Research Methods - Research philosophies

Session 4

Methodology: Research onion model

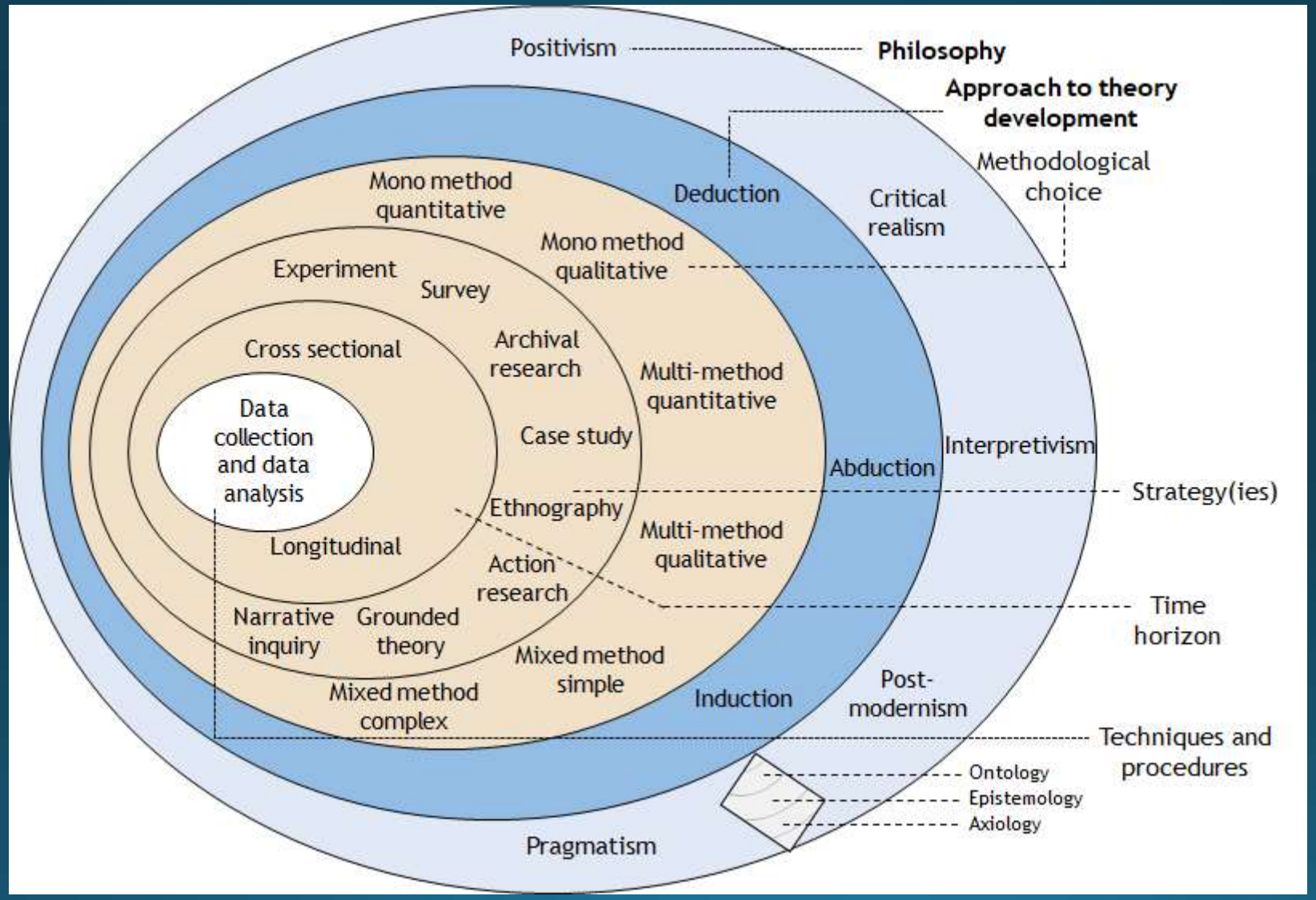

Figure 4.1 The research 'onion' (Saunders *et al.*, 2019, p.130)

