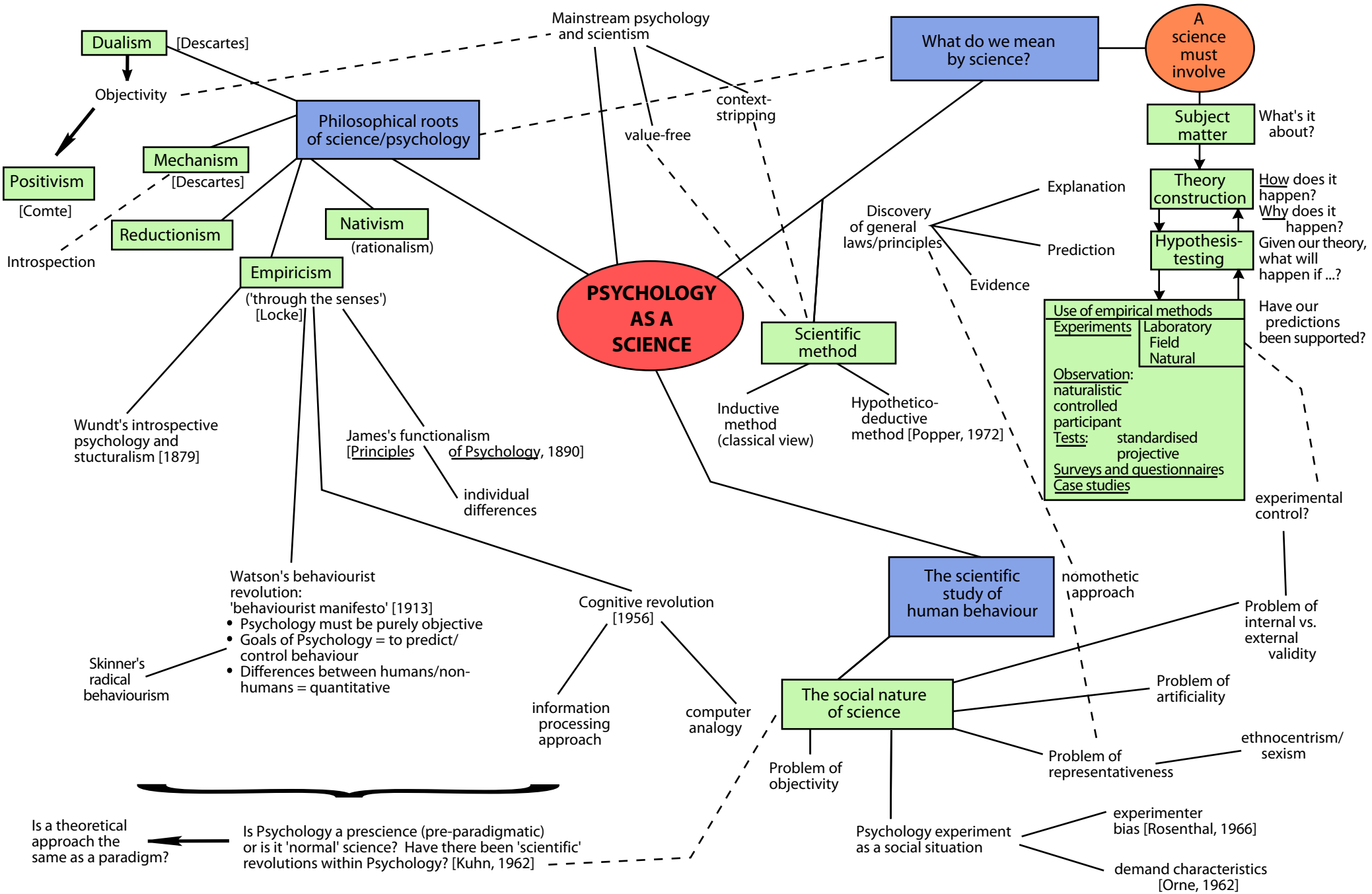
PSYCHOLOGY AS A SCIENCE
Philosophical roots of science/psychology
Dualism
[Descartes]
Objectivity
Positivism
[Comte]
Mechanism
[Descartes]
Reductionism
Introspection
Nativism
(rationalism)
Empiricism
('through the senses')
[Locke]
Wundt's introspective psychology and stucturalism [1879]
Watson's behaviourist revolution:
'behaviourist manifesto' [1913]
• Psychology must be purely objective
• Goals of Psychology = to predict/ control behaviour
• Differences between humans/non-humans = quantitative
Skinner's radical behaviourism
James's functionalism
[Principles of Psychology, 1890]
individual differences
Cognitive revolution [1956]
information processing approach
computer analogy
Mainstream psychology and scientism
value-free
context-stripping
What do we mean by science?
A science must involve
Subject matter
What's it about?
Theory construction
How does it happen?
Why does it happen?
Hypothesis-testing
Given our theory, what will happen if ...?
Have our predictions been supported?
Discovery of general laws/principles
Explanation
Prediction
Evidence
Scientific method
Inductive method (classical view)
Hypothetico-deductive method [Popper, 1972]
Use of empirical methods
Experiments
Laboratory
Field
Natural
Observation:
naturalistic
controlled
participant
Tests: standardised
projective
Surveys and questionnaires
Case studies
experimental control?
The scientific study of human behaviour
nomothetic approach
Problem of internal vs. external validity
The social nature of science
Problem of artificiality
Problem of representativeness
ethnocentrism/ sexism
Problem of objectivity
Psychology experiment as a social situation
experimenter bias [Rosenthal, 1966]
demand characteristics [Orne, 1962]
Is Psychology a prescience (pre-paradigmatic) or is it 'normal' science? Have there been 'scientific' revolutions within Psychology? [Kuhn, 1962]
Is a theoretical approach the same as a paradigm?