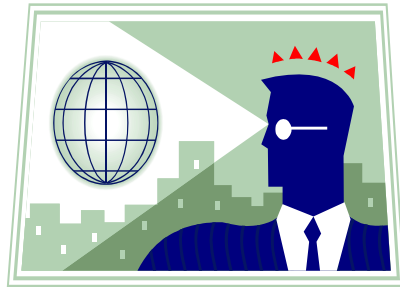


Philosophical Foundations

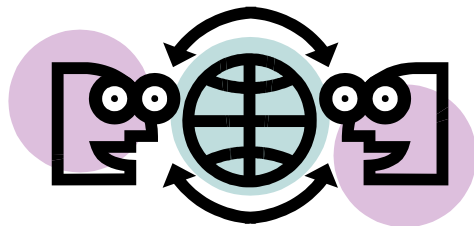
Philosophical Foundations

Cognitivist vs. Emergent

Where does meaning come from?



Cognitivist:
Realist (Positivism)



Emergent:
Constructivist (Phenomenology)

Philosophical Foundations

- Realism
 - Reality exists absolutely and, whether rationally by reason or empirically by sense, we apprehend it and thus come to understand its form and structure
 - Ockham, Gallileo, Hobbes, Locke, Hume, Moore, and Russell
 - John Locke: perception as a causal process whereby physical stimuli act on the sensory apparatus to produce ideas (concepts or representations)
 - Logical positivism (*e.g.* Schlick and Carnap)
 - Reality is exactly that which yields to empirical investigation and anything that is not verifiable by empirical investigation is meaningless

Philosophical Foundations

- Idealism
 - Reality is ultimately dependent on the mind and has no existence outside of it
 - Berkeley, Kant, Schopenhauer, Nietzsche, Hegel, ...
 - Kant differentiated between
 - *noumena*, the domain of 'things in themselves'
 - *phenomena*, or the 'appearances' of things as they are presented to us by our senses
 - Noumena are not accessible to us and cannot be known directly
 - Phenomena are the basis for knowledge
 - Kant refers to noumena as 'trancendental objects' and his philosophy is sometimes referred to as 'trancendental idealism'.

Philosophical Foundations

- Dualism
 - Reality comprises two distinct mutually-exclusive 'substances':
 - physical (corporeal)
 - Mental (non-corporeal)
 - Descartes

 - Both domains exist concurrently

 - Problems with dualism: if they are truly mutually exclusive, it is not clear how they can interact

 - 'Mind-Body' problem:
 - Paradox: if the body and mind are mutually exclusive entities, then how do they 'communicate'?

Philosophical Foundations

- Phenomenology
 - Husserl, Heidegger, Merleau-Ponty, ..
 - Reconciliation of the idealist and the realist positions
 - Reality does not exist 'outside us'; we are beings in a world, not disjoint from it
 - Dichotomy between the world and 'us' is false
 - What we perceive depends on what it is we are
 - We play a role in defining reality
 - but only insofar as it affects us as individuals (the idealist aspect),
 - the reality that we perceive does exist (the realist aspect)
 - Our perception and conception of reality is conditioned by our experience

Philosophical Foundations

- Constructivism
 - The dependence of reality on the ontogenetic state of an individual is the essential characteristic of phenomenology and is often referred to as radical constructivism
 - we construct our reality as a consequence of our perceptions and experiences.
 - Unfortunately, the term constructivism is also sometimes used to denote an entirely different realist position taken by advocates of the cognitivist approach to artificial intelligence whereby representations of the external world are constructed through perception.
 - Radical constructivism of phenomenology vsx the representational constructivism of realism