Methodology: Research onion model

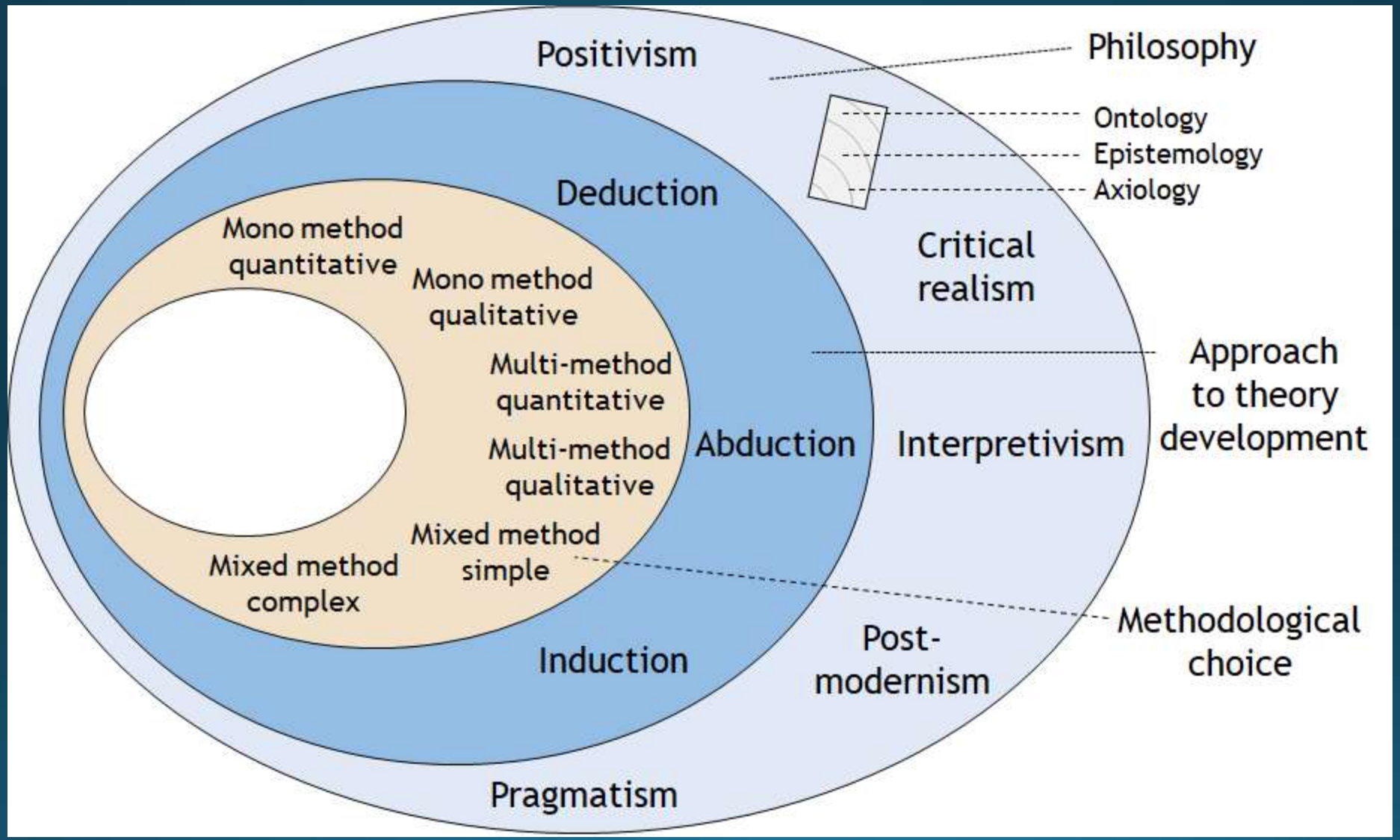

Figure 4.1 The research 'onion' (Saunders *et al.*, 2019, p.130)

Methodology: Research onion model

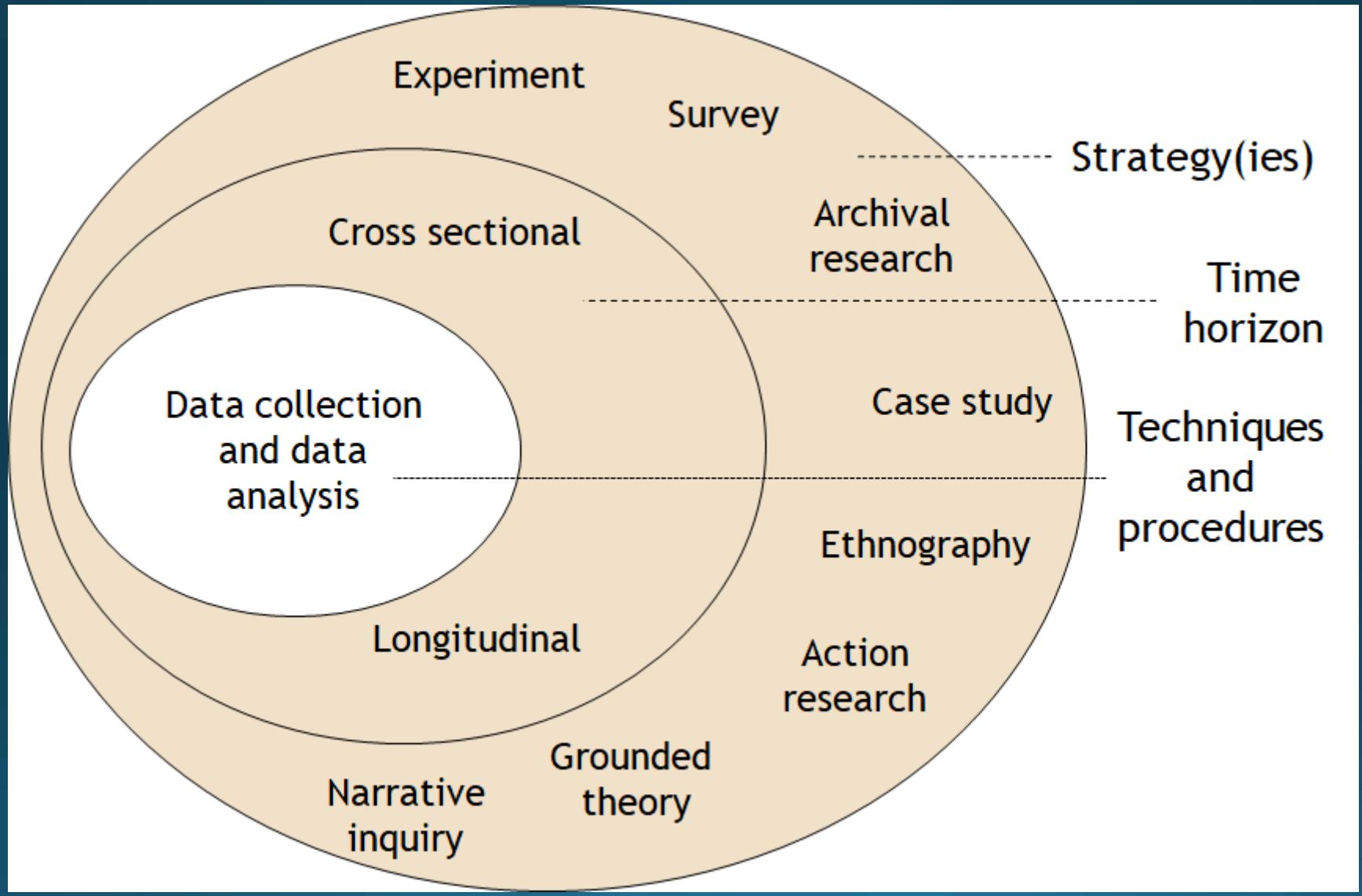

Figure 4.1 The research 'onion' (Saunders *et al.*, 2019, p.130)

