

# SOCIAL, ETHICAL AND KNOWLEDGE ASPECTS IN SUPPLY CHAIN MANAGEMENT

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# Lecture plan



Circle Limit II  
Maurits Cornelis Escher

- Aim
- Ethics in Supply Chain Management
- Values and ethics in knowledge production
- Ethics in Research and Professions
- Network as a Model of Knowledge
- Transdisciplinary Knowledge
- Sources & Resources

# Aim of this lecture

Aim of the Supply Chain Management Seminar II, TEK540

- The course aims to provide the graduates with an in depth knowledge in one chosen Supply Chain Management (SCM) area. Furthermore, the course aims to provide insight in how firms, from various perspectives, work with SCM issues. The course also aims to give students knowledge of a more general kind that helps to successfully complete the rest of the programme.

Among Learning outcomes of the course:

- **Ability to make assessments with consideration to relevant scientific, social and ethical aspects, and demonstrate awareness of ethical aspects of research and development.**

# The topic is huge

What this lecture can do is to open the window with a view



# Supply Chain Management programme

120 credits (MSc, 2 years )

- The programme focuses on the **design, management and improvement of supply chain management strategies**. It is **multidisciplinary** and builds on several scientific disciplines.
- One important way a company can improve its competitiveness is to apply supply chain management (SCM). This programme helps students develop their **skills in purchasing, logistics, marketing, transport and general management**.
- **Problem-based learning** including case studies and problem solving with quantitative and qualitative models is one important aspect of the programme.

# Corporate Social Responsibility & Corporate Citizenship Across Global Supply Chains

Incidents like the 2013 Savar building collapse with more than 1,100 victims have led to widespread discussions about corporate social responsibility across global supply chains. Wieland and Handfield (2013) suggest that **companies need to audit products and suppliers and that supplier auditing needs to go beyond direct relationships with first-tier suppliers. They also demonstrate that visibility needs to be improved if supply cannot be directly controlled and that smart and electronic technologies play a key role to improve visibility.**

**Finally, they highlight that collaboration with local partners, across the industry and with universities is crucial to successfully managing social responsibility in supply chains.[32]**

# Building collapse

## Rana Plaza, 2013



The 2013 Savar building/Rana Plaza collapse occurred on Wednesday, 24 April 2013 in Dhaka, Bangladesh, where an eight-story commercial building Rana Plaza collapsed. The search for the dead ended on 13 May 2013 with a death toll of 1,129. [2] Approximately 2,500 injured people were rescued. **Global labour and rights groups have criticised Western retailers and say they are not doing enough to ensure the safety at factories where their clothes are made.** The companies linked to the Rana Plaza disaster include the Spanish brand Mango, and Italian brand Benetton. (Wikipedia)

Photo by rijans - Flickr: Dhaka Savar Building Collapse, <https://commons.wikimedia.org/w/index.php?curid=26051590>

# Ethics in Supply Chain Management



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# SCMA Code of Ethics for Professionals in the field of Supply Chain Management

<http://scma.com/en/about-scma/join-scma/code-of-ethics>

Supply Chain Management Association Code of Ethics.

Affecting and Accepting Responsibility

## A. Standards of Conduct

(Avoidance of conflicts of interest; Protection of confidential or sensitive information; Business relationships; Gifts, gratuities, and hospitality inducements; Environmental and social responsibilities)

## B. Professional Principles

(Professional competency; Professionalism; Honesty and integrity; Responsible management; Serving the public good; Compliance with legal obligations)

## C. Governance and compliance

(Part I. Member Compliance; Part II. Complaint Procedures)

# Code of Conduct Example

<http://w5.siemens.com/cms/supply-chain-management/en/sustainability/expectations/principles/pages/code-of-conduct.aspx>  
Siemens

Legal Compliance

Prohibition of Corruption and Bribery

Fair competition, anti-trust laws and intellectual property rights

Conflict of interest

Respect for the Basic Human Rights of Employees

Prohibition of Child Labor

Health and Safety of Employees

Environmental Protection

Supply Chain

Conflict Minerals

# Sustainability and social responsibility in supply chains. SECH ratings

Supply chain sustainability is a business issue affecting an organization's supply chain or logistics network, and is frequently quantified by comparison with **SECH ratings**, which uses a triple bottom line incorporating **social, ethical, cultural and health footprints**.

