

Gendering Science and Technology

Experimental horizons of structural change

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One step further

Negotiating change: the STAGES project

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STAGES: Structural Transformation to Achieve Gender Equality in Science

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- FP7 Cooperation, Work programme Science in Society
- Co-funding from the IGRUE/Inspectorate General for Financial Relations with the European Union, Ministry for Economy and Finance – Italy, Italian Government
- The partners:
 - **Italian Department for Equal Opportunities (co-ordinator)**
 - **ASDO (Italy)**
 - **State University of Milan (Italy)**
 - **Fraunhofer Gesellschaft zur Förderung der angewandten Forschung (Germany)**
 - **Aarhus University (Denmark)**
 - **Universitatea Alexandru Ioan Cuza, Iași (Romania)**
 - **Radboud University, Nijmegen (The Netherlands)**

An unprecedented opportunity ...

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- Leaving the logic of pilot projects behind
- Launching strategies addressing the many interconnected layers of gender inequality in science
- Applying self-tailored integrated action plans
- Making the most of partnerships by fostering mutual learning practices

... but also an unprecedented risk!

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- What happens when projects try a change of scale, implementing measures in so many areas of the organisation (and also outside, in the perspective of social innovation) that **there is “no escape”** (which was always possible in pilot projects, marginalising and isolating equality-oriented initiatives)?
- In this situation, the risk of backlash is much higher, and represents the critical issue to be addressed by the project

Lessons learned from previous projects/1

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- From PRAGES and previous research experience on gender inequality:
 - **Deep-rootedness of discriminatory habits and environments**/the cultural, social and psychological matrix of science as a male domain
 - **Persistence**/change is slow, the “generation effect” weak
 - **Systematic nature**/beyond full professorship: women lack from many different important positions in post-academic science; moreover, the gender dimension itself is lacking in the very understanding of science
 - **Common frame vs. contextual situations**/dealing with the difficult issue of transferring analysis and solutions: the strategy of benchmarking

Lessons learned from previous projects/2

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- From WHIST:
 - ▣ **Confronting reality**/Obstacles and facilitating factors: a roadmap for the action plans in STAGES
 - ▣ **The risk of denial and backlash**/the capacity to negotiate:
 - Interpretation
 - Symbolic dimensions
 - Institutional change
 - Operational change
 - ▣ **The perspective of social innovation**

In synthesis, the analysis of PRAGES ...

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- **Friendly environments for women**
 - Changing cultures and behaviours
 - Promoting work-life balance
 - Supporting early-stage career development

- **Gender-aware science**
 - Overcoming gender stereotypes
 - Gendering scientific contents and methods

- **Scientific leadership**
 - Women's leadership in research practice
 - Women's leadership in research management
 - Women's leadership in scientific communication
 - Women's leadership in innovation and science-society relationships

... plus the dynamic of WHIST

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- Projects as evolving, complex, non-linear fields
- Negotiation in practice: actors, conflicts and alliances
- The methodology of supporting change by providing continuous technical assistance, monitoring and evaluation, but also on-going accompanying research

STAGES approach to planning structural change – Analytical step

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Identifying needed actions and fields of action through the PRAGES grid ...

Analytical step

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STRATEGIC AREA	OBJECTIVES	DESCRIPTION AND SOME EXAMPLES OF ACTIONS
1. Women-friendly environment	1.1. Actions promoting change in organisational culture and formal/informal behaviours	Measures pertaining to the modification of the cultural and behavioural patterns within the research environment, by promoting awareness-raising initiatives addressing specific internal and external targets, promoting gender studies across university faculties and departments, and supporting women in coping with environmental stress factors .
	1.2. Actions promoting work-life balance	Provision of services facilitating work-life balance, by means of supporting access to internal and external services of various kind and the promotion of customised and flexible organisational practices .
	1.3. Actions supporting early-stage career-development	Measures specifically aimed at sustaining early-stage career-development for young scientists, particularly addressing the barriers that women frequently meet in that early phase. These measures include contractual arrangements supporting temporary staff, career advice, mentoring and training for early-career researchers, provision of funds for professional development and training officers in charge of hiring and promotions.
2. Gender-aware science	2.1. Actions challenging gender stereotypes and consequent horizontal segregation	This is pursued, on the one hand, by addressing images and representations of women and science, especially through the collection of data documenting the groundlessness of stereotypes, the use of gender-sensitive language and textbooks , as well as awareness-raising initiatives . On the other hand, particular attention is devoted to fighting those mechanisms translating gender stereotypes into horizontal segregation, by attaching a gender to disciplines, topics or tasks. This is done especially by addressing training initiatives of various kinds to those responsible for career development support and task attribution .
	2.2. Actions aimed at gendering S&T contents and methods	Actions are aimed at questioning epistemological and theoretical assumptions, methodologies and priorities. Research and dissemination activities are usually undertaken in this regard, but also curricular reform of scientific disciplines to include relevant gender studies, institutional or organisational arrangements to increase the number of women research directors, and the dissemination of tools to support the process of gendering the design of research and innovation.
3. Women's leadership	3.1. Actions promoting women's leadership	Measures supporting women in attaining leadership positions in the traditional academic career, encompassing, among the others, support for mobility , delivery of specific training, mentoring , provision of dedicated funds for research , creation of reserved chairs , introduction of new institutional bodies or regulations to redress gender imbalances.