Philosophy

Research onion: Philosophy layer

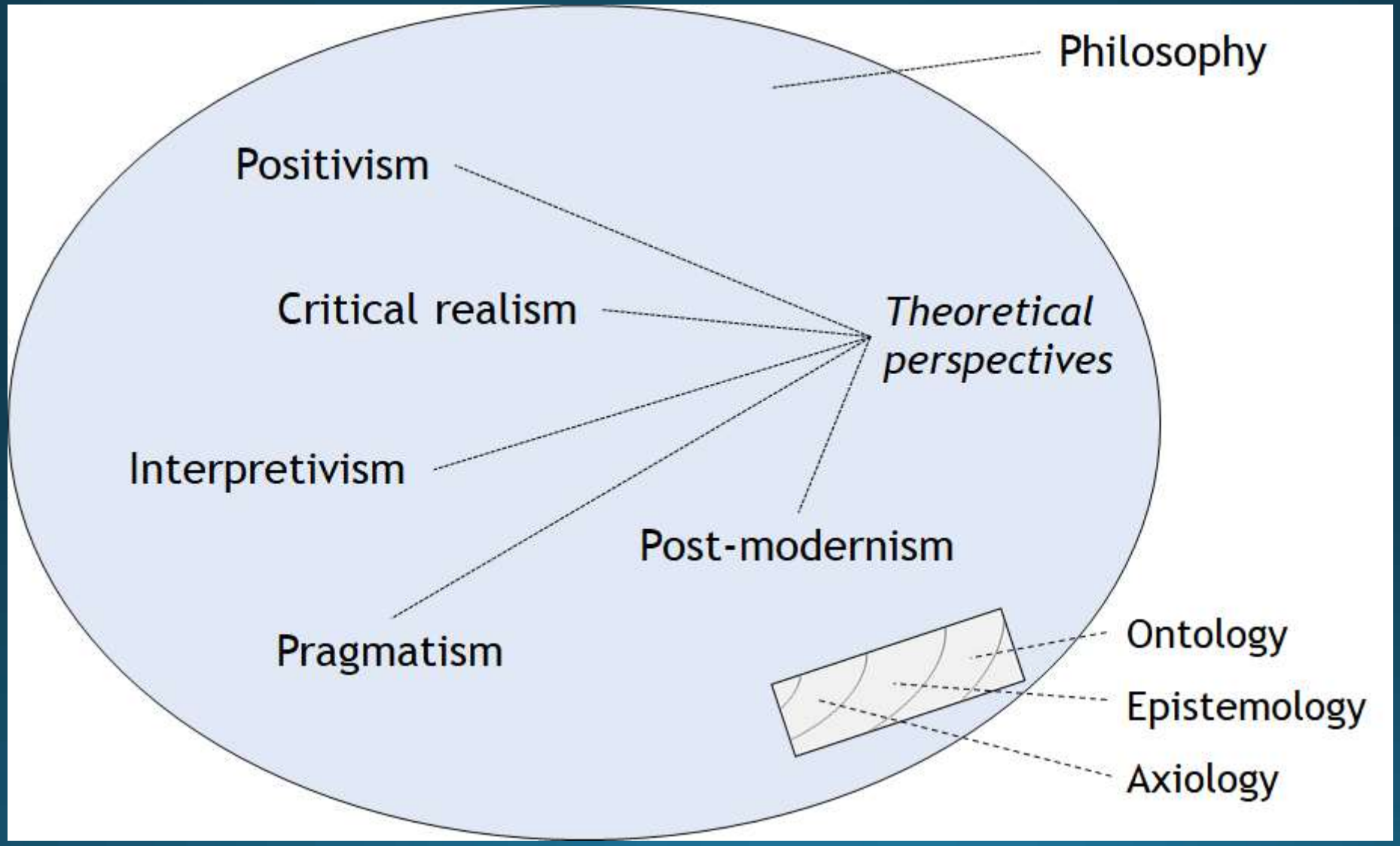

Figure 4.1 The research 'onion' (Saunders *et al.*, 2019, p.130)

Research philosophy

- System of beliefs/assumptions
- Worldview assumptions
  - shape research
- Pluralist perspective
  - each philosophy unique/valuable

(Saunders, 2019, p.159)

Ontology

Ontology is…

- 'assumptions about the nature of **reality**'
  (Saunders *et al.*, 2019, p.133)
- 'determines how you see the world … and, therefore, your choice of what to research'
  (Saunders *et al.*, 2019, p.133)
- 'embodies understanding *what is*'
  (Gray, 2017, p.21)
- 'the nature of existence, of what constitutes a reality that pre-exists our knowledge of it'
  (Bazeley, 2019, p.17)

Epistemology

Epistemology is…

- 'assumptions about **knowledge**'
  (Saunders *et al.*, 2019, p.133)
- 'tries to understand what it *means to know*'
  (Gray, 2017, p.21)
- 'the nature of and justification for knowledge'
  (Bazeley, 2019, p.17)
- 'the study of knowledge'
  (Moon and Blackman, 2014, p.1770)

Axiology

Axiology is…

- 'the role of values in human inquiry'
  (Lincoln and Guba, 2013, p.11)
- assumptions about 'the role of **values** and ethics'
  (Saunders *et al.*, 2019, p.134)
- seeks to describe 'the impact of … both your own values and those of the people you are researching'
  (Saunders *et al.*, 2019, p.134)