SECH ratings are defined as **social, ethical, cultural, and health' footprints**. Consumers have become more aware of the environmental impact of their purchases and companies' SECH ratings and, along with non-governmental organizations (NGOs), are setting the agenda for transitions to organically grown foods, anti-sweatshop labor codes, and locally produced goods that support independent and small businesses.

**Because supply chains may account for over 75% of a company's carbon footprint**, many organizations are exploring ways to reduce this and thus improve their SECH rating.

# Ethics issues are at the heart of supply-chain management

<http://www.supplychainbrain.com/content/research-analysis/chainlink-research/single-article-page/article/ethics-issues-are-at-the-heart-of-supply-chain-management-1/>

CORPORATE SOCIAL RESPONSIBILITY (CSR) - regarding the environment, health and safety: envisioned seamless world of corporate citizenship that extends beyond U.S. borders.

Nike insisted in 1990ties that labor conditions in its contractors' factories were not its responsibility – defined a code of conduct for its contractors, but with no control to determine if contractors complied with the code.

Nike's factories came under attack for their workplace practices, including the use of child labor.

# Ethics issues are at the heart of supply-chain management

<http://www.supplychainbrain.com/content/research-analysis/chainlink-research/single-article-page/article/ethics-issues-are-at-the-heart-of-supply-chain-management-1/>

Beyond monitoring: a more collaborative approach to reforms, sharing workplace and human resource best practices.

Apple was criticized for the workplace conditions and wage rates of its Chinese manufacturer, Foxconn, which makes the iPhone.

Fair Labor Association (FLA): Workplace Code of Conduct throughout its supply chain: assesses working conditions and monitors attempts to remedy violations in factories, farms and facilities used by its affiliated companies. "We believe every worker has the right to a fair and safe work environment free of discrimination, where they earn competitive wages and can voice their concerns freely," Apple CEO Tim Cook

# Values and ethics of knowledge



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Based on the article:

Nancy Tuana (2015)  
Coupled Ethical-Epistemic Analysis in Teaching  
Ethics. Critical reflection on value choices.  
CACM VOL. 500 NO. 12. Pages 27-29

