

Research Methods for Business and Management

Session 5- Research Philosophy

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Last Workshop

- What is Research?
- Clarifying your Research Idea
 - Title
 - Research Question
 - Aim
 - Objectives
- Writing a Literature Review
- Research Poster
- **Activity- to complete Worksheet 1**

This Session

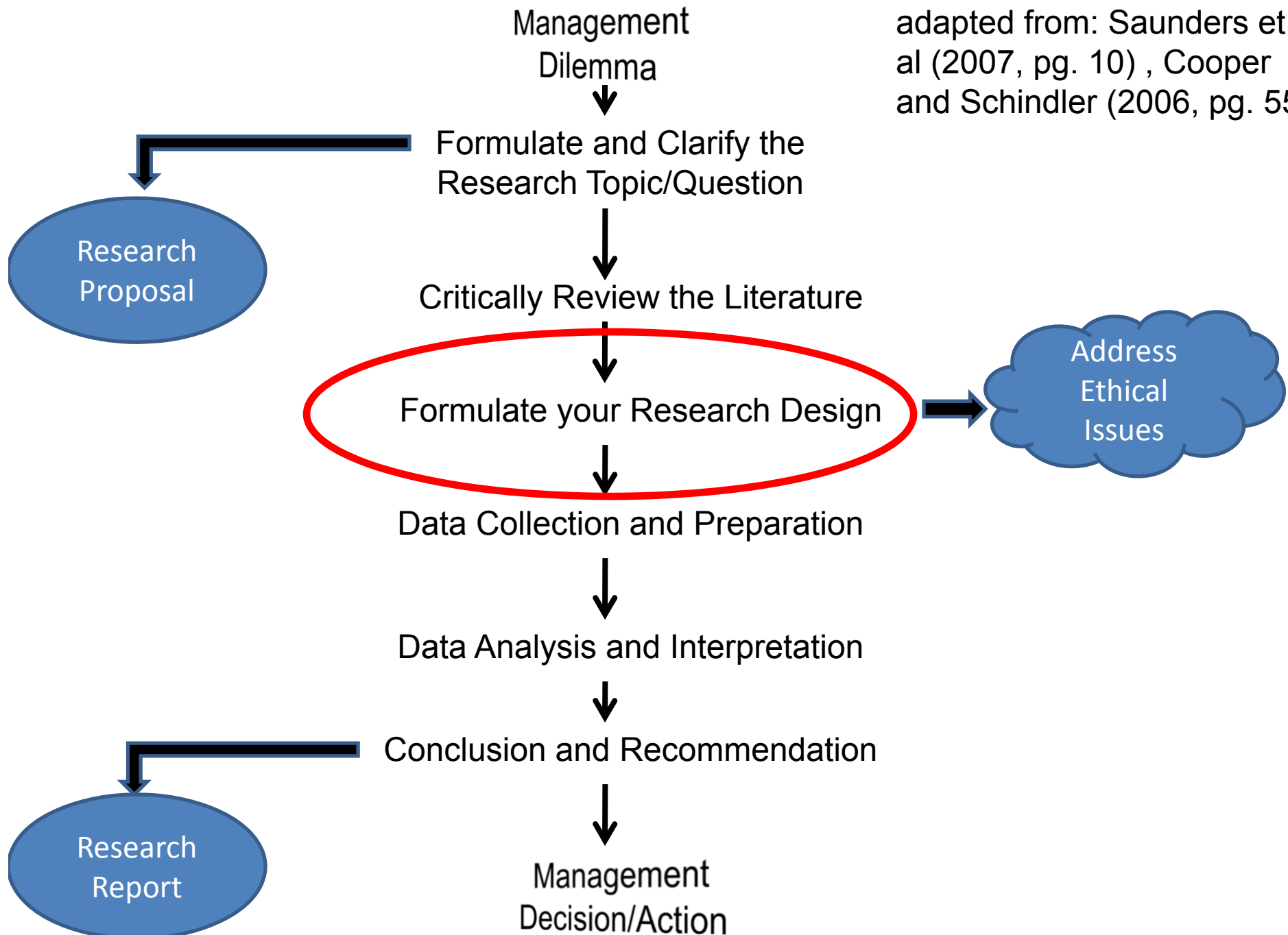
- What is meant by Research Design?
- Assumptions of Main Paradigms
 - Epistemology
 - Axiology
 - Ontological
- Research Paradigms or Philosophies
 - Positivism
 - Phenomenology
 - Pragmatism

What have we done so far?