Ontology, epistemology and theoretical perspectives

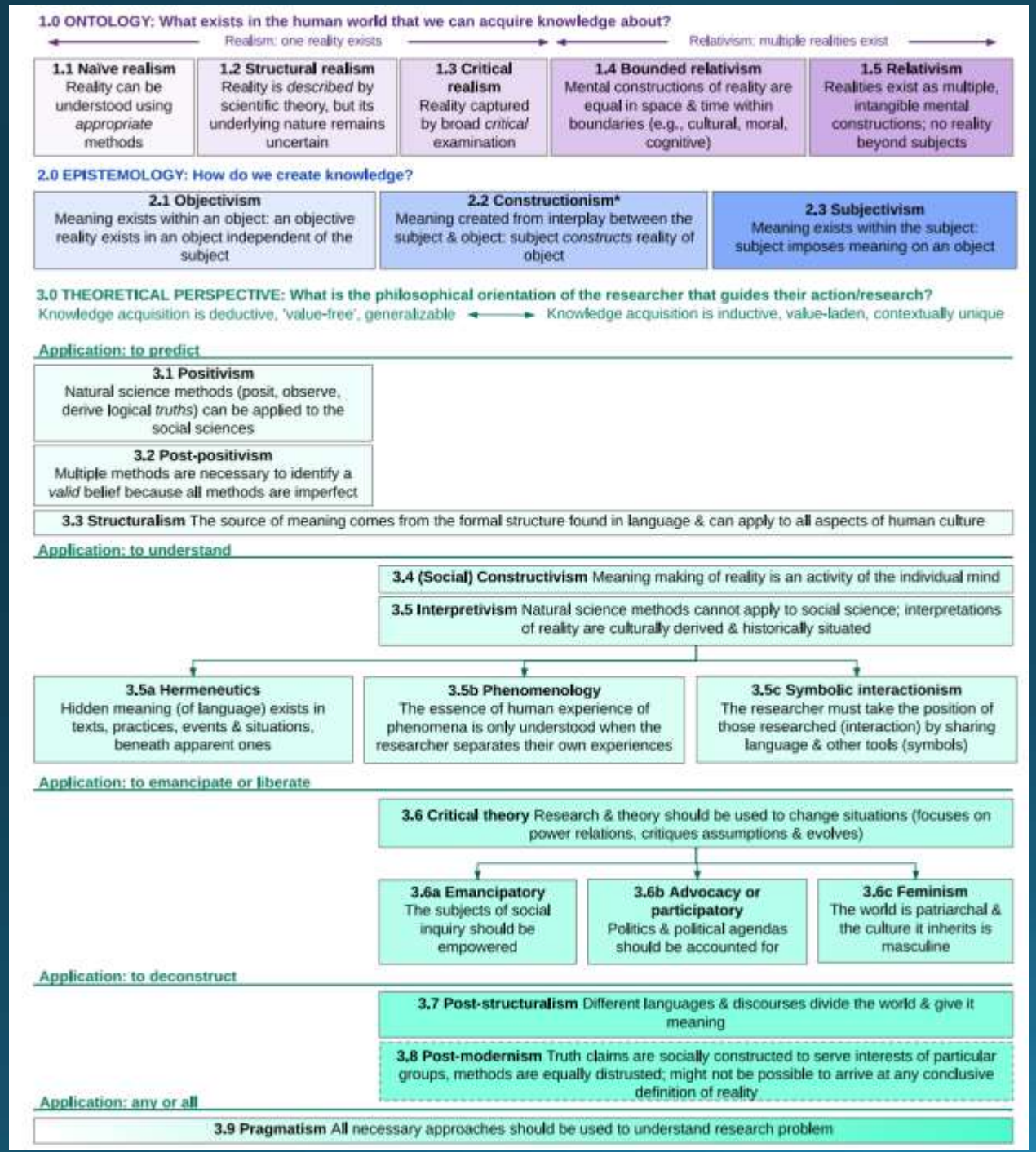

Figure 1. Social science research guide consisting of ontology, epistemology, and philosophical perspectives (Moon and Blackman, 2014, p.1169)

