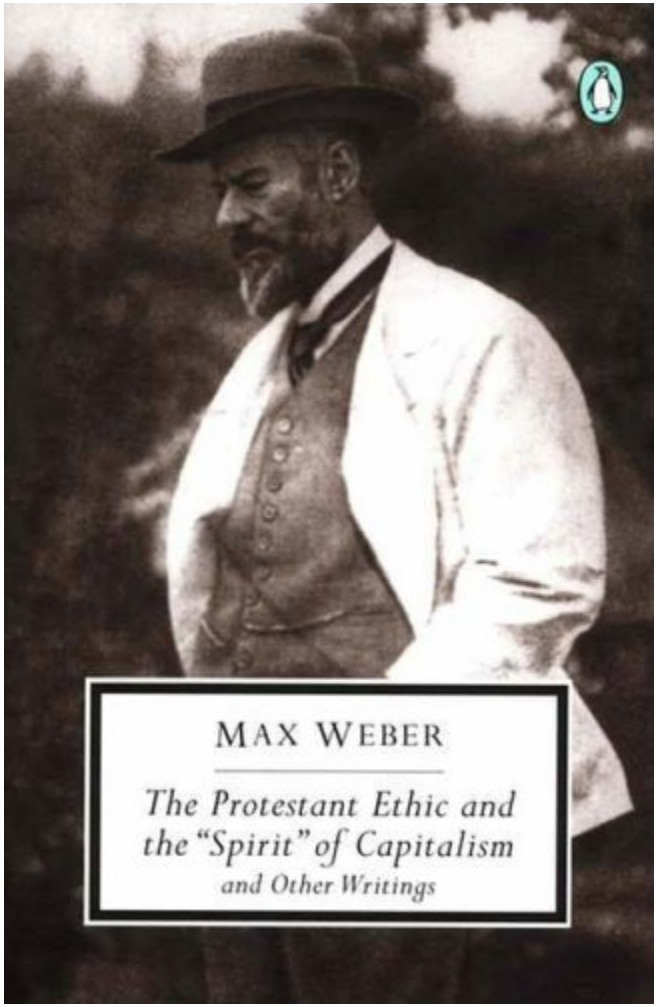
- The laboratory and the corporation intertwined in the 'new scientific life' (c.f. an older notion of science as a vocation)
  - IP and venture capital driven?
- Biovalue: capturing the latent value inherent in life itself
  - Vitality decomposed, stabilized, frozen, banked, stored, commoditized, accumulated, exchanged, traded across time, across space, across organs and species, across diverse contexts and enterprises
- The birth of 'the bioeconomy:

  "that part of economic activities "which captures the latent value in biological processes and renewable bioresources to produce improved health and sustainable growth and development"
- Biocapital ….An economy of expectation
- A path dependent theory of biomedical truth
  - Hence truth shaped by expectation and capitalisation
  - though the imagined future seldom arrives as expected (c.f. the human genome)
  - And can lead to rush to market, inflated claims, and undesirable later consequences



Ethics and Economics

- Max Weber
- An elective affinity between early Calvinism and early accumulative capitalism
- Between a form of extraction: capitalisation
- And a way of conducting ones life: Lebensfűhring



Somatic Ethics

- Kant's questions:
  - what can I know?
  - What must I do?
  - What may I hope?
- Now posed in 'somatic' terms:
  - 'Soma' – our genome, our neurotransmitters: our 'biology' - given salience
  - Somatic experts articulate rules for living
  - We understand ourselves partly in 'biological' terms
  - Expectations, hopes shaped in terms of maintenance of health and prolongation of earthly existence.

Somatic Ethics and the Spirit of Biocapital

- Does this 'somatic' ethical economy have elective affinity with biocapital?
  - Only where life itself has achieved such ethical importance
  - Only where the technologies for maintaining and improving it can place themselves in the service of health and life
- Can biocapital achieve this hold on economies of hope, of imagination and of profit.
- In this sense somatic ethics is intrinsically linked to the 'spirit of biocapital'.

Thank you for your attention!

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