- What is Research?
- Clarifying your research
- Literature Review

**what's the next step
in the research process?**

The Research Process
adapted from: Saunders et al (2007, pg. 10) , Cooper and Schindler (2006, pg. 55)



What is the purpose of the Research Design?

- To operationalise the research objectives
- It is the HOW of the research
- Given that you have set out to find an answer to the RQ, the question now is:
- HOW are you going to do it?
- So, its all about HOW

Importance of getting the right Research Design

- **Reliability-**

- The extent to which results are consistent over time and an accurate representation of the total population under study and
- if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable.

- Validity
 - determines whether the research truly measures that which it was intended to measure or how truthful the research results are.
 - In other words, does the research instrument allow you to hit "the bull's eye" of your research object?
- Generalizability
 - will the findings apply to other people, organizations, industry and/or other situations that the study's sample supposedly represents.

What is Research Design?

- Research design is the **plan** and the **procedure** for research that span decisions from:
 - Broad assumptions
 - to detailed methods of data collection and analysis
- These decisions must be deliberated by the researcher and based on:
 - the nature of the research problem or issue and
 - The researchers' personal experiences

- **Essentially**, the research design answers three key questions:
 1. **What-** are the underlying assumptions,
 2. **How-** you are going to conduct the research, specifically the data collection and analysis and
 3. **Why-** this chosen plan would be best suited for the study. A justification of your choices.

Framework for Design adapted from Creswell

(2009)

Philosophical Worldviews

- Epistemology
- Ontology

Selected Research Strategies

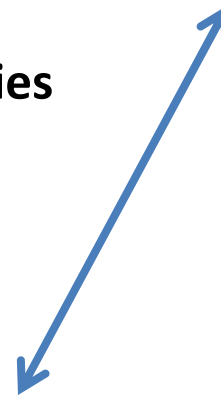
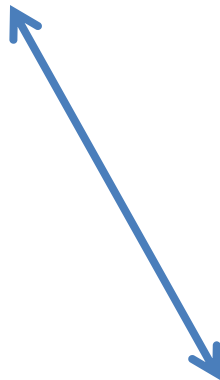
- Positivistic Strategies
- Phenomenological Strategies
- Mixed Methods

