

Universities as cultural workplaces

UPGEM findings and discussions

UPGEM Understanding Puzzles in the
Gendered European Map

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Innovation:

Looking at universities as work-place cultures

- A. Qualitative studies of the cultural working environment of academic staff at universities.
- B. Identify local cultural-historical processes creating 'leavers' – especially female leavers

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Physics as case: Stayers and Leavers

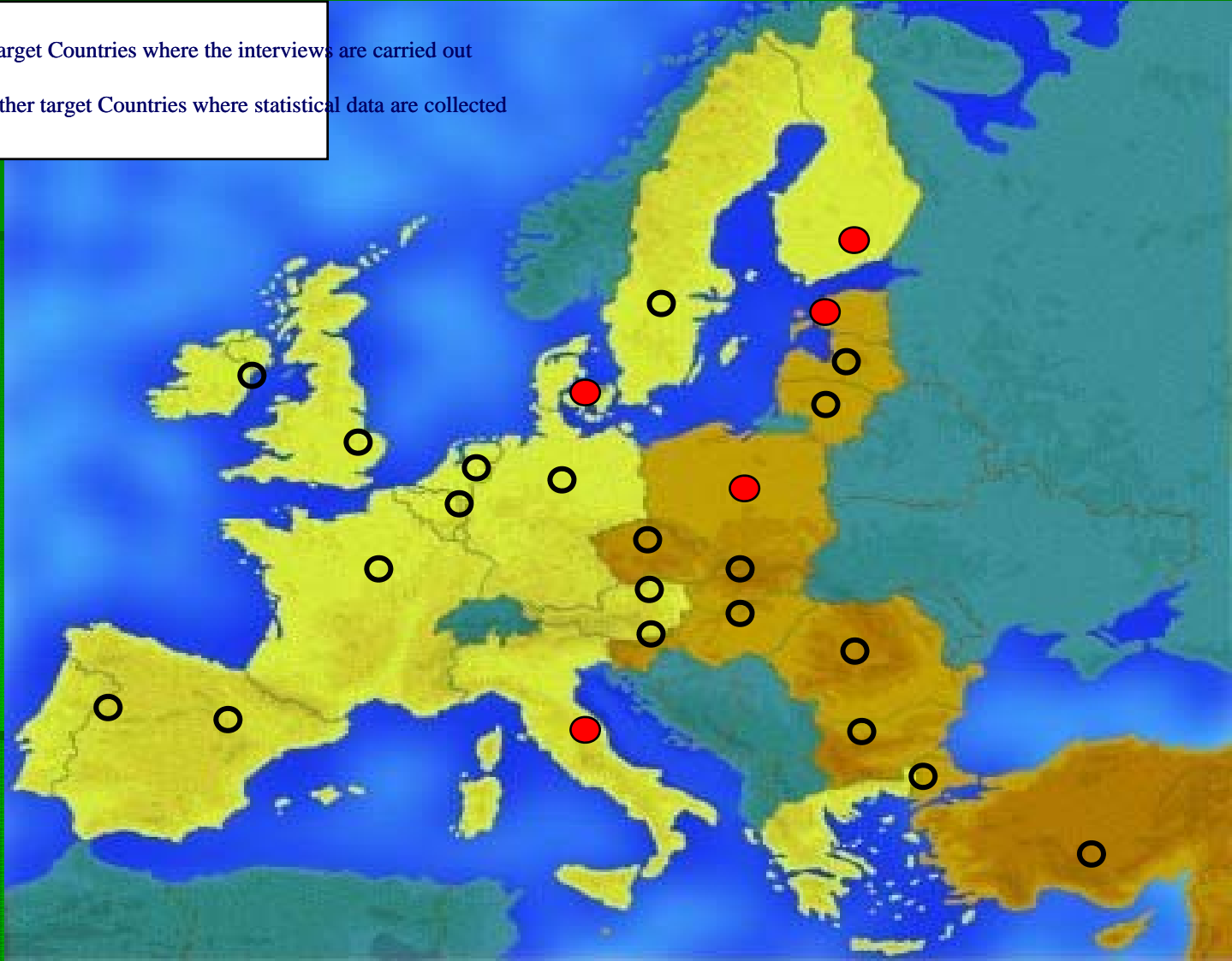
- Stayer fields: Geophysics, theoretical physics, nano physics, solid state physics, particle physics, nuclear physics, X-ray physics, aerosol physics, astrophysics, astronomy, meteorology, material physics etc.
- Positions held by leavers: Designers, Cleaners, Public Researcher, Industrial researcher, Patent Consultants, Academic administration, Website administrators, Well site engineers, College teachers, Record managers, Medical physics, Research & development in high technology companies, Energy industry, Specialist positions in public sector, HR management, Polytechnics and high school, Investment companies, Dissemination of Didactics, Retired, Unemployed

