

The Core of Presence: Perceiving an External World around the Self

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Outline

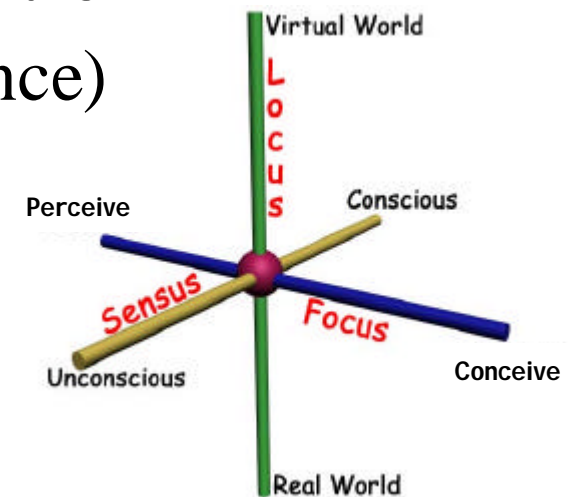
- Dimensions of Presence
- The Evolution of Presence
- Measuring Presence
- Subjective Aspects
- Definitions and Words
- Conclusions

Dimensions of Presence

- **Focus:** Perceptual versus Conceptual
 - External versus internal model
 - The Importance of Absence
- **Locus:** Real versus Virtual
- **Sensus:** Level of Conscious Attention
 - More gives more presence (or absence)

Focus, Locus and Sensus (2000)

The Illusion of Being (2001)



The Evolution of Presence

- **Presence evolved with the sense of self**
 - Proto presence (sensation, proprioception)
 - Core presence (perception of outside world)
 - Extended (significance of events in outside world)
- **By the "body route" not the "as-if body route"**
 - Presence feels different from absence
 - Not the same as emotional engagement or intellectual interest (which can increase presence *or* absence)
 - We never (normally) confuse the two (or we would die!)
- **Presence allows us to tell what is actually out there**
 - Not in here, not myself, but could affect me physically
 - Not imagined or remembered scenarios
 - Really out there, now!
 - VR fools the system

Perception?

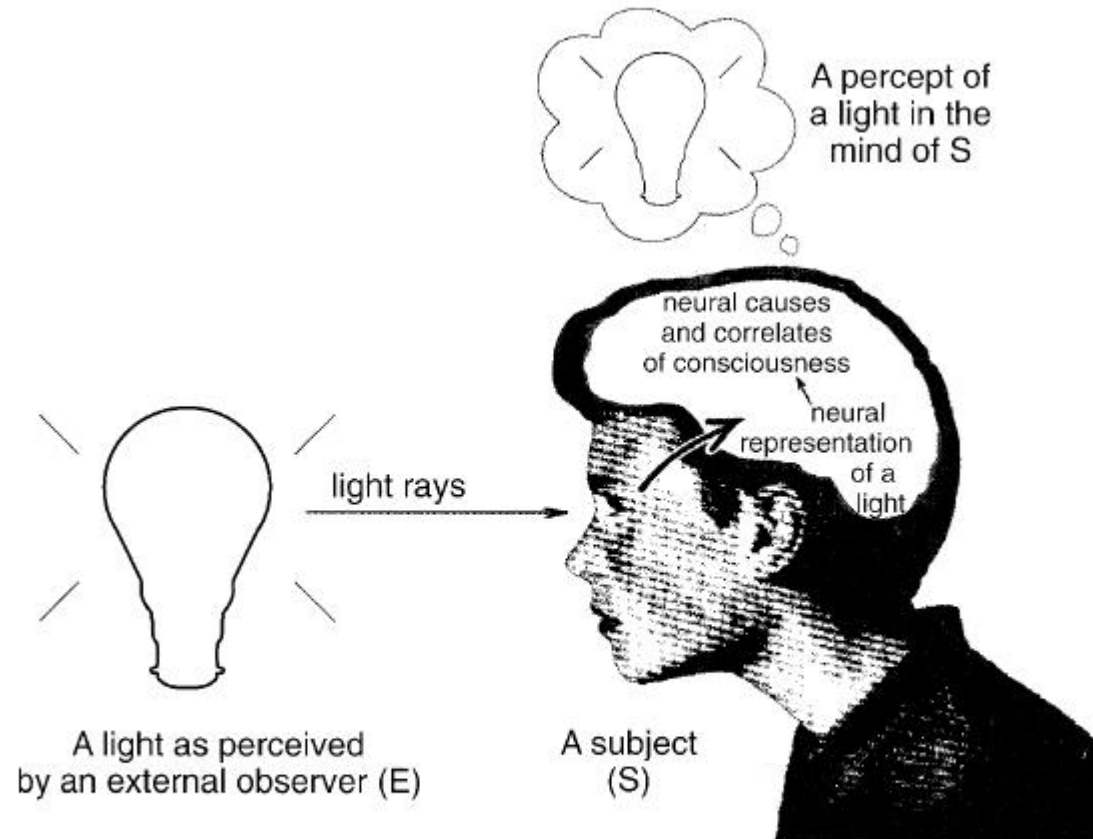
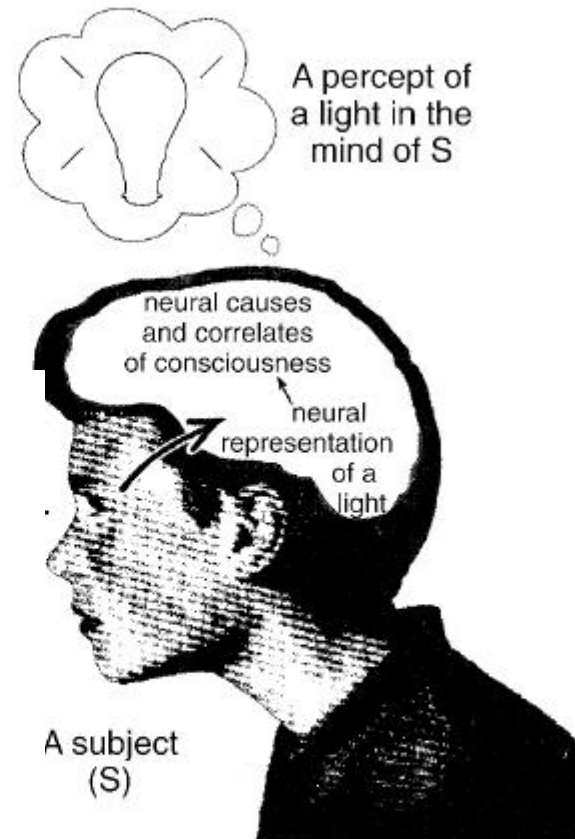