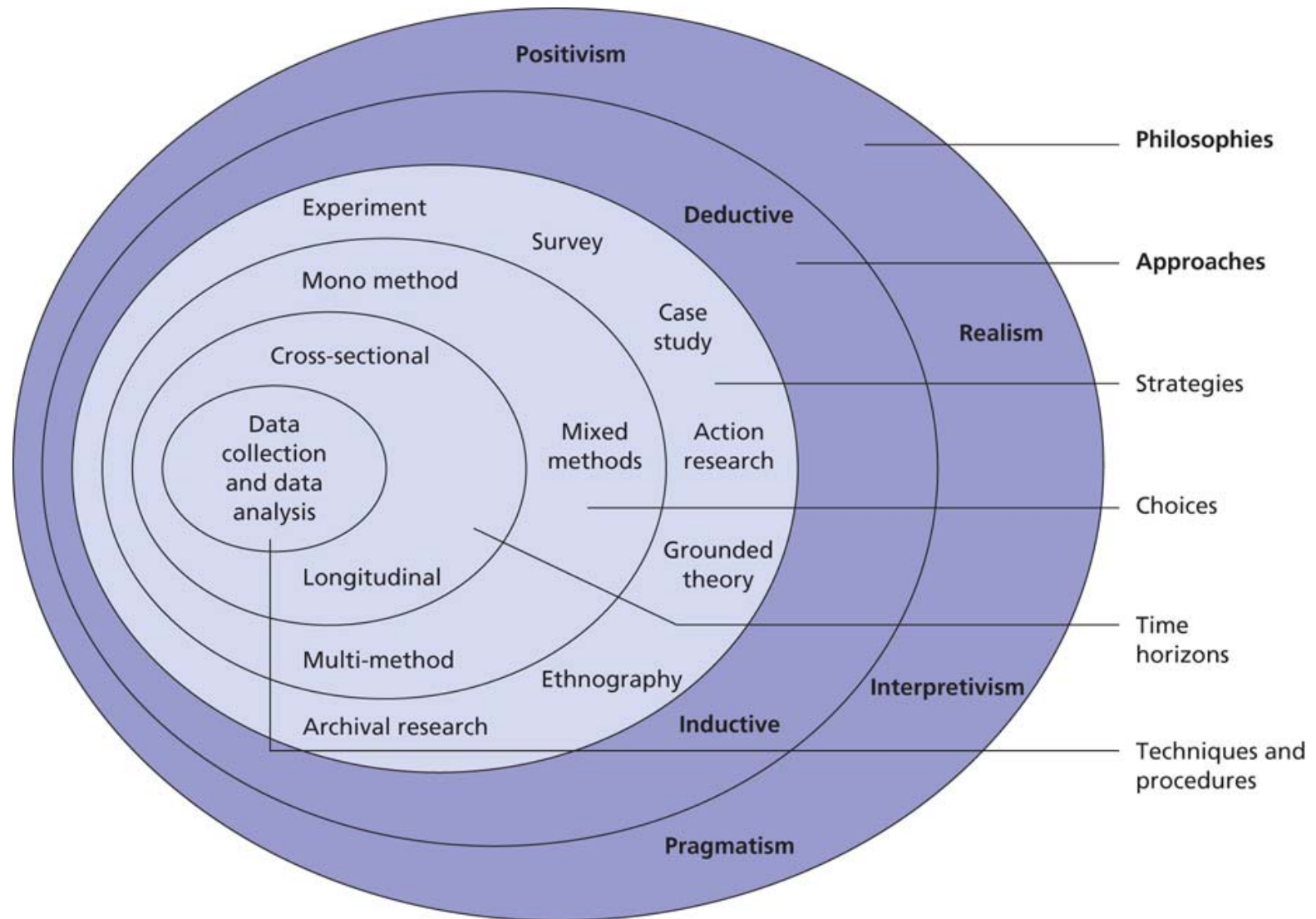
Research Paradigm/Philosophies

- Positivistic
- Phenomenological
- Mixed Methods

Research Techniques/Procedure

- Data Collection
- Data Analysis
- Interpretation

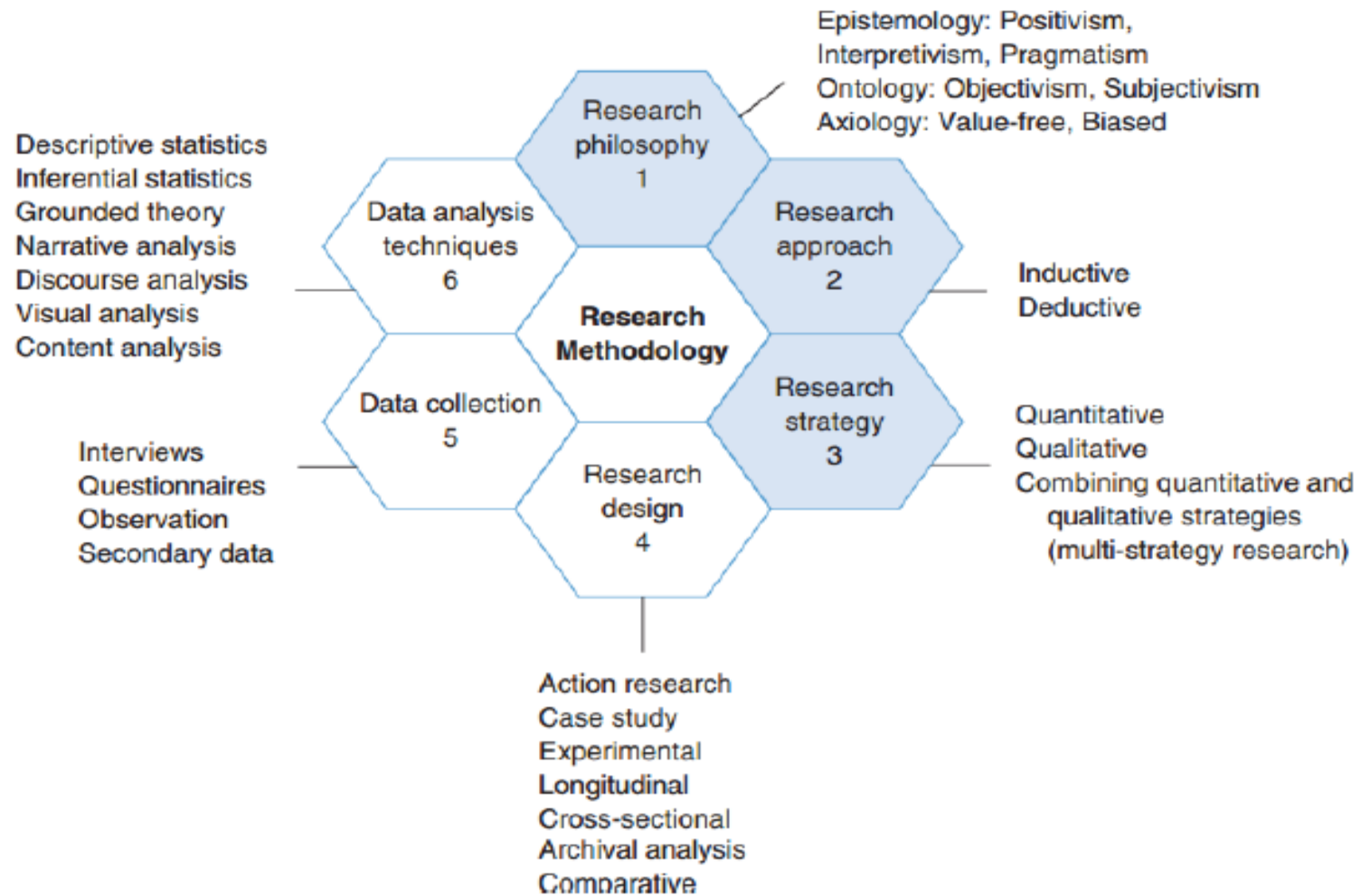




The Research 'Onion'

Saunders et al (2006)

The Honeycomb Model- Wilson (2013)



Key terms-definition

- **Research Paradigm**-describes a cluster of beliefs and dictates what should be studied, how research should be done and how the results should be interpreted. Bryman (2008, p.696)