# Ethical-Epistemic\* analysis

## How values and priorities affect knowledge

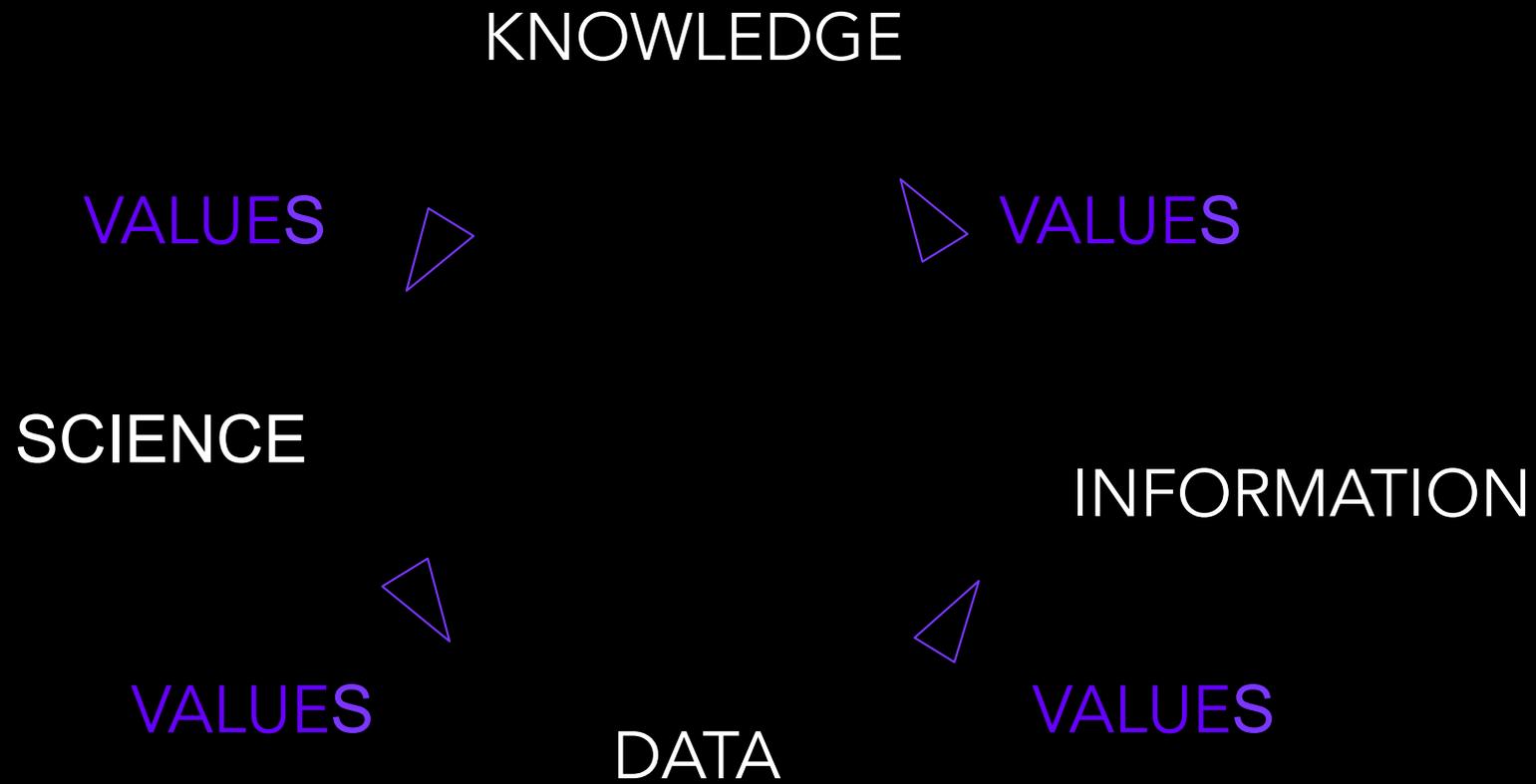
“Computer experts aren’t just building and manipulating hardware, software, and code, they are building systems that help to achieve important social functions, systems that constitute social arrangements, relationships, institutions. computer experts can facilitate and constrain behavior, and materialize social *values*.”

Deborah Johnson

Values serve as a guide to action and knowledge.

Epistemology-the branch of philosophy concerned with the nature and scope of knowledge.

# Values built in Knowledge



# Values

Values serve as a guide to action and knowledge. They are relevant to all aspects of scientific and engineering practice, including discovery, analysis, and application.

# Values and emotions

“The decisions that scientists and others need to make about what projects to pursue, what theories to accept, and what applications to enact will unavoidably have an emotional, value-laden aspect.”

“The best course is not to eliminate values and emotions, but to try to ensure that the best values are used in the most effective ways.”

Paul Thagard

# Types of values

Various types of values can be involved in decision making and reasoning:

- ethical values (the good of society, equity, sustainability)
- *aesthetic* values (simplicity, elegance, complexity), or
- *epistemic* values (predictive power, reliability, coherence, scope).
- *economic* values, etc.

# Values in research – choices we make

- **The selection of research topics.** What is a good basis for ( We get involved with existing research. Or we get funding for a specific research. Or we choose freely. Why is this research worth our time and effort?)
- **Choice of approach, methodology, tools.** What are the values of a model, hypothesis, or theoretical explanation in providing convincing explanation?
- **Judgment of the support for a research result.** What values of evidence constitute robust evidence?
- How are ethical aspects of research taken care of?

# Requirement for transparency of values

**Transparency of values** is essential for trustworthiness and credibility of research. It is central to transdisciplinary research such as e.g. the National Science Foundation's Sustainability Research Network on Sustainable Climate Risk Management (SCRiM, <http://scrimhub.org>).

**Coupled ethical-epistemic analysis** helps to identify new and refined research topics, and inform modeling for multi-objective, robust decision making.

# Ethics in Research and Professions



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# Goals of research

"Perfection of means and confusion of goals seem, in my opinion, to characterize our age."

Einstein, 'Out of My Later Years'

# New challenging technological developments

Challenge-driven innovation

Big data

Internet of things – internet of everything

Intelligent cities

Autonomous cars

Autonomous intelligent software as control systems, information systems etc.

