

## Environmental ethics and justice

- As Environmental Health (7) on 12 Nov. 2015
- Key Concepts
  - **Ethics** and morals have empirical, professional expectations, and mediate current health needs and long-term needs of human and nature with sustainability
  - **Justice** is a movement representing the convergence of civil rights and environmentalism, based on the concept that hazardous exposure have disproportionate impacts on people of colored and poor communities

## Definition of Ethics and Morals

- **Morals / Morality:** the set of core beliefs or commitments of a person or society that identifies what is most important, valuable, or right with regard to conduct and character
- **Ethics:** more formal version of morality
  - A reasoned or systematic approach to figure out what is the right or wrong
  - Professional morality as expressed in widely accepted codes and statements (opp. personal morality)
  - The scholarly study of morality by philosophers
- **Objectively thinking in ethics**
  - Being reasonable and not doctrinaire
  - Listening actively to others
  - Letting the best reasons determine judgments
  - Staying close to the practical issues at hand on which consensus is possible
  - Remaining calm and optimistic in the face of controversy

## History of Ethics in Environmental Health

- Related Debates
  - Environments are provided for human welfare by the God? (classic)
  - Environmental damage to the Earth resulted from human sins? (medieval)
  - Human dominates over nature? (early modern)
  - Multidisciplinary cooperation with many health professionals, new codes are needed (modern)
- Professional Codes of Ethics
  - Dedication to service to the client
  - Respect for other professionals
  - Assurance of high levels of competence
  - Protection of confidentiality
  - Performance with honesty and integrity
  - Avoidance of conflicts of interest
  - Informed consent and cooperation with clients
  - Service to the community
  - Promotion of the profession itself
- Selected Ethical Theories
  - Deontology (義務論) / Utilitarianism (功利主義) / Bioethics / Feminist ethics / Religious ethics
- Three important concepts: sustainability, resilience, global health

## International consensus statements

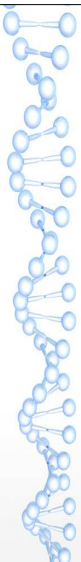
- **Earth Charter (2000):** The resilience of the community of life and the well-being of humanity depend upon preserving a healthy biosphere with all its ecological systems, a rich variety of plants and animals, fertile soils, pure waters, and clean air. The global environment with its finite resources is a common concern of all peoples. The protection of Earth's vitality, diversity, and beauty is a sacred trust.  
[http://www.earthcharterinaction.org/invent/images/uploads/echarter\\_english.pdf](http://www.earthcharterinaction.org/invent/images/uploads/echarter_english.pdf)  
<http://www.earthcharter.or.jp/downloadfiles/japanese.pdf> (in Japanese)  
(ref) <http://www.earthcharter.or.jp/resource/>
- **Rio Declaration on Environment and Development (1992):** Human-beings are at the centre of concerns for sustainable development. We are entitled to a healthy and productive life in harmony with nature.  
see, <http://habitat.igc.org/agenda21/rio-dec.html>

## General principles of ethics

- **Sustainability:** Conduct environmental health work in such a way that it meets the needs of both the present and future generations -> three immediate implications
  - Methods of cost accounting that discount the future should be avoided
  - The full life-cycle cost of environmental health measures must be included (i.e. LCA is an important method)
  - Many have observed a strong correspondence between the wealth of a nation and the average health of its citizens (World Bank 1993)
- **Healthfulness:** The health of humans and the environment needs to be restored, balanced and harmonized.
- **Interconnectedness:** Environmental health actions have far-reaching consequences (such as "butterfly effect")
  - eg. Greenhouse gases released in the Northern Hemisphere spread everywhere, including the Southern Hemisphere, resulting in those least responsible for climate change suffer most from its effects ... (it's also the issue of environmental justice)
- **Respect for all life:** Environmental health work should be conducted with respect for both human and nonhuman life (cf. Is "biophilia" our nature?)
- **Global equity:** Everyone is entitled to just and equal access to the basic resources needed for an adequate and healthy life.
- **Respectful participation:** Respect the considered and responsible choices of stakeholders, whether individuals or organizations
- **Realism:** Environmental health ethics should be founded on a realistic understanding of the health sciences and the risks and benefits of proposed activities and investments
  - The idea of **ecological footprint** is needed to understand the resource gap among countries
  - **Precautionary principle** is going to be widely accepted as a mode of realistic risk assessment