Data collection + seminars

Data

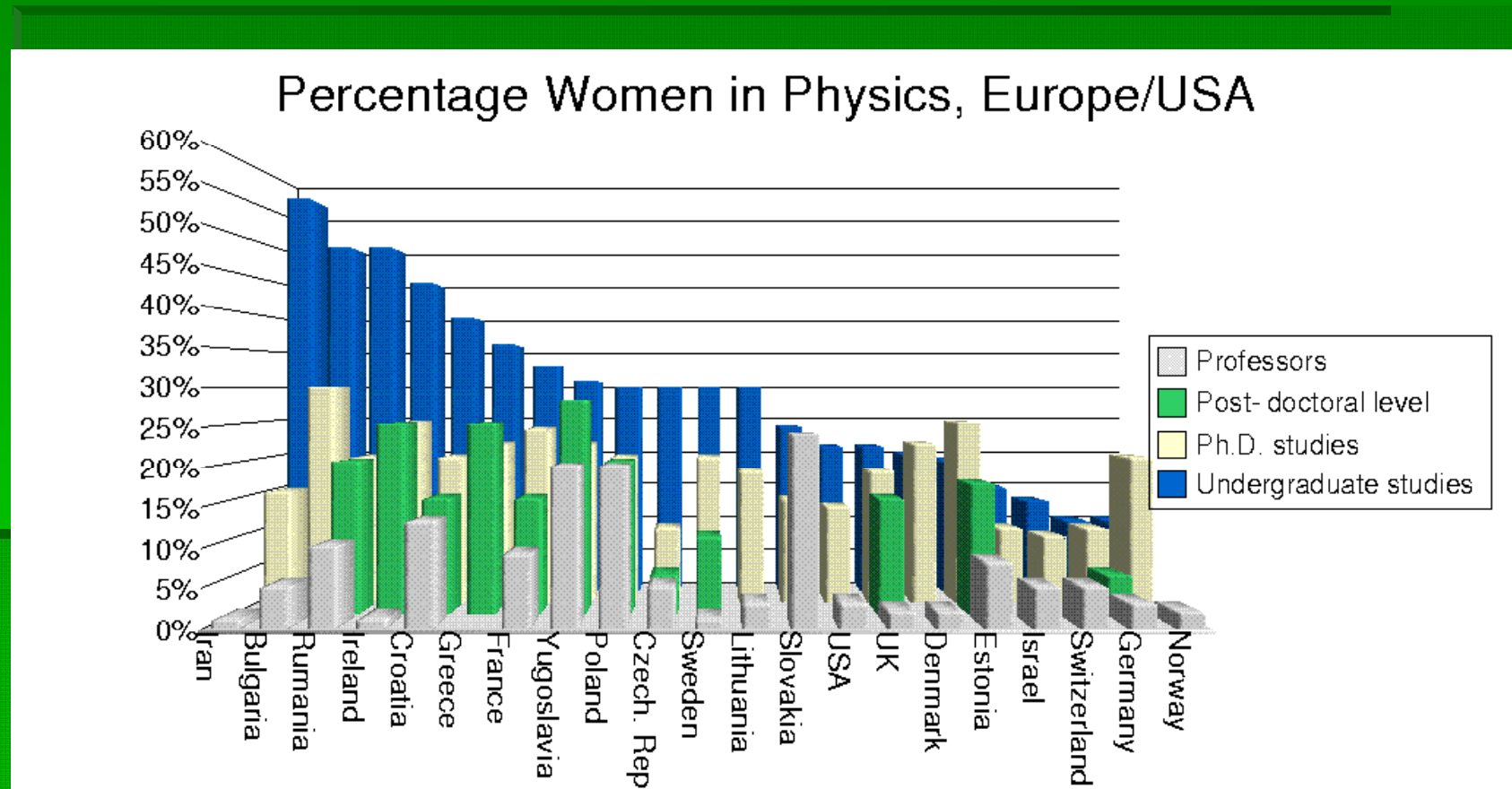
1. 235 interviews with male and female physicists translated into English. Aprox. 50% of the informants are employed outside of academia in the partner country.
2. Field observations from 20 physics institutes
3. X-Ray of 20 physics institutes and other quantitative data
4. Information boxes with cultural historical background information.
5. Seminars: 6 weeks in Copenhagen 2006, 1-2 weeks in Estonia, Finland, Poland and Italy in 2006-2008.

