Methodological decisions in comparative studies
Recent examples:

**UK & Australia**

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**Managing university libraries**

A cross Australian/UK study of second tier managers in university libraries

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De Montfort University, Leicester, UK

Abstract

**Purpose** – The purpose of this paper is to investigate the management function of second tier posts in both Australia and the UK university libraries, including the identification of trends about their demography and responsibility range. The study aims to examine the major managerial challenges they face as individuals as well as the challenges for the wider university library. Various aspects of the skills needed by second tier university library manager are to be explored.

Data were gathered using an online questionnaire completed by managers in both Australia and the UK.

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**Benchmarking quality systems in two European academic libraries**

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Abstract

**Purpose** – The purpose of the paper is to benchmark two ISO 9001:2000 based quality management systems, one in the Universitat Autònoma de Barcelona, Spain, and the other in Kuopio University, Finland.

**Design/methodology/approach** – The paper is a case study in which both libraries’ approach to the building of their quality management system are compared.

**Findings** – The ISO 9001:2000 guides institutions so that they will develop their quality management...
Recent examples:

UK & Australia

Little or no information on, or rationale for:
Why these countries were chosen
Why & how these institutions were selected
What the purpose of the comparison was

In fact, very little real comparison took place.

Finland & Spain
Purpose of this presentation:

To “surface” some submerged methodological issues in comparative studies, particularly in LIS
Outline:

1. Introduction, disclaimers, caveats...
2. Comparison in science & scholarship
3. Pre-methodological assumptions
4. Methodological decisions
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1. Introduction, disclaimers, caveats...

2. **Comparison in science & scholarship**

3. Pre-methodological assumptions

4. Methodological decisions
Comparison is key for:

- **Identification**
- **Classification**
- **Phylogenetics**
- **Experimentation**

Comparison:
Did value of dependent variable increase or decrease **significantly**?

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Observation</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>O₁</td>
<td>O₂</td>
</tr>
<tr>
<td>[No intervention]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The comparative method as alternative to experimentation in the social sciences

“We have only one way of demonstrating that one phenomenon is the cause of another. This is to compare the cases where they are both simultaneously present or absent, so as to discover whether the variations they display in these different combinations of circumstances provide evidence that one depends on the other. When the phenomenon can be artificially produced at will by the observer, the method is that of experimentation proper. When, on the other hand, the production of facts is something beyond our power to command, and we can only bring them together as they have been spontaneously produced, the method used is one of indirect experimentation, or the comparative method.”

– Emile Durkheim (1901)
Outline:

1. Introduction, disclaimers, caveats...
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The iceberg model

- Sociological
- Ontological
- Teleological
- Epistemological
- Methodological

Implicit assumptions

Conscious decisions

Techniques (Data collection, etc.)
Not just a series of steps

• Reflection required before determining methods
  – Why we study particular phenomena
  – What is an appropriate object for study
  – What we want to achieve
  – How we will know if we achieve it ...

depend on a sub-structure of assumptions

• Useful model for analysis of pre-methodological questions:

Dimensions of social science research

- Methodological
- Epistemological
- Teleological
- Ontological
- Sociological

Note: Don't blame M&M for the pyramid, that's my idea.
Dimensions of social science research

Teleological: concerned with goals. Research is intentional and goal-directed: exploration, description, explanation, prediction, control. Aims: empirical (description & understanding of what exists), or normative (how things should be) Reform, adoption of others' policies, practices... “transfer”, “borrowing” Evaluation, rankings Patriotic motives...

What are the aims of current comparative studies in LIS?
Dimensions of social science research

Methodological

Epistemological

Teleological

Ontological

Sociological

Methodology: “how” research is conducted:
Which theory or model?
Research hypotheses or questions
Methods (approaches, strategies)
Research design.
Techniques (e.g. sampling, data collection & analysis), etc.
Outline:

1. Introduction, disclaimers, caveats...
2. Comparison in science & scholarship
3. Pre-methodological assumptions
4. Methodological decisions
Introductory research “road map”

Wide range of methods & techniques can be applied.
Capita selecta: some (7) issues specific to comparative studies:

- Symmetry/asymmetry of project design
- Conceptualization & operationalization
- Levels of analysis, cases, units
- How many cases?
- Which cases?
- Equivalence over identity
- Comparison

Research report

Interpret data

Analyze data

Collect data

Sampling

Research Design

Data Collection Techniques

Select research method/approach

Survey
Experimental
Qualitative
Historical
Symmetry/asymmetry of project design

Asymmetrical projects
Conceptualized & designed in one country, usually western, e.g. US-based “trans-Atlantic” research
Concepts operationalized & instruments & techniques designed in US/UK/France etc.
“Colonialist”
Assumed criteria, models
Danger of miscomparison

Symmetrical projects
Conceptualized & designed in multiple countries – participation by “local” researchers
Search for “universal concepts”

Challenging:
Different assumptions,
Clash of intellectual styles

Conceptualization & operationalization

The Public Library concept

- Public Library
- Village reading room
- Community library
- Bibliothèque municipale
- MPCC
- Community resource center
- Telecenter

