

Getting to Grips with Research...

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Overview

- P O'Sitivist and Ethna O'Graphy
- Some competing dichotomies in research
- Geographic polarisation
- Some concluding observations (not Conclusions)

The Tale of P. O'Sitivist

- Paper rejection problem - scientific investigation
 - Accepted v. rejected paper titles?
- Colonicity, esotericity, polysyllabicity hypotheses
- Choosing statistical tests
- Conclusions & further research
 - Longer titles
 - Colon + em-dash

The Tale of Ethna O'Grady

- Anthropologist in IS clothing - no barriers to entry
 - Quest for deep, beyond superficial, meaning
- Project: determine information requirements for computer system for a video shop
- Grounded Theory (GT) approach
 - Let requirements “crawl in by themselves”
 - Complete ignorance of how a video shop operates actually an advantage (cf. Glaser, 1992)

The Tale of Ethna O'Grady

- Exploitation, adultery, theft, violence unacceptable
 - Only 4 eligible films
 - Counselling service
- 1000+ pages of field notes, 200+ hours of video footage, Rorschach ink-blot tests
- 6 months - *Preliminary Requirements Denouement*
 - uncovering/peeling away metaphor
- Angry reaction
- Need for new paradigm...ANT

(Some) Competing Dichotomies

- Ontological Level
 - Relativist v. Realist
- Epistemological Level
 - Interpretivist v. Positivist; Subjectivist v. Objectivist; Emic v. Etic
- Methodological Level
 - Qualitative v. Quantitative; Exploratory v. Confirmatory; Induction v. Deduction; Field v. Laboratory; Idiographic v. Nomothetic
- Axiological Level
 - Relevance v. Rigour
- Not an exhaustive list
- Hierarchies rather than dichotomies

Positivism v. Interpretivism

- Positivism
 - Emphasis on rigour, objectivity, measurement, reductionism, reproducibility
 - Primacy of 'scientific' method
- Interpretivism
 - No universal truth or reality
 - Researcher's own frame of reference important
- Positivism widely criticised
 - Reductionism v. emergent holism
 - Sterile
 - Reproducibility
 - Myth of objectivity
 - Can't satisfy its own standards

Quantitative v. Qualitative

- Quantitative
 - View that scientific maturity increases as quantification increases
 - “Whoever condemns the supreme certainty of mathematics feeds on utter confusion”
 - Primacy: 75% of IS studies (Orlikowski & Baroudi, 1990)
 - However...
 - » Omission of critical factors
 - » Spurious accuracy – mistakenly confused with rigour
- Qualitative
 - What things exist rather than how many there are
 - ‘Thick’ description
 - However...
 - » Loosely-related stories

Exploratory v. Confirmatory

- Exploratory
 - Discover patterns in data --> explain and understand --> possible generation of hypotheses
- Confirmatory
 - Testing of hypotheses
- Parallels with understanding v. prediction
- In new disciplines, exploratory strategy is more appropriate
 - But often viewed as background work before 'real' research begins
- *“The context of discovery has hardly been mined while the context of justification has been overburdened with trivial investigations”*

Induction v. Deduction

- Deduction
 - Uses general results to ascribe properties to specific instances.
 - Associated with theory verification/falsification & hypothesis testing
 - But reveals nothing “except what the infirmity of our own minds has so far concealed from us” (Medawar, 1963)
- Induction
 - Begins with specific instances which are used to arrive at overall generalisations which can be expected on the balance of probability
 - Plays an important role in theory/hypothesis conception but denounced by Popper (1968)
- “Intellectual immorality...(of)...generalising beyond one’s data”

Field v. Laboratory

- Research (arguably) involves simultaneous maximisation of
 - Generalisability over populations of Actors (A)
 - Precision of measurement of Behaviours (B)
 - Realism of Context (C)
- Field research
 - Improves C at expense of B and possibly A
 - Experience of field research has often been diametrically-opposed conclusions
- Lab experiment
 - Improves B at expense of C and possibly A
 - Certain issues unethical or impractical to generate in laboratory

The Polarisation Phenomenon

- Primacy of 'hard/rigorous' approach
 - Akin to '*According to the teachings of the Church*'
 - 'Soft' OK if conducted as scientifically as possible
 - Preliminary stage before 'real' research begins
- Why?
 - Striving for respectability
 - Short-term tenure-driven
- Geographic polarisation

Geographic Polarisation – ‘Rigorous Research’ Stereotype

- Research forced to fit hypothesis-testing model – but trivial hypotheses often
- Research must be grounded in a suitable theory base...
...but anything previously published will do as a theory base
- Data analysis increasingly complex...
...but best explained by evolution of statistical software packages
- Artificial context – student surrogates
 - “a system in serial arrangement cannot be better than its weakest part”*
 - “If it (research project) isn’t worth doing, it isn’t worth doing well.”*

WHEN YOU PIRATE MP3S,
YOU'RE DOWNLOADING
COMMUNISM



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A REMINDER
from the
Recording Industry Association of America

Geographic Polarisation: 'Relevant Research' Stereotype

- Relevance label is self-proclaimed and meaningless in absence of rigour
- Sloppy research method – constructs not validated, over-generalisation
- Case Studies with convenience sampling
- Action Research & Grounded Theory common – but really an excuse to dive in without preparation
- Faddish: CST, Structuration Theory, ANT, Habermas, Foucault, Giddens, Latour, Bourdieu

Concluding Observations

- Both poles cold!
 - Approach inherited unquestioningly & treated as universally applicable
 - Research about answering questions, not following styles (Dainty, 1983)
- Possible Strategies for Resolution
 - Supremacism, Isolationism
 - Integrationism, Pluralism

Concluding Observations

- Both 'hard' and 'soft' are *locally* 'true'
- *Opposite of great truth is also true (Niels Bohr)*

Absence makes the heart grow fonder

v.

Out of sight, out of mind

The proper place to study elephants is the jungle, not the zoo

v.

The proper place to study bacteria is the laboratory, not the jungle

Concluding Observations

- World best characterised by an interpretivist view
 - Reality socially constructed; multiple realities exist; 'scientific' research criteria both context and time dependent
- Research process inherently positivist
 - Papers necessarily structured in an idealised linear fashion; research findings unitised and categorised; reductionism in choices of findings to present; explanation of some cause-effect

Further Readings

- Caplan, Paula J. (1993) *Lifting a Ton of Feathers: A Woman's Guide for Surviving in the Academic World*. Toronto; Buffalo: University of Toronto Press.
- Feibelman, Peter J. (1993) *A Ph.D. Is Not Enough! A Guide to Survival in Science*. Reading, Massachusetts: Perseus Books.
- Mintzberg, H (1979) An emerging strategy of "direct" research, *Administrative Science Quarterly*, 24, 4, 582-589
- Peters, Robert L. (1997) *Getting What You Came For: The Smart Student's Guide to Earning a Master's or a Ph.D.*, Farrar Straus & Giroux.
- Sternberg, David Joel (1981) *How to Complete and Survive a Doctoral Dissertation*. New York: St. Martin's Press.
- Toth, Emily (1997) *Ms. Mentor's Impeccable Advice for Women in Academia*. Philadelphia: University of Pennsylvania Press

Discussion Questions

- Based on the Fitzgerald & Howcroft paper, identify your position on
 - Ontology
 - Epistemology
 - Methodology
 - Axiology
- Are these research paradigms incommensurable?