Ontology and epistemology

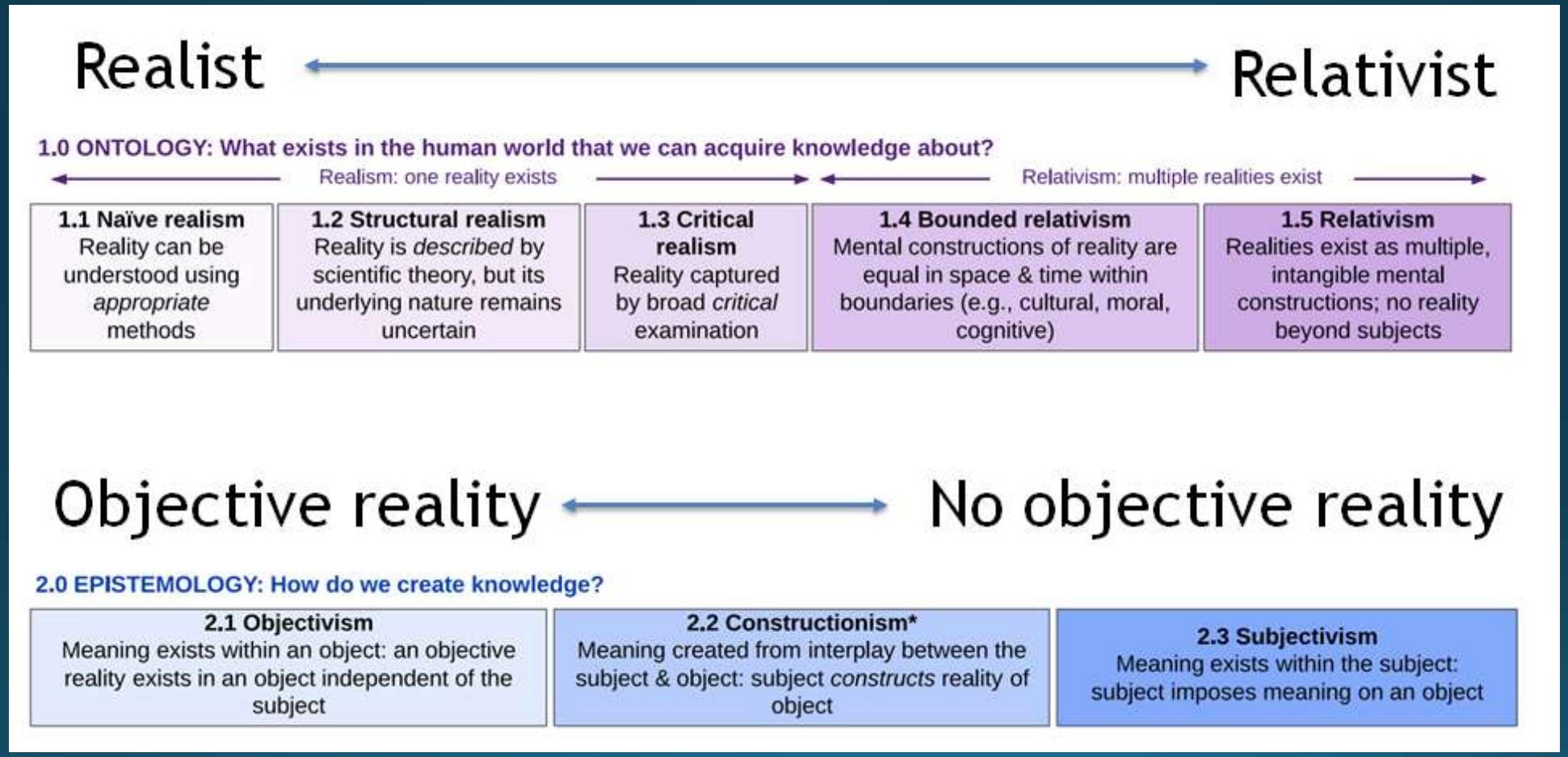

Figure 1. Social science research guide consisting of ontology, epistemology, and philosophical perspectives (Moon and Blackman, 2014, p.1169)

Theoretical perspective

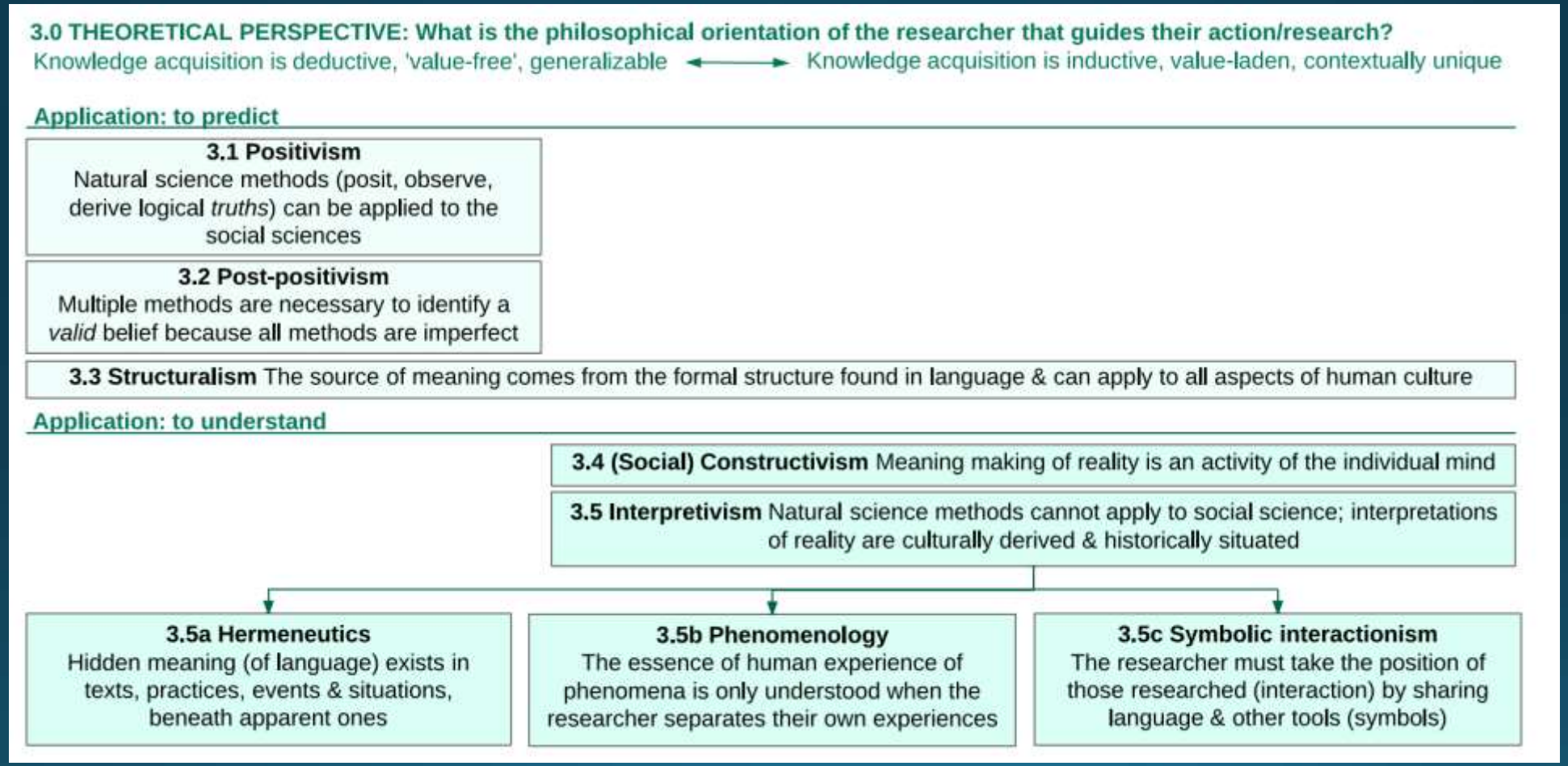

Figure 1. Social science research guide consisting of ontology, epistemology, and philosophical perspectives (Moon and Blackman, 2014, p. 1169)