Education is for the future - anticipation

We are educating engineers that will solve future problems

Future is already at our doors

Choices are made all the time in the design and engineering

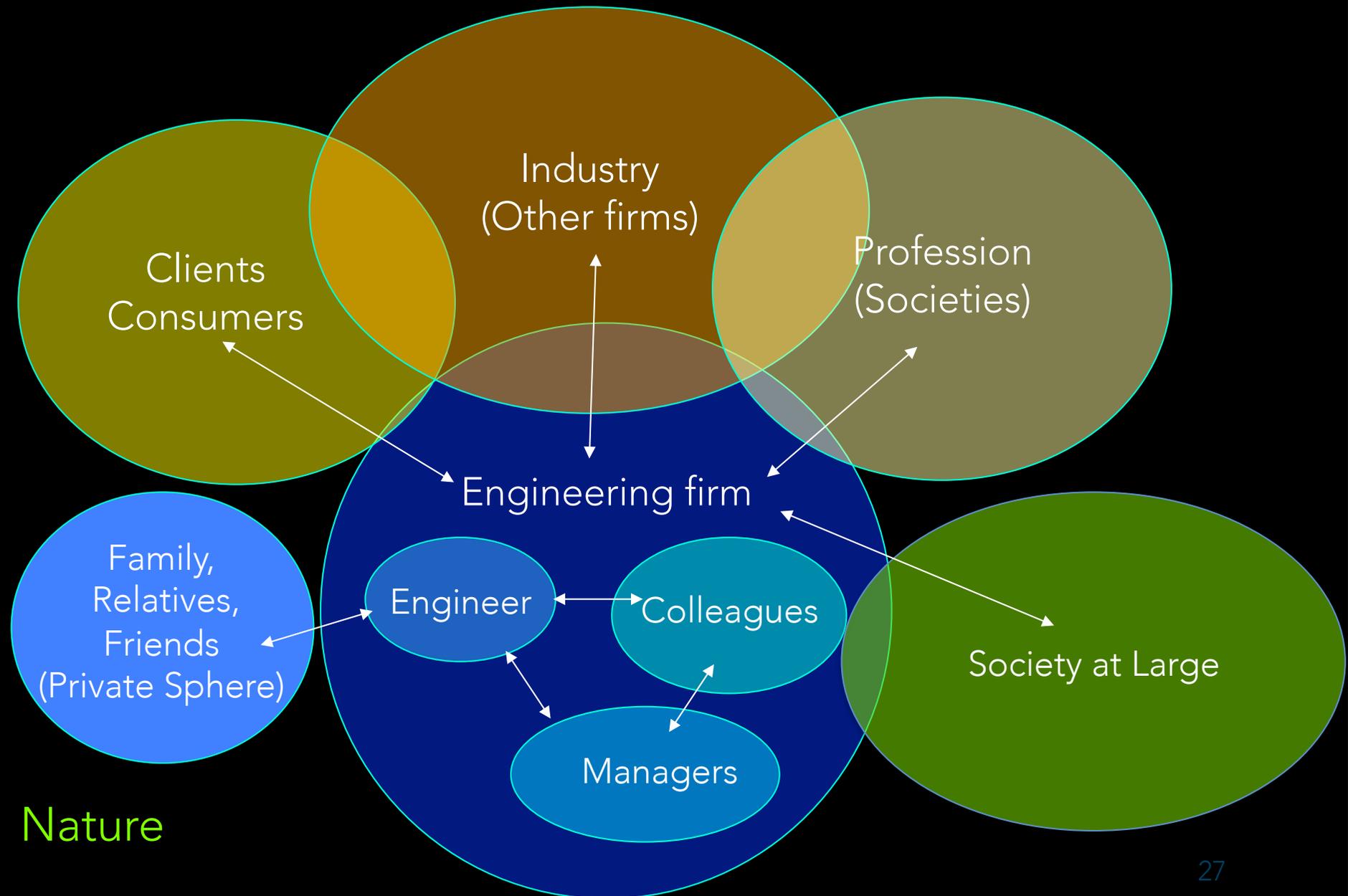
# Why ethics and value system are important?

Every technical solution is made for some reason. Was the reason good enough?

We want cars that are less fuel consuming, built with less material but those are not goals in themselves. As cheaper cars can inspire changing cars more often, more people having cars and using cars more often.