Concept extension

Adapted from Sartori, via Pennings et al. (2006:48-49) “Verzuiling” example)
Conceptualization & operationalization (2)

Fewer countries; more attributes in common (high concept intension)

Public Library

Village reading room

Community library

Bibliothèque municipale

MPCC

Village reading room

Community resource center

Telecenter

More countries; fewer attributes in common (low intension)
Conceptualization & operationalization (3)

- Internal validity
- External validity

Public Library
- Village reading room
- Community library
- Bibliothèque municipale
- Telecenter

MPCC
- Community resource center

Concept extension
Levels of analysis, cases, units of analysis

- Country
- Province/state
- County/district
- City
  - Library A
    - Children's Section
Levels of analysis

You could compare library systems of countries, states, counties, cities etc. These would be the cases.
Levels of analysis (2)

• Macro level: groups, systems, structures
  – e.g. Information literacy curricula of provinces or countries
• Micro level: individual activities or behavior
  – e.g. Information literacy of individual subjects
• Shuttling (interaction) between the two levels, combining macro & micro analyses can be very fruitful
• Danger of “ecological” or “aggregate” fallacies
• E.g.
  – Conclusions regarding information literacy of individual students on the basis of a comparison of their libraries' IL curricula
Multidimensional studies

- Country
- Province/state
- County/district
- City

Type of client, activity, service, etc.

Dimensions:
1. Geographical area
2. Type of library
3. Category of client

E.g.
Services to autistic children (3) in public libraries (2) in Wisconsin and Minnesota (1)
Distinguish between cases and units of analysis. They could be at different levels. In a comparison of children's libraries in Wisconsin & Minnesota, the states are the cases and children's libraries would be the units of analysis.
How many cases?

- Single case/country study
  - Controversial, is this comparative?
  - But good description is useful
- Case study approach
  - Few cases, many variables
- Survey (“statistical”) approach
  - Many cases, fewer variables
Few books published in African languages

Speakers can’t afford to buy books

No bookshops, poor distribution where speakers live

Not financially viable

Speakers can’t read

Prefer to read English

Dependence on school text market

No interest among speakers

Books = school

Literacy rate

Example (single case) from South Africa
Comparison of two cases

Country A

Literacy rate

Book titles published

Country B

Literacy rate

Book titles published
Comparison of many cases

Choice:

Small N, many variables, more insight, less external validity
Large N, fewer variables, less insight, more external validity

Literacy rate

Book titles published
Which cases? Which countries?

- Important decision with small N
- No random sampling: purposive selection of cases
- Countries that appear to be similar?
  - Botswana, Lesotho, Swaziland
  - Estonia, Latvia, Lithuania
- Countries that appear to be dissimilar?
  - South Africa, South Korea, Spain
- Either strategy can work – it all depends...
- J.S. Mills: Methods of agreement & difference
MSSD: Most Similar Systems Design

Country A
Former British colony
Medium literacy
Medium GDP
Multiple languages

Country B
Former British colony
Medium literacy
Medium GDP
Multiple languages

Country C
Former British colony
Low literacy
Medium GDP
Multiple languages

Local public libraries

No Local public libraries
MDSD: Most Different Systems Design

Country D
Nordic
High literacy
High GDP
Two languages.

Country E
Latin America
High literacy
Medium GDP
One language

Country F
Former British colony
High literacy
Medium-low GDP
Multiple languages

Local public libraries

Local public libraries

Local public libraries
MDSD: Most Different Systems Design

Country D
Nordic
High literacy
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Multiple languages

Local public libraries

NB: Very simplistic examples. It's a bit more complicated than this. Number of cases is also significant.
Equivalence over identity

- Experience of European Social Survey
- Reliability of quantitative research depends on the “principle of equivalence”
  - Probability of inclusion in a random sample
    - Different sampling frames in different countries
  - Response rate
  - Questions (should have broadly equivalent meanings to all respondents) – “spurious lexical equivalence”
    - E.g. “left, center, right”, “liberal-conservative” continuum, “strong leadership”, “nationalism”, “democracy”
  - “Can questions travel successfully?”
Spurious lexical equivalence

USA

School

K-12
Elementary
Middle
High

Junior College
Community College
Four-year College
University

South Africa

School
Primary
Middle?
Secondary

Post-Secondary
Nursing, teachers Colleges
University of Technology
University
Equivalence

- Principle of equivalence (cont'd.)
  - Coding schemes should be designed to minimize differences between coders
  - Methodological and procedural habits of researchers in different countries (39 national institutions involved)
    - Training of field workers
    - Interviewing styles
    - Visual aids
    - Socio-economic classifications
  - Emphasis on equivalent, not identical, methods & measures
Comparison…

Studying two or more cases, systems, countries etc. is not enough.

For comparative research we need:

- Juxtaposition
- Identification
- Analysis
- Explanation

Contextual factors

Similarities and differences