Research Paradigms, the Philosophical Trinity, and Methodology

by

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Presentation Objectives

- Outline a reasoning process that leads to the selection of a methodology that ensures alignment between the:
  - researcher’s belief system,
  - research paradigm, and
  - research methodology.

- Introduce the idea of the ‘Philosophical Trinity.’

- To make explicit my philosophical posture.
Theories are nets to catch what we call ‘the world’: to rationalise, to explain, and to master it. We endeavour to make the mesh ever finer and finer.

Sir Karl Popper, 1902–1995, Austrian Philosopher
What is a Paradigm?

According to Kuhn there are two essential qualities of a paradigm:

- First the paradigm must be ‘sufficiently unprecedented to attract an enduring group away from competing modes of scientific activity’ (Kuhn 1962, p. 10); and

- Second ‘sufficiently open-ended to leave all sorts of problems for the redefined group of practitioners to resolve’ (Kuhn 1962, p. 10).

Broadly there are two paradigms available to a researcher – quantitative and qualitative.
In both paradigms research is distinguished from private study by the requirement to have an impact on an audience other than oneself.

The paradigms are further distinguished from consultancy work by the obligation to make rigorous and defensible additions to a body of knowledge, rather than to solve an immediate problem.

This means that each research paradigm of necessity has a preoccupation with theory, and particularly with the ‘philosophical trinity’ of theory.
In philosophy, however, we are concerned not with what belongs exclusively to the past or the future, but with that which *is*, both now and eternally – in short with reason.

Georg Hegel, 1770-1831, German Philosopher
The questions:

- ‘What exists?’,
- ‘How do I know?’, and
- ‘What is valuable?’

Together form the philosophical trinity.

Each is a philosophical discipline in its own right.
Ontology

- Ontology is the philosophy of the world view, or ‘weltanschauung’ of reality (Heron & Reason 1997; Hitchins 1992).

- The seminal ontological question for a researcher is - ‘Is there a “real” world out there that is independent of our knowledge of it?’

- The answer to this question firmly positions the researcher into one of two schools - the essentialist or foundationalist school, or the anti-foundationalist school.
Epistemology is the philosophy of knowledge and justification (Audi 2000).

The seminal epistemological question for a researcher is - ‘Can “real” or “objective” relations between social phenomena be identified, and if so how?’

The answer to this compound question positions the researcher into one of three schools – idealists, empericists, or realists.
Ontology and epistemology deal with truth, however axiology is about values and ethics (Mingers 2003).

The seminal axiological question for a researcher is - ‘What is the ultimate purpose of the inquiry?’

The first position is valuing knowledge for its own sake and as an end in itself: this is the Aristotelian School (Heron & Reason 1997).

The second position values knowledge as a means to inform, transform, or enable positive change: this might be called the ‘Applied School’.
The quantitative research paradigm typically has an essentialist ontology, empiricist epistemology, and either an Aristotelian or applied axiology.

The qualitative research paradigm characteristically has an anti-foundationalist ontology, a realist or idealist epistemology, and an applied or Aristotelian axiology.

- The realist epistemology in this paradigm gives rise to the constructivist research tradition, and the idealist epistemology results in the subjectivist tradition of inquiry.
The researcher is seeking to maximise the overlap between the ontological, epistemological and axiological positions.

Philosophical alignment leads to another trinity: the alignment between the researcher’s belief system, the research paradigm, and the research methodology.
Methodology

It is a capital mistake to theorise before you have all the evidence. It biases the judgment.

What is Methodology?

- Methodology is defined as:

  - 'a generic combination of methods that is commonly used as a whole – as in soft systems methodology, strategic options development and analysis, or survey methodology covering the design and analysis of questionnaires (Mingers 2003, p. 559).'

- The seminal question of a methodology is - ‘How can a researcher discover whatever they believe can be known (Guba & Lincoln 1998)’
Methodology Rich Picture

Methods
(procedures, tools and techniques)

Methodology
Hitchins (1992, p. 225) says the seven essential attributes of a methodology are:

- it applies to any system;
- is simple;
- is comprehensive;
- is creative and innovative;
- is for individual and team use;
- is supported by tools and methods; and
- is proven in practice.
Methodology and the Trinity

- Alignment of the philosophical trinity provides the desired logic attributes of the methodology.

- Ideally the researcher will align their own belief system (the philosophical trinity), with the research paradigm, and the research methodology to be employed.

- In order to justify the methodology, and to make rigorous and defensible additions to a body of knowledge, the researcher must make explicit their views on the philosophical trinity.
My Philosophical Posture

I shall certainly admit a system as empirical or scientific only if it is capable of being tested by experience.

Sir Karl Popper, 1902–1995, Austrian Philosopher

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All social phenomena are socially constructed and as such must be positioned in time, space and culture.

Some social phenomena can be decomposed to smaller components, providing they are positioned in time, space and culture.

Real properties are emergent depending on where the system boundary is drawn.
Realist Epistemology

- Knowledge is both created and constructed by an individual within a social and cultural system located in time and space.

- Individuals can share socially constructed knowledge.

- Knowledge is therefore both material and immaterial.
Applied Axiology

- Knowledge is actually information in action and therefore is already being applied to a situation.

- Little point in understanding for the sake of understanding.

- Knowledge is and must be purposeful!
This philosophical posture clearly leads to a constructivist tradition qualitative research paradigm.

It also positions me in the systems school.
Given my philosophical posture I am seeking a methodology or methodologies that:

- explores participants’ world-views on knowledge and workplace productivity, and contrasts them with the debate in the literature – that is the methods are participant centred;

- allows me to develop a theory of knowledge productivity from the data that is ultimately acceptable to a wider audience – that is the methods are researcher centred; and

- permits either a generic model of knowledge productivity or a public sector model of knowledge productivity to be developed.
My desired research outcome is to produce a generic model of knowledge productivity.

My primary research question is ‘How can public sector organisations enable knowledge for improved productivity and positive exploitation?’

Alignment of my philosophical posture with my desired research outcome and my primary research question suggests Soft Systems Methodology, Grounded Theory and Action Research are suitable methodologies.
Questions?

‘It is better to know some of the questions than to think you know all of the answers.’

James Thurber, 1894-1961, American Humorist.


PhD Mind Map

Chaos Into order: towards a generic model of knowledge management for the public sector

Managing knowledge in the public sector: case studies of current practice

Enabling productivity in the public sector: a knowledge management model

Grounded Theory
Soft Systems Methodology
Action Research

What constitutes data, information and knowledge for public sector organisations?
How do public sector organisations evaluate a knowledge claim, both at the personal and organisational level?
What workplace practices support individual and organisational productivity, and in turn enable knowledge?

How can public sector organisations enable knowledge for improved productivity and positive exploitation?
How do public sector organisations actually manage knowledge?

Most discussions present 'models of knowledge' rather than 'knowledge management models'.

Organisations find it difficult to exploit knowledge because they don't define what constitutes knowledge for them.

Organisations find it difficult to implement knowledge management initiatives because the examples in the literature are 'models of knowledge' rather than 'knowledge management models' with explicit processes.

Data, information and knowledge are interacting holons within complex social systems
Each social system has its own data, information and knowledge holons.
Public sector organisations are complex soft systems, consisting of formal and informal holons each with their own knowledge holons.

Knowledge itself cannot be managed, but organisations that unite their holons with a common purpose and focus on individual and organisational productivity actually enable knowledge.

Produce a generic model of knowledge productivity
Produce a knowledge productivity model for the public sector

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