The worthwhile goal is more environmental friendly, sustainable society

# STAKEHOLDERS IN AN INDUSTRIAL PROJECT



# Risk, Precautionary principle & Whistle blowing

When an action presents threat to human health and the environment we should take **precautionary measures** even if some evidences and relations are not scientifically proven.

People have the duty to take precautionary measures to prevent harm.

All possibilities should be considered before taking an action.

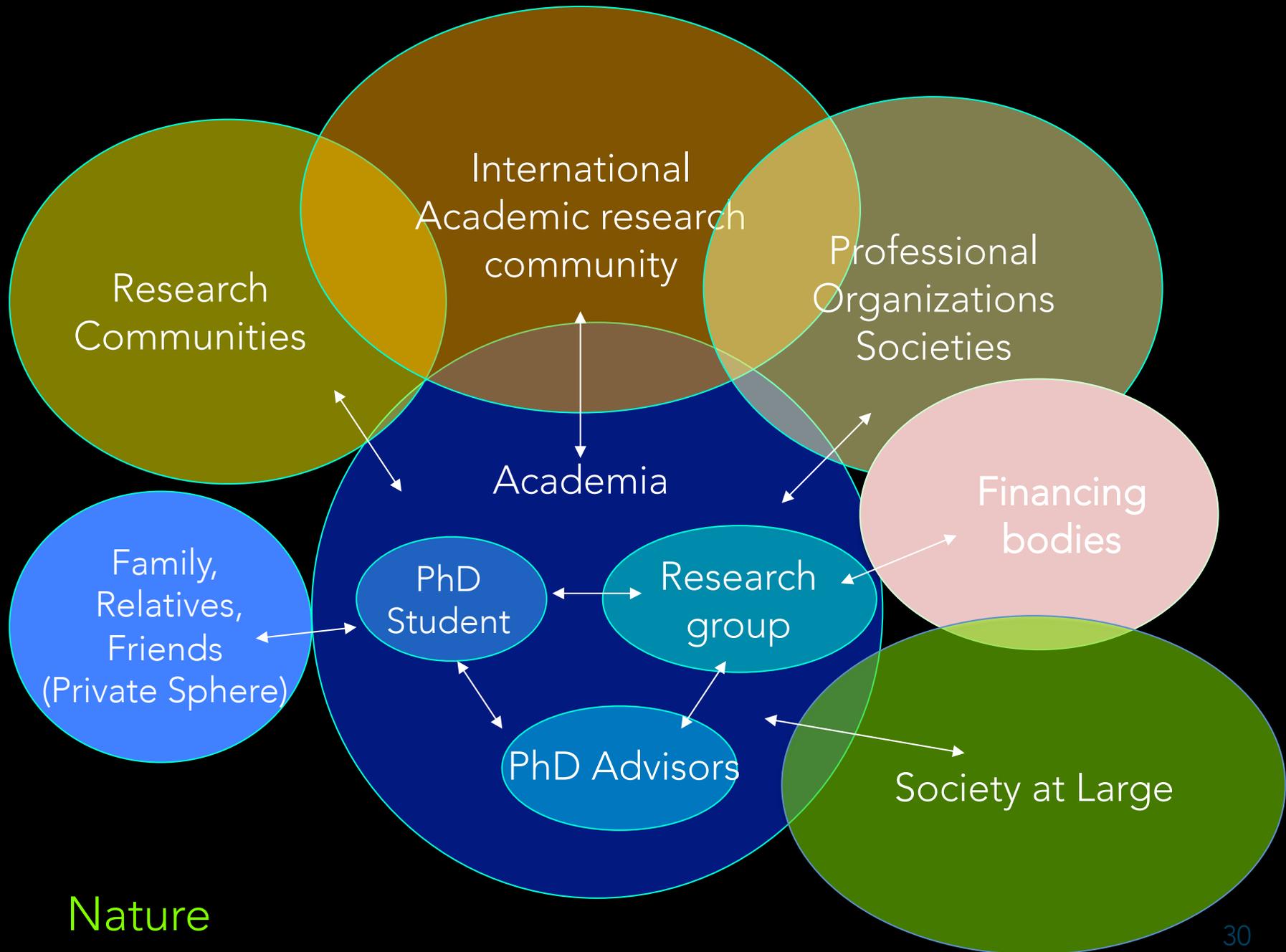
When an individual employee feels that his company's actions are not right and he cannot accept them (S)he can give them publicity through the media – action called **whistle blowing**.

