William James, Michael Faraday, Seymour Papert Radical Empiricism, Construal Making and Computer Modelling

> Meuríg Beynon, Steve Russ University of Warwick, UK

David Gooding, <u>Experiment and the</u> <u>Making of Meaning</u>, 1990, Kluwer

"How do observers move from the concrete, practical context of individual experience of particulars to the realm of discourse about shared experience in which generalisation, argument and criticism are possible?" (p.xiii)

"Modelling the mind of Michael Faraday"

Evan Thompson, <u>Mind in Life: Biology</u>, <u>Phenomenology and the Sciences of</u> <u>Mind</u>, Belknap Press, 2007

- cognitivism: computer model of mind, meaning + mind versus subjectivity and consciousness
- 'unbridgeable chasm' between the subjective and subpersonal cognitive routines in the brain
- connectionism : 'explanatory gap' remained
- embodied dynamicism: the enactive approach and phenomenology fruitful for investigating 'lived experience'

Gruber Shadow-Box

- Observers see one image, shadow of single objects hidden in box, each sees a projection
- One saw a círcle, another a triangle: disbelief!
- Uncertainty: reconstruction, reinterpretation
- Recognise incompleteness of experience
- Collective interpretation is a CONSTRUCT ...

Construals (Gooding) Negotiating agreement - what observers are seeing versus personal experience

- Exchanging tentative constructs: construals
- Construals interpret the unfamiliar and communicate trial interpretations

 Suggest construals can be made (on a computer) and help bridge the 'gap' between practical experience and theoretical discourse.

Personal Construals

- <u>Timetable</u>: then <u>Making construals</u>
- · Idea + artefact: personal, partial, provisional
- View from aeroplane landing at night ...
- Discussion of a geometry problem on a board ...
- Making connections in experience: relation to learning

• Digital construals are the subject of <u>CONSTRUIT!</u>