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**10th International Conference on ICT, Society and Human Beings**

**Topic: Perspectives on ICT (gender, theoretical)**

# **Investigating Information Systems research through the lens of feminist epistemology:**

## **The case of MIS Quarterly**



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# Outline

1. Why feminist epistemology?
2. The four dimensions of feminist epistemology
3. Feminist epistemology in IS research: the case of  
MIS Quarterly
4. Results
5. Conclusion

# 1. Why feminist epistemology?

## ■ Science

- Knowledge produced by scientific disciplines
- Set of principles and techniques ensuring the validity of research outcomes
- Social institution: people, norms, decisions-making processes (funding, recruitment etc.)

## ■ Critical view on science from a gender equality perspective

- Practices discriminating women : peer-review, funding, glass-ceiling (**ETAN report, 2000**), exclusion (Grace Hopper **and 1968 NATO Conference** on software engineering; Marie Curie and **French Academy of sciences**)
- Methodological biases : researchers are socially and historically embedded (prejudices, value judgments, interests)



**production of “androcentric” knowledge, particularly in human and social sciences (e.g. female initiation rites, role of women in History)**

# Method, methodology, epistemology (S.Harding, 1987)

## ■ **Method** : technique for gathering evidence

- No feminist research method, but a feminist approach to research (e.g. choice of interviewees)

## ■ **Methodology** : theory of how research should proceed

- Marxist, constructionist, structurationist, positivist methodology etc.
- Feminist use of methodologies: includes a gender perspective

## ■ **Epistemology** : theory of knowledge production process

- Who can be a “knower”? How do beliefs become knowledge? What is considered worthy of interest?
- Feminist approach: questioning processes and options to legitimate knowledge

Harding, S. (1987). Introduction: Is there a feminist method? In: S.G.Harding (ed), *Feminism and Methodology: Social Science Issues*, Indiana University Press, 1-14

## « Feminist epistemology » in this presentation

- All **three aspects** (method, methodology, and epistemology) are generally present in all research (more or less implicitly)
  - However do not always refer to Harding's definition of terms
  - Sometimes what Harding calls “methodology” is referred to as ‘epistemology’ or “theoretical foundations” (e.g. Denison, 1996),
  - Sometimes all the methodological aspects of research design are referred to as “epistemology”
- We use the expression « **feminist epistemology** » to refer to Harding’s three methodological aspects
  - Considering gender when using a method;
  - Including gender when defining an object of study;
  - Being aware of gendered aspects in the knowledge production processes

Denison, D. R. (1996). What is the difference between organizational culture and organizational climate? A native's point of view on a decade of paradigm wars. *Academy of management review*, 21(3), 619-654.

## 2. The four dimensions of feminist epistemology

- a) Employing the “gender” concept
- b) Unveiling gender aspects
- c) Recognizing knowledge as “situated”
- d) Including an emancipatory objective

## a) Employing the “gender” concept

### ■ Gender: different meanings

- Biological
- Assignment to a social category

### ■ No causal link between biology and gender categories

- “*one is not born but, rather, becomes a woman*” (S. de Beauvoir)
- “doing gender” (West & Zimmerman, Butler etc.)

### ■ Analysing social arrangements based on gender categories

- gender division of labor

## Gender as a tool for research

### ■ Rejecting essentialist beliefs

- Characteristics associated with men and women (cognitive, psychological, behavioral) are socially constructed (norms, upbringing, stereotypes etc.)
- Rejecting the so-called « **eternal feminine** »

### ■ Relational perspective

- Social **co-construction of masculinity and femininity**
- These are not separate spheres (no « real man » or « real woman »)

### ■ Power perspective

- Social relationships between women and men often include inequality interactions



## b) Unveiling gender aspects

### ■ Object of study

- Giving women a voice
- Relationships of domination

### ■ Historical construction of common sense notions

- « feminine culture »

### ■ Gaining legitimacy as a female expert in IS-IT field

- « *Being perceived as an expert is then more crucial than being one* »  
(Robertson et al., 2001)

## c) Recognizing knowledge as “situated”

### ■ Critical view on scientific objectivity

- Production of knowledge is not impermeable to the researcher’s social position
- Partial views
- Self-reflexivity

### ■ Understanding the structuring power of metaphors

- Way of thinking that provides an understanding of reality using elements found in another sphere
- Relies on common sense, obvious and unquestioned knowledge
- Can have insidious effect (e.g. “violation”, “abort”, “kill”, “chaining”, “execute”, “divide-and-conquer”)

Haraway, D. (1988). Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist studies*, 14(3), 575-599.