- Target Countries where the interviews are carried out
- Other target Countries where statistical data are collected



IUPAP Conference: Woman in Physics Paris 2002

Figure Caption: Data collected for the conference and analysed by K Wiesner



UPGEM X-ray: Women in %

■ Associate professor		Professor
■ DK	10	3
■ FI	12	9
■ EST	11	10
■ PL	14	13
■ IT	33	23

Discussions

- More female students
- Girls Schools
- Former communist countries
- Catholic/Protestant
- Class society vs. 'Gender' society

Draw the Line

Ways into physics as culture:

- Family background
- Teachers' influence
- Motivation and love for physics
- Ph.d. – offers and driftwood
- Mentorship

PUSH / PULL Factors at universities as work-places

Push factors explicit and implicit – recurring themes

- Low pay + Short term contracts
- Insufficient organization of workplace
- Hidden Competition
- Stereotypical identities
- Lack of acknowledgement
- Political changes
- Lack of career perspectives
- Work motivational problems
- Bad working environment (conflicts, harassment)
- Mobility requirements

Pull factors

- Family responsibility
- New job possibilities (i.e. in industry or business)
- Better pay
- Better career options

Draw the Line

The particular problems for female researchers in these local cultures:

- Discrimination against women
- Downplay of femininity
- Sexual harassment
- Perceptions of womens careers as inseparable from family responsibility
- Lack of female role-models and identification possibilities with stereotypes

Draw the Line

The challenge of change:

- The influence of political changes on the development of the discipline of physics
- Change in managerial structures and administration
- Change in access to communication and equipment
- From generation to generation