# Professional Ethics

question of relations between different stakeholders

- practicing professionals
- employee and employer
- professionals and their clients
- teachers and students
- supervisors and research students

# STAKEHOLDERS IN A RESEARCH PROJECT



# Is there Research Ethics?



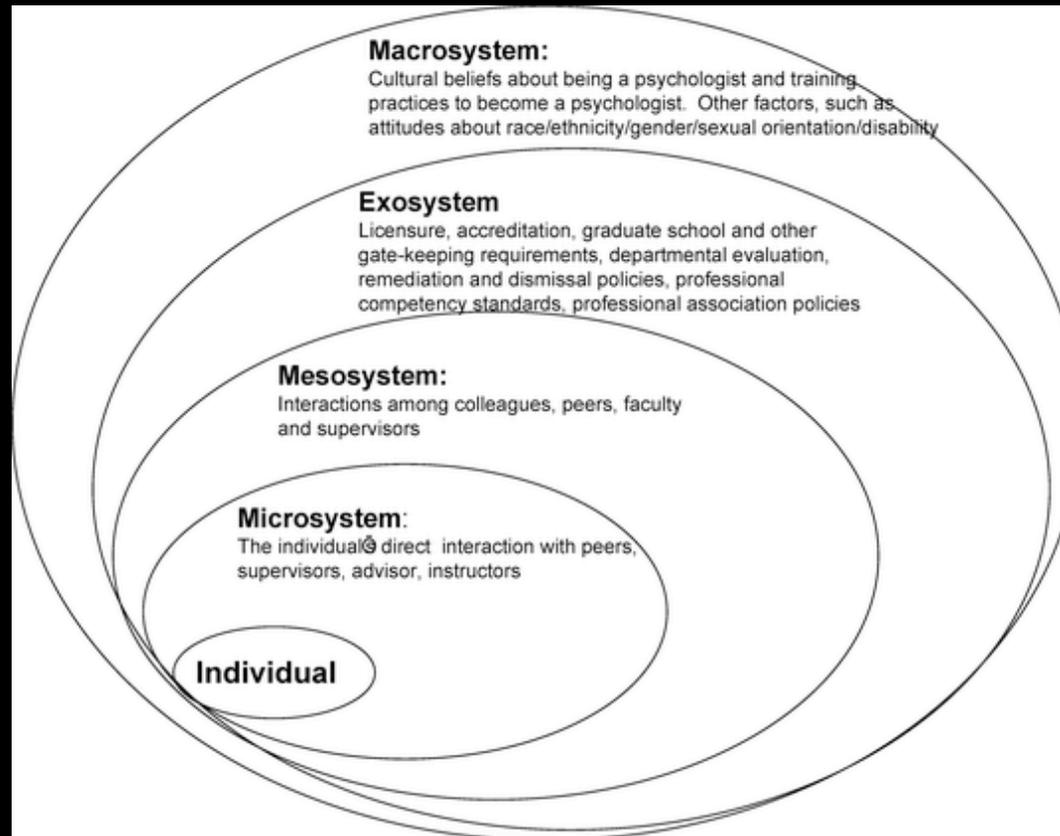
"The beauty of math, of course, is that we don't need an ethicist."

# Excuses not to think about Ethics

Discussion based on Paul Root Wolpe article from Cell 125, June 16, 2006 p. 1023. – class discussion

- "I'm Not Trained in Ethics"
- "My Scientific Work Has Little to Do with Ethics"
- "Ethics Is Arbitrary"
- "Ethicists Mostly Say 'No' to New Technologies"
- "Others Will Make the Ethical Decisions"
- "The Public Does Not Know What It Wants"
- "Knowledge Is Intrinsicly Good"
  
- Can you plausibly defend any of the above positions?
- Can you plausibly refute any of the above positions?

# Micro – Meso – Exo – Macro Domains of Ethics



The domain-based view in the analysis applicable to different types of problems – organization of society, sustainability of cities, ecology, economics, ethical aspects etc. Source: American Psychological Association