STAGES approach to planning structural change – Proactive step

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- Drafting self-tailored action plans through internal negotiation and mutual learning among partners ...

State University of Milan: Advancing gender equality. How to enhance change in scientific careers

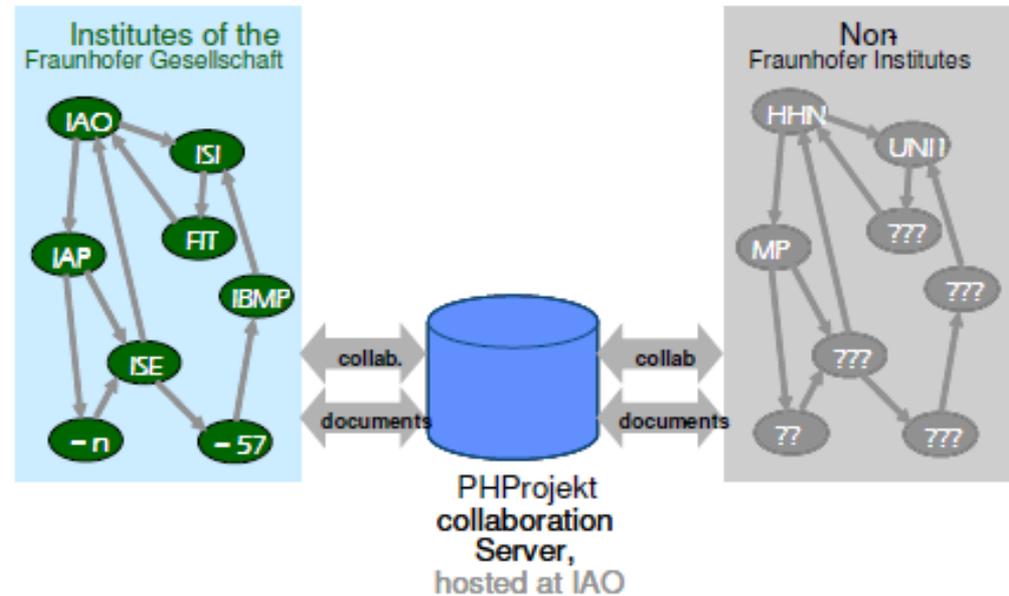
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- **Friendly environment:**
 - Participant observation in 4 hospitals to identify discriminatory mechanisms affecting retention and progression (Faculty of Medicine)
- **Gender-aware science:**
 - Workshop on “Gender medicine” (Faculty of Medicine)
 - Crash courses on gender stereotypes for top management (Faculties of Medicine and Agriculture)
- **Leadership:**
 - School of “Strategies for improving publishing” for Doctoral students
 - Annual reporting to Faculties and the Academic Senate (targets)
 - Week of Women and Science during the Milan EXPO 2015

Fraunhofer: Building an internal market for gender diversity in science and innovation

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- Dissemination and extension of the WHIST experience, to also include other activities covering PRAGES strategic areas, from IAO to the other Fraunhofer and non-Fraunhofer institutes



Aarhus university: taking advantage of restructuration to build a fully gender-equal institution

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□ **Friendly environment:**

- Including gender diversity management competencies in standard administrative and professional leadership development process

□ **Gender-aware science:**

- Collection of data on horizontal segregation at faculty level

□ **Leadership:**

- Establishing internal praxes linking evaluation of scientific productivity to available time (f.i. in case of maternal leave), also considering time spent on teaching, formulation of large projects, etc.

AIC University of Iași: Bridging the gender gap through an active knowledge brokerage

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□ **Friendly environment:**

- Carrying out a participative assessment of “internal climate and organisational values”
- Drafting and establishing internal guidelines on equal opportunities as concerns recruitment and promotion both in research and managerial positions

□ **Gender-aware science:**

- Developing a cross-disciplinary teaching modules on gender and science to be taught at involved S&T faculties

□ **Leadership:**

- Acknowledging through the Media and Communication Dept. the successful career of young female and male researchers through a permanent section on the university website

Radboud University of Nijmegen: Taking change one step further

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□ **Friendly environment:**

- Reform of current work-life arrangements through an internal research examining the actual use of existing tools: childcare facilities, parental leaves, sabbatical leave and part-time work
- Facilitating a women's network of young female scientists