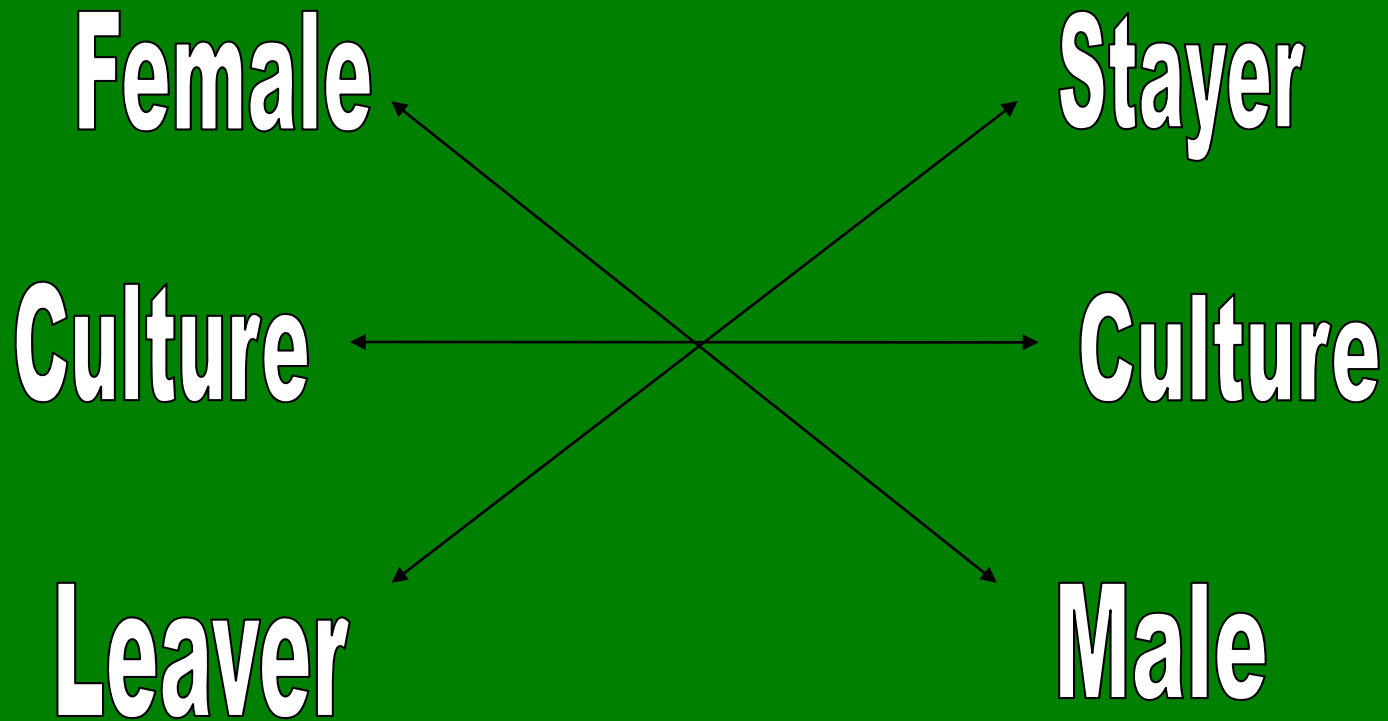
Draw the Line

Problems connected to university as workplace culture:

- Open and hidden competition
- Loneliness in Academia, Lack of feedback
- Demands of mobility
- Power structures
- Reconciliation of family and work-life
- New masculinities

Potential leavers in spite of passion for physics

MODEL OF CULTURE CONTRAST ANALYSIS



The analytical tools

- **Physics in culture** embedded in local national cultures as it is presented in the national reports in 'Draw the Line'
- **Physics as culture** presented as the three ideal types culture-contrast analysis presented in 'Break the Pattern'.
- (www.upgem.dk from November 2008)

Ideal-types in Physics Culture

The individual physicist in the competitive physics context: Hercules.

The caring physicists in social context: The Caretakers

The diligent physicist in the work context: The Work-Bees

Ideal types in workplace cultures

Hercules

Caretakers

Worker bees

Focus:

Physics & the realm of physics science

Physics for society & surrounding world

Physics as a job

Approach to physics:

Playful, curious, daring, ambitious

Social, curious, confident

Diligent, serious, fortuitous

Workplace Culture:

Individualistic. Devotion. Assessments. Sacrifices.

Relational, respect & interdependency
scapegoat

Depends on the leadership. Professional rather than personal.

Competition: 1 on 1, with all means

Group vs. group.

Uninterested in competition.

Ideal types in physics as culture

Hercules

Caretakers

Worker bees

Power structure:

Less transparent, unstable. Individual power, reads power plays.

Group hierarchy. more stable. Power is for the Group or to meet obligations in group.

most stable. Uninterested in strategy and power plays. Distance to the powerful H. Leader.

Work/family Balance:

Physics before family. Late work hours, Long stays abroad if fruitful

Dilemma; both are equally important. Disapproves of long work hours for show.

Disapprove of long work hours, but stay late if required. Enjoys spare time.

Gender:

Will use gender & harassment if it fits the culture of the power play

Little chance of gender discrimination it will be retaliated by the group, they react against it

Not likely to discriminate but will not react against a discriminating leader

Problems identified in UPGEM: Harassment

Different kinds of harassment in relation to competition or lack of explicit rules for conduct:

- a. Hercules – Competitive harassment, 1:1, Sexual harassment, individuals solve problems
- a. Caretakers – The young or weaker group-members are exploited. Group-leaders exploit *and* solve problems
- b. Worker-Bees – top-down leaders solve problems if they become aware

Problems identified in UPGEM: Competition

Different kinds of competition for funding, positions etc.

- a. Hercules – hidden-open 1:1 anything goes
- b. Caretakers – hidden-open, group against group, socially accepted means (e.g. nepotism)
- c. Worker-Bees – no competition on bottom, hidden-open on top

Conflicts in physics as culture – who do *not* fit in?

Caretaker culture:

1. Those who are ‘betraying’ the group – who do not believe in group effort and challenge the group structure.
2. The loner

Worker-bee culture:

1. Those who challenge the ‘boss’
2. Those who show too many private feelings at work

Hercules culture

1. Those who will not fight for privileges
2. Those who openly show that they prioritize family, children hobbies etc.

Draw the Line and Break the Cultural Patterns

- Drawing the line at the workplace
- 'Pockets' of balanced ideal type workplaces
- How to break cultural patterns?
- All 'types' are equally needed!

Conclusion of the UPGEM project (so far...)

- To break patterns we suggest that action is taken to break cultural pattern, which does not target women but the whole of the workplace environment. This we argue from our analysis will not only help women but also many men in pursuing careers in physics.

Titles of publications:

- Draw the Line
- Draw the Line Proceedings
- Break the Pattern

Homepage

- <http://>

- www.upgem.dk