- **Research Methodology**- to emphasize an overall approach to the research process e.g. Survey or Action Research
- **Research Method**- used to outline a specific research technique or procedure for collecting and analyzing data e.g. Questionnaire or Focus Group

Some clarifications on terms

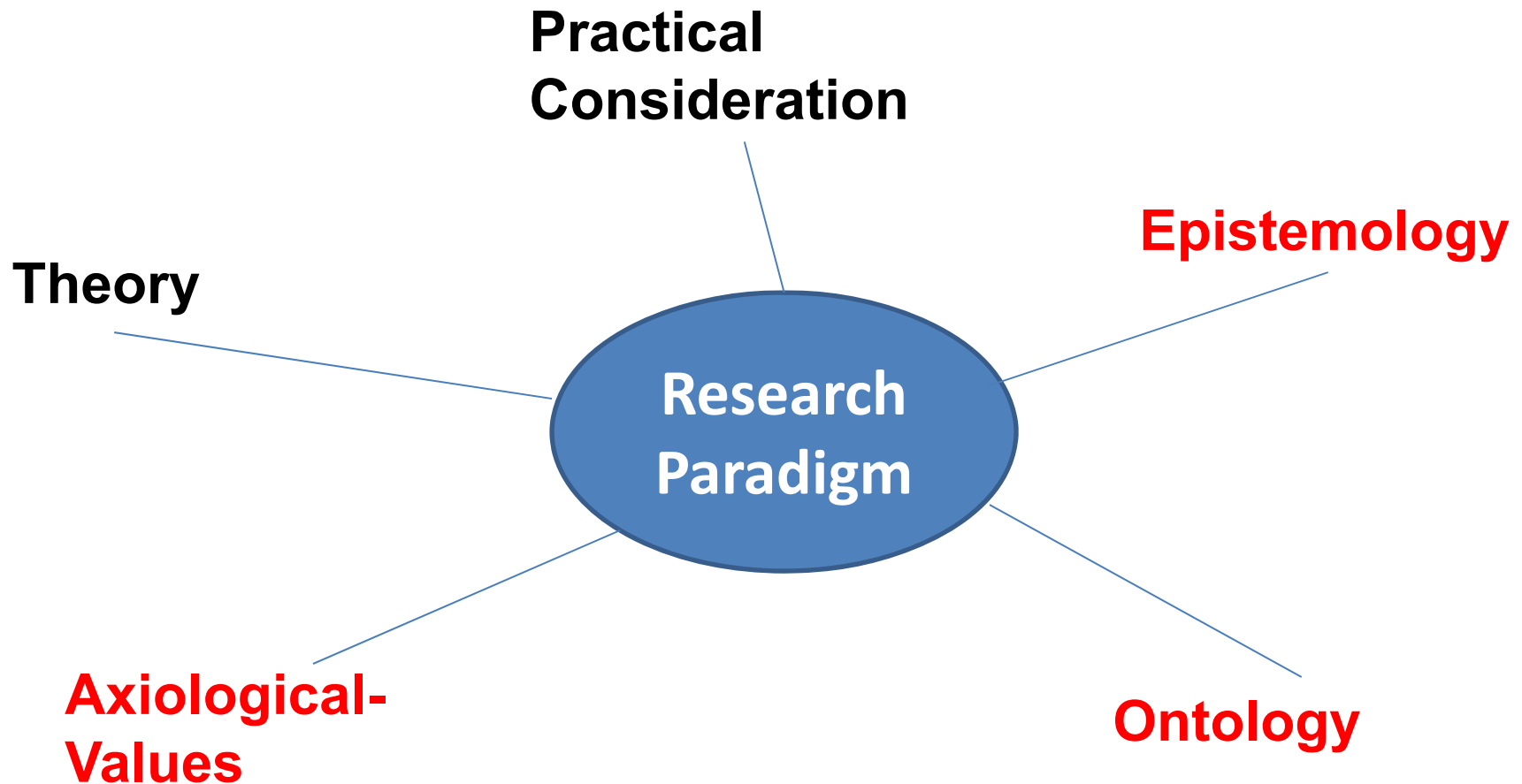
- Some say Research **Paradigm** (Lincoln & Guba 2000) Philosophy (Saunders et al 2007) or even Worldview (Creswell 2009)
- Some use the term Research **Methodology** or Research Strategy
- Some say Research **Methods** or Technique or Procedure