□ **Gender-aware science:**

- Developing the use of computer-based modelling in gender analysis through a research project to be inserted in the European Master on System Dynamics (School of Management)

□ **Leadership:**

- Implement target figures for female full and associate professors

STAGES approach to planning structural change – Proactive step - 2

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- Building consensus and managing conflict anticipating consequences and reactions:
 - Identifying internal and external actors of negotiation
 - Identifying suitable forms of negotiation

- Putting under control through negotiation problems often merely managed as “accidents”, managing and planning them as critical project areas and activities

Proactive step/Interpretive negotiation

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WP and type of negotiation	Project task and actions	Actors to be involved
Interpretative negotiation WP1- Action Plan UMIL	Arranging informal meetings with PhDs, postgraduates and young women researchers to discuss what element should be stressed/included in the gender awareness training (crash courses) to the top management (Task 1.3)	PhDs, Postgraduates and young women researchers
Interpretative negotiation WP2 – Action plan FRAU	Dissemination of the catalogue of all actions implemented within Fraunhofer, to be used as a basis for discussion at the different institutes of possible change initiatives to be adopted (task 2.3.)	Human resources managers and other representatives of other Fraunhofer Institutes
Interpretative negotiation WP4 – Action plan UAIC	Consulting involved stakeholders to collect suggestions and requests from the users of university’s childcare services to support the design process of new or extended services (task 4.2)	Child carers, UAIC employees, university central services

Proactive step/Symbolic negotiation

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WP and type of negotiation	Project task and actions	Actors to be involved
Symbolic negotiation WP2 – Action plan FRAU	Joint appearance of all Stuttgart-based Equal Opportunities officers (BfCs) planned at launching initiatives (task 2.1)	Stuttgart-based Equal Opportunities officers (BfCs)
Symbolic negotiation WP4 – Action plan UAIC	Organising university-wide ceremonies, to be publicised on the media such as the inauguration of the exhibition on women and science at the UAIC's museum (WP4.4)	Media professionals, journalists, Communication department of UAIC
Symbolic negotiation WP5 – Action plan RU	Celebrating achievements of young female researchers and full professors with articles and pictures in internal and external communication (task 5.8).	Communication department, human resources managers, young female researchers and full professors

Proactive step/Institutional negotiation

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WP and type of negotiation	Project task and actions	Actors to be involved
Institutional negotiation WP3- Action Plan AU	Creating, in collaboration with the Task Force on Gender Equality (TFGE) and the frAU (Female researchers at Aarhus University) both informal and formal occasions to discuss teleworking and flexibility schemes with staff and leadership at different faculties/departments, so to devise most suitable arrangements and regulations (task 3.2)	Task Force on Gender Equality (TFGE) and the frAU (female researchers at Aarhus University)
Institutional negotiation WP1- Action Plan UMIL	Organising regular meetings with the Rector in order to inform him about the advancements of the project and prepare and revise the Annual Report to be presented at the Academic Senate (all tasks)	Rector and rector direct collaborators; Academic Senate
Institutional negotiation WP5- Action Plan RU	Meetings with the HRM department and the leadership of the School of Management to discuss the development of a network of young female scientists within the faculty (task 5.3)	Dean and HRM officers

Proactive step/Operational negotiation

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WP and type of negotiation	Project task and actions	Actors to be involved
Operational negotiation WP3- Action Plan AU	Constantly monitoring project implementation with the participation of representatives of promoters and stakeholders for the different actions and for the project in general (all tasks).	Task Force on Gender Equality (TFGE), the frAU (female researchers at Aarhus), trade unions repres.
Operational negotiation WP4- Action UAIC	Establishment of an independent evaluation board of national experts on gender and diversity management to assess action plan progress (all tasks).	Project team, Rector offices,
Operational negotiation WP5- Action Plan RU	Regularly measuring improvements in target figures (task 5.7).	Project team, administrative offices of RU, Dean and HRM officers

The outcomes

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- **Measurable impact at the end of the project:**
 - Targets as for women in higher academic and managerial positions, plus increases in publications, funds for research, etc.
 - “Softer” targets related to awareness raising, consensus, improvement in internal climate, women researchers’ visibility, etc.

- **More analytical information on what happens in structural change efforts within and outside organisations, through:**
 - Research foreseen in the action plans
 - Continuous observation, monitoring and evaluation
 - Guidelines

Thank you!

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Negotiation

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□ **Negotiation as a tool for social change**

Any activity involving two or more people or groups of people who interact to produce an agreement over courses of action, to bargain for individual or collective advantage, or to craft outcomes to satisfy various interests. Dynamics of power are implied by definition

□ **Applied to gender dynamics in organisations**

It includes all actions – at micro, meso or macro level – aimed at directly or indirectly redefine gender arrangements and the distribution of power, in its different forms, between men and women, therefore producing deep and systematic change

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