## d) Including an emancipatory objective

- **Different types of interests guiding human inquiry (Habermas, 1970)**
  - technical (controlling the environment, searching for general laws)
  - practical (understanding reality, searching for meaning)
  - **emancipatory** (increasing human autonomy, searching for human progress)
- **Link with Critical Management Studies (CMS)**
  - To advance practices towards increased social justice

Habermas, J. (1970). Knowledge and interest. In *Sociological theory and philosophical analysis* (pp. 36-54). Palgrave Macmillan UK.

### 3. Feminist epistemology in IS research: the case of MIS Quarterly

#### ■ Research question

- *Does information system (IS) research contribute to reducing gender imbalance?*
- *What is the impact of IS research on gender & IT representations and beliefs?*

### ■ Applying the 4 dimensions of feminist epistemology

- Analysis of all articles (mentioning “gender”) in leading IS journal *MIS Quarterly*

### ■ Corpus

- 1,727 published articles
- **180 articles using term “gender”**

### ■ Analysis

- Review from feminist epistemology perspective
- Deeper analysis of two groups of selected articles that make essentialist assumptions

## 4. Results

### ■ Categorisation of articles

Category depending on the use of « gender »	Articles		%
A (demographic characteristic used for checking gender balance in samples)	54		30 %
B ( control variable)	101		56%
<b>B1: effect on results</b>		26	<b>31%</b>
<b>B2: no impact on results</b>		58	<b>69%</b>
<b>B3: suggestion to include gender in further research</b>		17	
C (other usages of gender in qualitative research)	25		14 %
<b>TOTAL</b>	<b>180</b>		<b>100%</b>

## How is gender taken into account?

### ■ Under theorization

- Most research in MIS Quarterly does not employ a gender theory (sex variable)
- Many of the comments that advocate using a gender variable express a stereotyped view of the gender and technology relation

### ■ If no evidence of a gender effect

- Differentialist comments are not discussed in the light of contradicting results
- Taken as a non-result
- Almost never cited in further research

### ■ Looking for differences between men and women

- E.g. V.Venkatesh (Brown&Venkatesh 2004 2005) is presented as an expert in « gender differences in technology adoption and use»

## Visibility challenges

### ■ Research on gender & IT

- Ignored (apart from a few exceptions)
- E.Trauth, member of MIS Quarterly Editorial Board, never cited (except by Carter&Grover , 2015 and by herself)
- A limited number of researches studies providing evidence of a gender effect  
over-cited  
their limits or biases never mentioned

### ■ E.g. Gefen&Straub (1997)

- Range of stereotyped characteristics  
men: independent, seeking respect, competitive ;  
women : network-oriented , focused on creating intimacy , cooperative
- Research on stereotypes (normative shared beliefs) is used as if they were actual characteristics

### ■ Work environment and work organisation not taken into account

- Personal factors explain behavior

### ■ Power issues

CIO, open source software communities



## Essentialist trend

### ■ « *Evolutionary psychology* » theory (Kock 2009)

- Puts forward biological reasons to explain behavior toward technology

- **No scientific evidence**

Questions the principle of male-female equality

Men would be suited for complex and innovative activities

Women could execute mechanical and repetitive tasks



### ■ MRI (magnetic resonance imaging) (Riedl&Hubert&Kenning 2010)

- Capturing the brain activity of 10 female and 10 male participants to study buying decision on eBay

- Authors rely on common sense to explain results

Women enjoy the process of buying (they have a « shopping feeling »)

According to a « *commonly accepted view* », women process more information than

men



## Risk: Performative effect

### ■ **Strengthening gender inequality (concerning gender & IT relation)**

- Repeated stereotyped assumptions
- Assumptions with little scientific evidence
- Uncritically relying on neuro-sciences can lead some IS research towards biological determinism

### ■ **No concern for male-female imbalance**

- No research in MIS Q on processes that exclude women from IT jobs
- Few research aiming to changing the situation

# Conclusion: contributions to IS research

## ■ Adopting a gender concept

- View gender as a relational concept
- Taking into account gender relations can lead to questioning social norms and power relations e.g.
  - in ICT projects teams, between professionals and users, etc.)
  - In Information systems
  - In technology adoption

## ■ Including gender in IS management research

IS governance (decision processes, CIO profile etc.)

Work organisation and human interactions in IS/IT projects

## ■ Promoting reflexivity

- Question implicit assumptions about men and women
- Investigate if and how being a man or a woman impacts data collection



*Frans Hals, Laughing boy*

**Thank you!**

**Discussion**