Theoretical perspectives: 3.1 positivism

Positivists argue that:

- Reality consists of what is available to the senses
- Inquiry should be empirical and based upon scientific observation
- The natural and human sciences deal with (quantitative) facts and not with values
- Ideas are incorporated into knowledge - if they can be tested empirically

(Gray, 2017, p.23)

Theoretical perspectives: 3.2 post-positivism

Post-positivists:

- Independent reality exists
- Observation is inherently fallible – imperfect, approximated truth
- Emphasise inferential statistics (assigning probabilities - not certainties)
- Falsification - scientists should seek to falsify (rather than verify) theories/laws
- Value quantitative research

(Gray, 2017, p.48)

Theoretical perspectives: 3.3 structuralism

Structuralists:

- One true reality
- Structures around how reality is defined can change
- Social structures - patterns and forms of social relations
- Social reality must be understood in relation to overarching systems or structures

Theoretical perspectives: 3.4 social constructivism

(Social) constructivists:

- Multiple socially constructed realities
- Focus on unique individual experiences
- Knowledge is created by social relationships /interactions
- Subject and object are dependent

Theoretical perspectives: 3.5 interpretivism

Interpretivists:

- Focus on culturally derived/historically situated interpretations of the social world
- Compare words with other data
- Argue there is no direct/one-to-one relationship between subjects and objects
- See a complex world – no observable 'laws'
- Take an anti-positivist stance
- Value qualitative research

(Gray, 2017, p.25)

Interpretivism: 3.5a hermeneutics

- Reality is socially constructed
- Interpretation (over explanation/description)
- Social reality complex - cannot be understood through observation
- Interpretation to achieve deeper levels of knowledge/self-understanding

(Gray, 2017, p.27-28)

Interpretivism: 3.5b phenomenology

- Reality is socially constructed
- An observer is party to what is being observed
- Focus on meanings – understand what is happening
- Construct theories from data (inductive)
- Use multiple methods to establish different views of the phenomenon

(Gray, 2017, p.26)

Interpretivism: 3.5c symbolic interactionism

- People interpret meaning and then act upon interpretations
- Meanings arise from the process of interaction
- Meanings are handled in/modified by an interactive process used by people in dealing with the phenomena encountered

(Gray, 2017, p.25)

Theoretical perspective

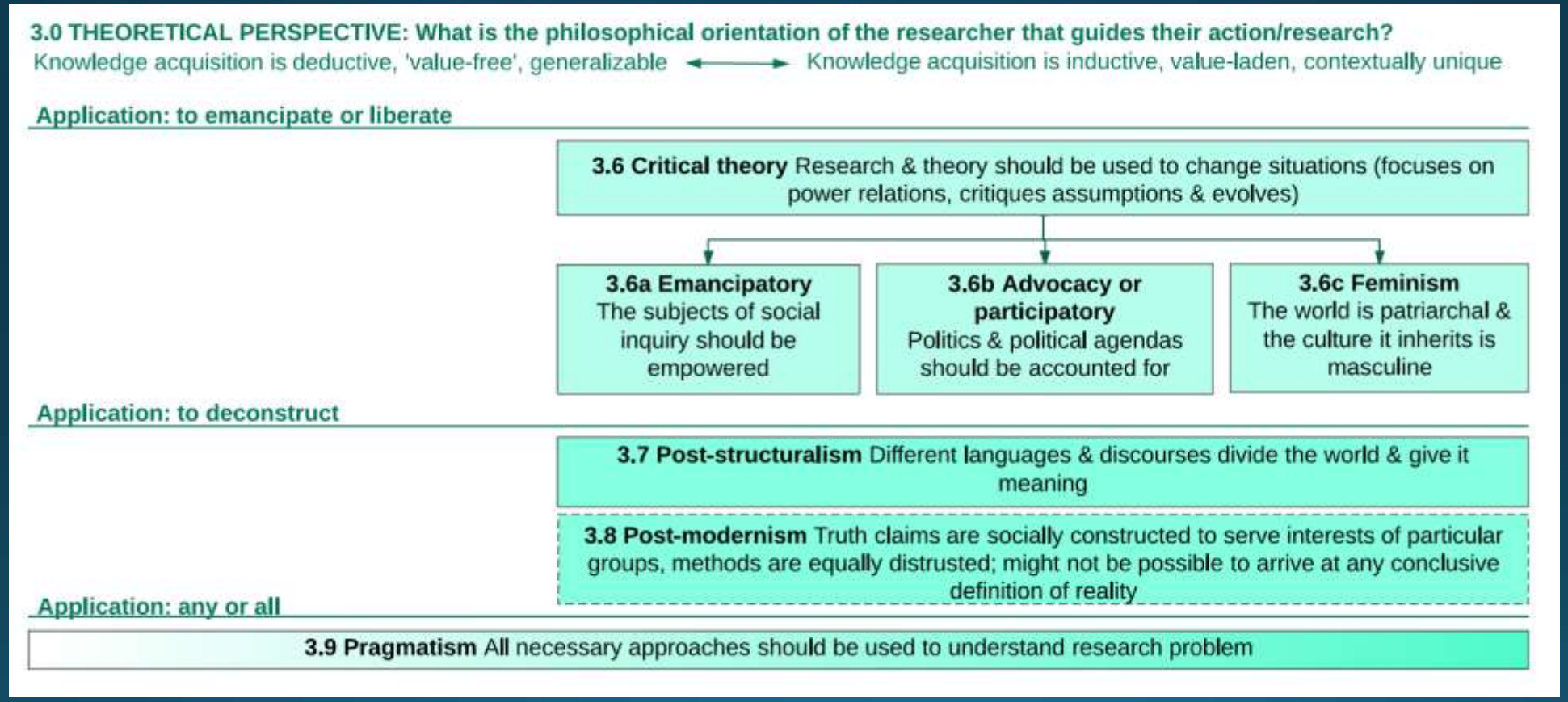

Figure 1. Social science research guide consisting of ontology, epistemology, and philosophical perspectives (Moon and Blackman, 2014, p.1169)