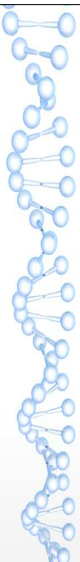
## Controversies in environmental health ethics

- **Examples**
  - Air pollution, water pollution, vegetarianism, cultural conflict, fossil fuels and climate change, genetically modified organisms, nuclear power, pesticides, slaughter of animals, obesity vs undernutrition vs starvation, environmental exposures and the human genome, confidentiality vs informed consent vs right to know, war, research ethics
- **Common features**
  - New technologies with uncertain risks
  - Social relationships with predictable conflicts
  - Risks and benefits that need to be rationally balanced
  - Competing goods
  - Cultural differences
  - Different views of our place in and relationship to nature
  - Complexity



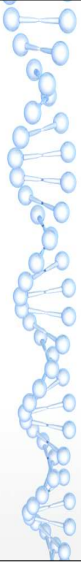
## Background of environmental justice

- It's convergence of the two of the major movements in latter 20th century
  - Civil rights movement
  - Environmental movement
- Three core concepts
  - The meaning of disproportionate impacts (Act against environmental racism)
  - The legal, public policy, and research challenges
  - The community-based, collaborative problem-solving strategies and tools
- Monumental root in Warren County, NC
  - NC decided that it was going to put PCB into a community that was 65% African Americans, but black and white residents were united and said 'No.'



## Examples of community-based environmental justice issues

- Chicago (African American, poor, urban, industrial): Public housing project, with population 10,000, built on top of landfill in 1940s and now surrounded by polluting industries, landfills, incinerators, smelters, steel mills, chemical companies, paint manufacturing facility, a.k.a. Chicago's "toxic donut."
- NY West Harlem (African American, urban) : Northern Manhattan is the site of North River Sewage Treatment Plant, hosts 5 to 6 bus depots. High rates of asthma and respiratory illness. West Harlem environmental action and Columbia University School of Public Health conducted community-based participatory research
- Barrio Boca (Puerto Rican, rural): Pesticide drift caused by aerial spraying on mango and banana plantation owned and operated by Tropical Fruit Company. Community actions resulted in court order to restrict spraying to only optimal weather conditions.



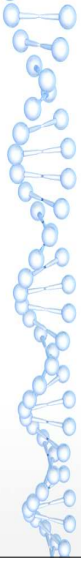
## The meaning of disproportionate impacts

- Components of disproportionate impact and those implications
  - Proximity to pollution sources: "locally undesirable land use (LULU)" were examined using GIS. (~NIMBY issue)
  - Unique exposure pathways
  - Susceptible and sensitive populations: Social position is closely related with susceptibility to air pollution
  - Multiple and cumulative effects
  - Social vulnerability: Underserved and disadvantaged communities (eg. through demographic change) shows low level of social capital (unstable leaders, networks and institutions), resulting in health disparities



## Legal, public policy, and research challenges

- After recognizing the disproportionate impacts, crafting legal and policy responses is needed.
- Challenges = divergence between civil rights and environmental law paradigms
- "Toxic Wastes and Race" was published in 1987. In 1994, US President Clinton signed "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations", as one of the first public policy statements in the arena of environmental justice



## Collaborative and integrated problem solving

- Environmental justice advocates and practitioners must develop a conceptual framework that moves the environmental justice discourse from a primary focus on problem identification to a focus that is also solution oriented
- Environmental justice issues are enormously complex. Environmentally, economically, and socially distressed communities require human, technical, legal and financial resources to properly address these issues.
- Environmental justice strategies need to address economic and social factors such as housing, transportation, job creation, ...
- When research is needed, community-based participatory research (CBPR) is applicable.
  - Builds on and reinforces community capacity
  - Promotes active collaboration and participation at every stage of research
  - Fosters co-learning
  - Ensures projects are community driven
  - Disseminates results in useful terms
  - Ensures research and intervention strategies are culturally appropriate
  - Defines community as a unit of identity
- Pay attention to the social determinants of health



## Homework: making a report

- Until today, we have learned the methods and paradigms of "Environmental Health"
- Please describe one of the topics briefly with your consideration.
- Format: Free, within 1 page of A4 paper or about 800 words in e-mail.
- Deadline: 31 December 2015