Correlation, Causation, Identity – Bob Stone **Supervenience, Emergence, Magic** ...

1. Correlation

The perceived one-to-one connection between conscious experiences and brain activities – e.g. imagining you're playing tennis and the lighting up of your premotor cortex in fMRI scanner.

2. Causation

- Conscious experiences may cause other conscious experiences
- Physical events may cause other physical events
- Conscious events may cause physical events
- Physical events may cause conscious events

3. Identity

The conscious experience and the correlated brain activity are the same event

- Type identity: all conscious experiences of a certain type are identical with brain events of a certain type
- Token identity: every conscious experience is identical with some brain event
- Identity of conscious and physical: contingent or necessary fact?
- Epiphenomenalism the sequence of brain events works by itself, as a closed physical causal system, leaving conscious experience redundant as a cause

4. Supervenience

Conscious experience *supervenes* on brain events, rather as biology supervenes on chemistry, or chemistry on physics.

Logical supervenience (inexorable), or merely natural supervenience (brute fact)?

5. Emergence

Conscious experience *emerges* from brain activity, rather as the sponginess of a cake emerges from non-spongy flour, butter, eggs, sugar and heat: something new, a higher-level state, with its own language, emerges from a lower-level state.

As with supervenience: inevitably so, or brute fact?

Overall problem:

How can some objectively observable states be experienced subjectively?