Theoretical perspectives: 3.6 Critical theory

- Challenges/reveals conflict/oppression
- Seeks to bring about change
- Questions currently held values/assumptions
- Challenges conventional social structures
- Focus on non-privileged groups
- 'Facts' cannot be disentangled from dominant groups (ideology/self-interest)
- Examples include: emancipatory; advocacy/ participatory; feminism

(Gray, 2017, p.28)

Theoretical perspectives: 3.7 Post-structuralism

Post-structuralists:

- Suggest independent reality does not exists
- Emphasise multiple constructed realities
- Argue there is no one truth
- Questions grand narratives – serve those in power
- Anti-paradigm – deconstructivist

Theoretical perspectives: 3.8 Post-modernism

- Suggest objective truth is unobtainable
- Expose power relations
- Emphasise multiplicity, ambiguity, ambivalence and fragmentation
- Deconstructive
- Value qualitative research

(Gray, 2017, p.29)

Theoretical perspectives: 3.9 Pragmatism

Pragmatists:

- Emphasise practical solutions and outcomes
- Highlight practical meaning of knowledge
- Suggest 'true' theories and knowledge are those that enable successful action
- Focus on problems, practices and relevance
- Privilege research problem/question
- Values a range of methods – used as justification for mixed methods

(Gray, 2017, p.29)

Approach to Theory Development

Methodology: Research onion model

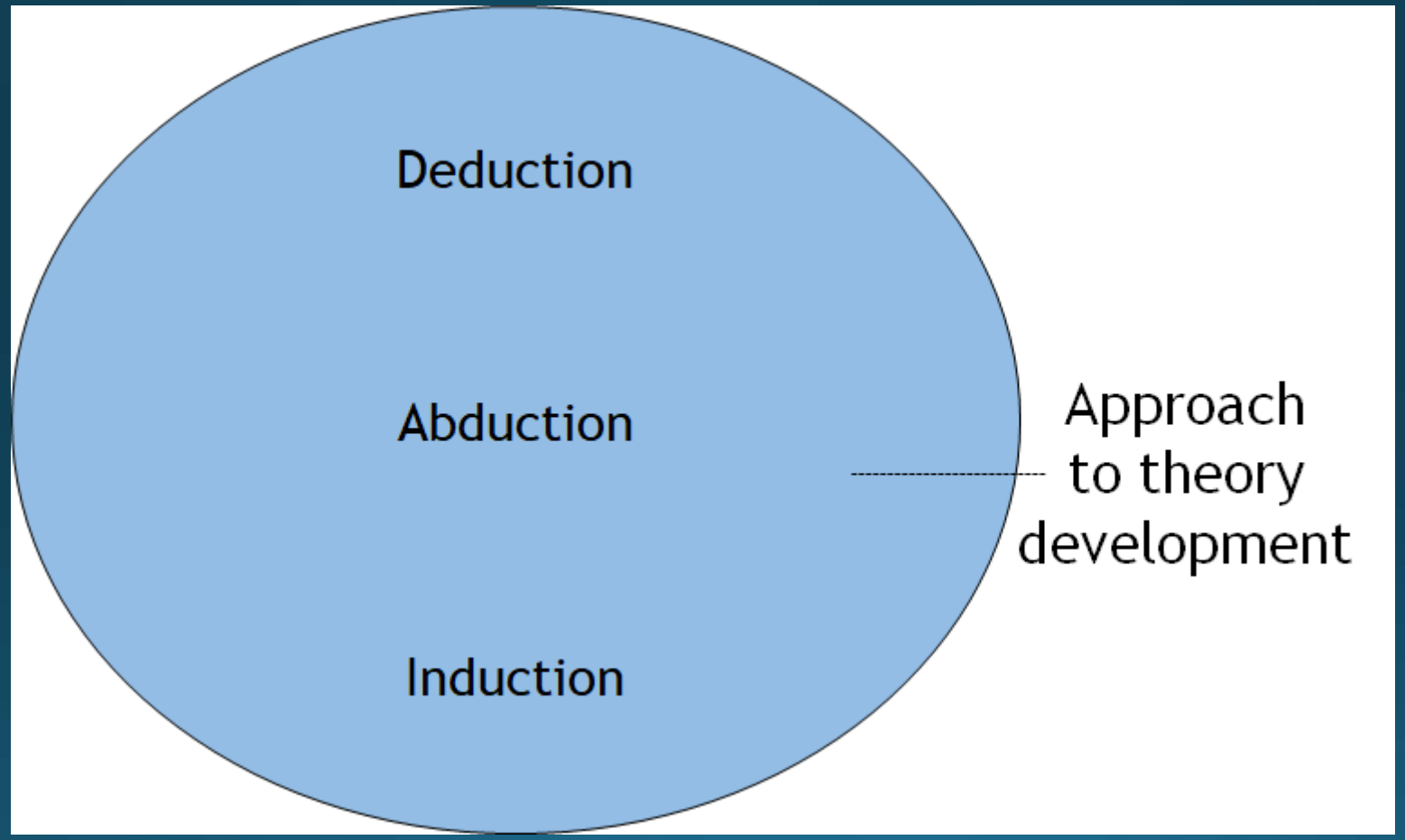

Figure 4.1 The research 'onion' (Saunders *et al.*, 2019, p.130)

Approach to theory development

- Inductive – generates theory
- Deductive – informed by theory
- Abductive - process of deductive and inductive reasoning