Worldviews or Assumptions

- These are general orientation about the world the researcher holds. Creswell (2009, pg.6)
- The types of beliefs held by researchers will often lead to embracing a particular *paradigm*.
- Paradigm are opposing worldviews either:
 - Scientific (objective) i.e. **Positivist** or
 - Constructivist (subjective) i.e. **Phenomenologist**
- There are many worldviews based on:
 - Epistemology
 - Ontology

Influences on Research Paradigm

Bryman (2008, p.24)



Epistemology

- Research is about the **search for knowledge**, but the question is, what is knowledge and can that knowledge be in any sense **true or false?**
- It is a branch of philosophy that deals with knowledge and tries to answer the question as to whether a given body of knowledge is **adequate or inadequate**
- It is best understood as the science of obtaining knowledge and justification (evidence for the knowledge if you like)

Essentially..

- “Epistemology is concerned with the study of knowledge and what we accept as being valid knowledge “Collis and Hussey (2003, pg.48)
- “An Epistemological issue concerns the question of what is (or should be) regarded as acceptable knowledge in a discipline” Bryman (2008, pg. 13)

A Simple Example

- Suppose I ask the question: are your friends trustworthy?
- Most of us would answer Yes
- But how did we arrive at this knowledge, knowledge here being YES and
- What evidence do we have for it?
- Is it that the knowledge 'YES' is true or false, accepted or unaccepted, or even valid?

Philosophy of Epistemology

Rationalism

- knowledge can be derived through the logic of reasoning
- adopts an *a priori* stance to knowledge, which is to say knowledge is gained independently of sense experience
- Descartes (1641) suggests that knowledge is justified when there is perfect certainty, in other words there is an absence of doubt.

Constructivism

- knowledge to be *a posteriori* i.e. as the outcome of the interaction between the mind and environment
- Polanyi as cited by Sanders (1988, pg. 242) says “we must recognize belief once more as the source of all knowledge”.
- Mannheim explained that knowledge must be on the basis of "historical experience which has social reality at its vital center." Mannheim as cited by Remmling (1961).

The Objectivism vs Subjectivism Epistemological Stance

Objectivism

- Positivist's believe that only phenomena which are observable and measurable can be regarded as valid knowledge
- They try to maintain an objective and independent stance
- **This leads a Positivism or Realism Paradigm**

Subjectivism

- Phenomenologist 's believes that knowledge is based on the perception of the individuals
- They attempt to minimize the distance between the researcher and that which is being researched
- **This leads to Phenomenological or Interpretivism Paradigm**

Ontology

- **What is the nature REALITY?**
 - “ONTOLOGY is concerned with the nature of reality..... and assumptions researchers have about the way the world operates and the commitment held to a particular view”

Saunders et al (2009, pg. 110)
- ‘Reality can be thought of as Knowledge of a phenomena’

- In this context we are thinking of ‘knowledge’ or perhaps more correctly the particular body of knowledge that is embedded in your research project
- Such as Leadership Styles, imagine it, just the way you would look at a say **a car**, and try to get to its substance and essence
- **Ontology** is a description, like a **formal specification of REALITY**, the concepts and relationships that can exist
- **Is that description external to or within the mind of the individual?**

So what about the car?

- How would describe it?
 - **Objectively** i.e. as you see it for what it is, independent! E.g. 1.6 engine, 4 doors, 5 passenger car
 - **Constructively** i.e. built up from your perception! E.g. cheap, poor quality, prone to theft, owned by low income earners, driven by thieves

Philosophy of Ontology

Realism

- takes on the view that there is a single truth
- Descartes (1641) in his suggest that beliefs about reality can only be guaranteed by what is indubitable or is based on what is indubitable, that is, concrete reality.

Idealism

- Therefore reality does not exist independently of our minds
- Kant (1781) suggest that there is no reality apart from what is in human mind and reality is a projection of the human mind
- Blaikie (1993, pg. 94) suggest that reality is about individuals and group interactions, therefore two realities alike cannot exist, resulting in no one truth, but indeed multiple realities of the phenomena.

Objectivism vs Constructivism

Bryman (2008, p.18)

Objectivism

- This is an ontological position that asserts that phenomena and their meanings have an existence that is **independent of social actors** i.e. beyond their influence.
- Therefore the description of the phenomena is based on facts that existed to be revealed, which can be measured and analysed and is ultimately, independent of the social actor's sense of experience

Constructivism

- This is an ontological position that asserts that phenomena and their meanings are continually **being accomplished by social actors**.
- Reality is produced through social interaction and in constant revision.
- This means that the description of a phenomena is a social construction built up from the perceptions and actions of social actor's

Two Extremes or Aspects

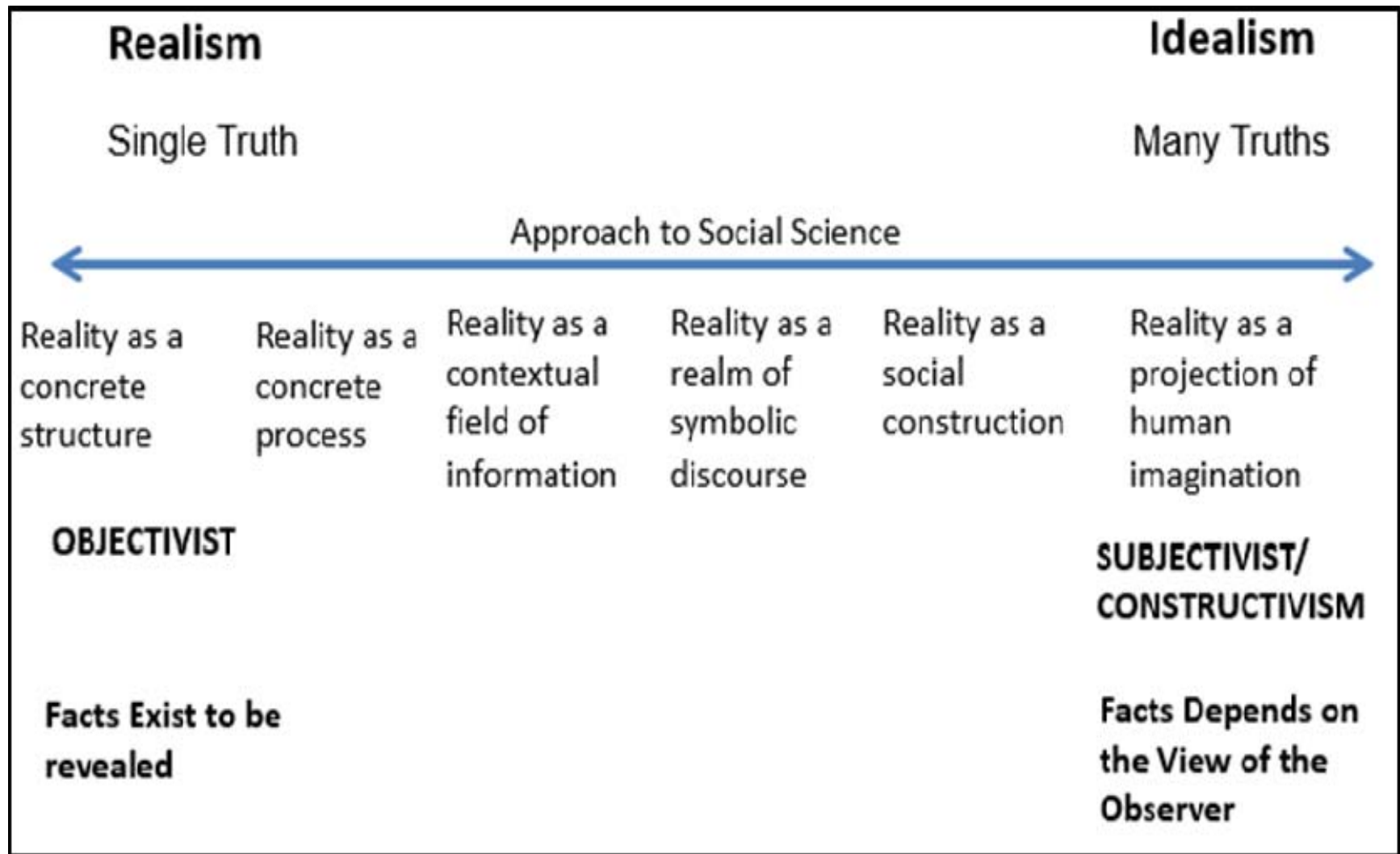
- You must decide whether you consider that REALITY is **Objective** and external to you the researcher, independent of your view
 - i.e. researchers assume the social world is the same as the physical world. Can attempt to measure, analyse and test
 - There is only ONE Reality