Approach to theory development

Table 4.4 Deduction, induction and abduction: from reason to research

	Deduction	Induction	Abduction
Logic	In a deductive inference, when the premises are true, the conclusion must also be true	In an inductive inference, known premises are used to generate untested conclusions	In an abductive inference, known premises are used to generate testable conclusions
Generalisability	Generalising from the general to the specific	Generalising from the specific to the general	Generalising from the interactions between the specific and the general
Use of data	Data collection is used to evaluate propositions or hypotheses related to an existing theory	Data collection is used to explore a phenomenon, identify themes and patterns and create a conceptual framework	Data collection is used to explore a phenomenon, identify themes and patterns, locate these in a conceptual framework and test this through subsequent data collection and so forth
Theory	Theory falsification or verification	Theory generation and building	Theory generation or modification; incorporating existing theory where appropriate, to build new theory or modify existing theory

Methodology: Research onion model

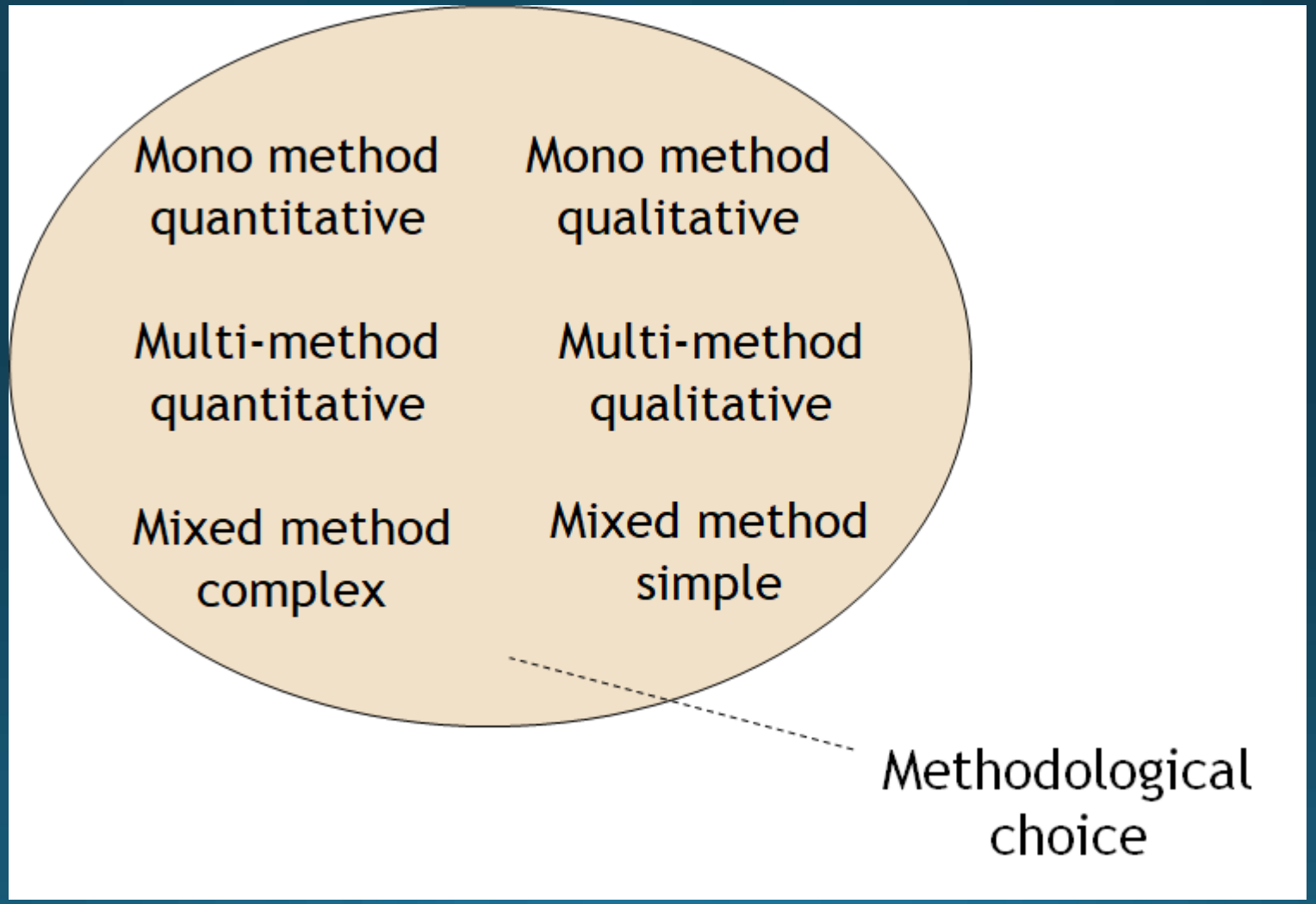

Figure 4.1 The research 'onion' (Saunders *et al.*, 2019, p.130)

Methodological choice

- Qualitative [QUAL] – text/narrative
- Quantitative [QUAN] - numeric

Methodological choice

- Mono – just qual OR just quan
- Multi – multiple qual OR multiple quan
- Mixed - qual AND quan

Activity 2

Saunders *et al*. (2019) Research Onion

- Start to complete your research onion:
  - the philosophy my proposed research most closely aligns with is…
  - the approach to theory development I will most likely take is…
  - the methodological choice I have made is…

Post-session activity:

Research philosophy

- Post a (referenced) comment on the ontological, epistemological and axiological assumptions for your assigned philosophy/ worldview to the Padlet space on Moodle

  (Week 4: Post-session activity)

References

Bazeley, P. (2019), *A Practical Introduction to Mixed Methods for Business and Management*. London: Sage.

Gray, D.E. (2017), *Doing Research in the Business World*. London: Sage.

Lincoln, Y.S. and Guba, E.G. (2013), *The Constructivist Credo*. Walnut Creek, CA, USA: Left Coast Press.

Moon, K. and Blackman, D. (2014), A Guide to Understanding Social Science Research for Natural Scientists. *Conservation Biology*. Vol.28, No.5, pp.1167-1177.

Saunders, M., Lewis, P. and Thornhill, A. (2019), *Research Methods for Business Students.* 8th ed. Harlow: Pearson.