OR

- Socially constructed and only understood by examining the perceptions of the human actors. **Subjective**
 - i.e. researchers assume that there is no social world apart from that which is inside the individual's mind
 - There are Many Realities

Continuum of core ontological assumptions

Source: Adapted from Collis and Hussey (2003, pg.51)



Research Paradigms

- Positivism
- Phenomenology

Positivism

- Comte (1844) introduced the term
- Comte maintained that society could be analysed empirically just like any other subjects of scientific inquiry
- Positivism is based on the belief that all knowledge can be developed by observations and experiments

Positivism

- This approach **seeks facts or causes** of social or business phenomena, with little regard to the subjective state of the individual
- Logical reasoning is applied so that precision, **objectivity and rigour replace hunches**, experience and intuition as the means of investigation
- It is based on the assumption that **reality is independent of the researcher** and exists regardless of whether we are aware of it

Characteristics of Positivism

- Hussey and Hussey (1997) suggest that the main features are:
 - Producing large amounts of data
 - Uses large samples
 - Concerned with Hypothesis testing
 - Data is specific
 - Reliability is high
 - Validity is low
 - Generalize from sample

Process of Positivism

- For this type of research you are likely to use an existing theory to **develop a hypotheses**
- These **hypotheses will be tested** and confirmed or refuted, leading to further development of theory or Reality
- Deductive approach

Positivism and Ontology

- Positivism is based on Realism
- There is ONE single truth ONE reality
- The researcher's view of reality and actual reality are the same
- Reality is measurable, by scientific facts
- So positivism takes a **OBJECTIVISTS Ontological Stance**

Positivism and Epistemology

- Researcher and the phenomena are independent
- Knowledge is only valid if it is measurable
- Therefore it takes an **OBJECTIVISM Stance on Epistemology**

Phenomenology

- Many have argued against Positivism
- Pointing out that the social science **deals with action and behaviour** which are generated from within the human mind
- Social science researchers argue that “the positivist philosophy cannot account for the interaction between theory and fact” Seale (1999, pg. 21).
- Additionally, interpretivist such as Schutz (1970) claims that the positivists approach creates an oversight to human subjectivity.

- Popper (1980) rejects the claim that through science a theory can be justified or verified indubitably as purported by rationalist such Descartes (1641).
- Popper (1980, pg. 47) states “There can be no ultimate statements in science, and therefore none that cannot in principle be refuted, by falsifying some of the conclusions that can be deduced from them”.
- In essence, Popper is suggesting that positivism’s view of knowledge are generalizations deduced from the testing of theories and that have not been refuted to that point.
- This is Popperian view suggest that theory must always be tentative since it can be challenged.

Birth of Phenomenology

- Husserl (1963) provided the foundations for Phenomenology as we know it today
- According to classical Husserlian phenomenology, our experience is directed toward — represents or “intends” — things only *through* particular concepts, thoughts, ideas, images, etc.
- These make up the meaning or content of a given experience, and are distinct from the things they present or mean

- Phenomenology studies the structure of various types of experience ranging from perception, thought, memory, imagination, emotion, desire, and embodied action, and social activity, including linguistic activity.

- “The phenomenologist views human behaviour as a product of how people interpret the world. In order to grasp the meanings of a person’s behaviour, the *phenomenologist attempts to things from that person’s point of view*” Bogdan and Taylor (1975)

- They argued that the interrelationship of **researcher and object or reality was impossible to separate** and
- What existed in the social and human world was what we as researchers thought existed
- Therefore, the Phenomenological paradigm is concerned with **understanding human behaviour from the participant's own frame of reference**

- It is assumed that **Reality is within us**
- Therefore, the act of investigating Reality has an effect on that Reality
- Considerable regard is given to the **subjective** state of the individual
- Because it **focuses on meaning** rather than measurement

- Phenomenologist's believes that social Reality is dependent on the mind
- There is no reality independent of the mind
- Therefore what is researched cannot be unaffected by the process of the research
- **Phenomenologist adopt a Subjectivists Ontological and Epistemological Stance**

Features of the two main Paradigms

Source: Collis and Hussey (2003, pg 55)

Positivistic

- Tends to produce quantitative data
- Uses large samples
- Concerned with hypothesis testing
- Data is highly specific and precise
- The location is artificial
- Reliability is high
- Validity is low
- Generalizes from sample population

Phenomenological

- Tends to be qualitative data
- Uses small samples
- Concerned with generating theories
- Data is rich and subjective
- The location is natural
- Reliability is low
- Validity is high
- Generalizes from one setting to another

Another Perspective by Creswell (2009)

- Quantitative Research
- Qualitative Research

Quantitative Research

- ‘Quantitative methods’ is an umbrella term and covers a wide range of methods that have been **informed by positivist assumptions**
- Is a means for **testing objective theories** by examining relationship among variables
- These variables can be measured, so that numbered data can be analyzed using statistical procedures
- Those who engage in this form of research have assumptions about testing theories **deductively**

Payne and Payne (2004)

Quantitative Research

- The core concern is to describe and account for regularities in social behaviour
- Patterns of behaviour can be separated into variables, and represented by numbers
- Explanations are expressed as associations (usually statistical) between variables, ideally in a form that enables prediction of outcomes from known regularities
- Social phenomena is explored through systematic, repeated and controlled measurements.

Qualitative Research

- Qualitative methods are linked to the interpretivist perspective of philosophy.
- Silverman (1993: 170) has stated that qualitative methods are 'especially interested in how ordinary people observe and describe their lives'
- Is a means for exploring and understanding the meaning individual assign to a social problem
- Data typically collected in the participant's setting
- Data analysis **inductively** builds from particulars to general themes, where the researcher interprets the meaning of the data

Quantitative

- Useful when looking for facts or causes
- Controlled measurements
- Objective (predictive)
- Outside perspective
- Deductive and verification oriented
- Outcome oriented – does your variable really control something
- Particular and closed
- Assume a stable reality otherwise results are worthless

Qualitative

- Useful when trying to understand behaviours
- Uncontrolled observation – that is just observation without you controlling
- Subjective
- Insider perspective on the data
- Discovery-orientated, explanatory and descriptive
- Process orientated – that is you drive the research
- Holistic and open
- Assume a very dynamic reality

Fundamental difference

	Quantitative	Qualitative
Principal Orientation to the role of theory to the research	Deductive-testing of theory	Inductive-generation of theory
Epistemological Orientation	Natural Science, Positivism	Interpretivism, Phenomenological
Ontological Orientation	Objectivism	Constructivism

For simplicity: the bottom Line

- Positivism = Deductive = Quantitative
- Phenomenology= Inductive = Qualitative
- *Be careful this not a strict rule*
- *Only meant to help you understand!!!*

Key Questions?

- Is it possible to hold a objectivist epistemology view and at the same time assume that reality is constructed?
- Or vice versa?
- **Further, Would it be accepted to use both a Qualitative and Quantitative approaches for your research?**

The Pragmatic Worldview

- **Pragmatism** arises out of actions, situations and consequences rather than classical considerations.
- Pragmatist focus on the research problem and use all available approaches to understand the problem
- Pragmatism is therefore not committed to one philosophy and reality

- Individual researchers have a freedom of choice
- Pragmatist believe in an external world independent of the mind as well as that lodged in the mind

Remember

- The research philosophy you adopt contains important assumptions about the way in which you view the world
- These assumptions will underpin your research paradigm, methodology and methods that you choose to conduct your research

A word on Research Methodology

- The Epistemological and Ontological view that research hold determine the Research Paradigm chosen
- Should it also determine the Research Strategy or Methodology?

Activity 1- Diagnosing Your Research Paradigm

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