Figure 8.1 A dualist model of perception, showing a clear separation between an 'objective' stimulus light out in the world (observed by an experimenter) and a 'subjective' experience of a light in the mind or brain of the subject.

....or Imagination?



Perception in VR and in Reality

The present world is our perceptual model
Not our imaginal model

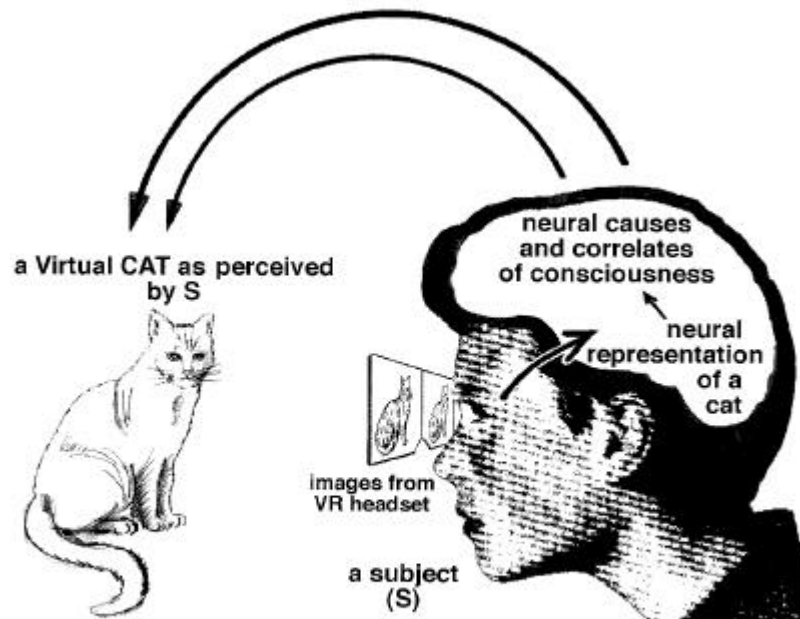


Figure 6.6 How a reflexive model of perception can be applied to an understanding of virtual reality, drawn by John Wood, from M. Velmans (1998) 'Physical, psychological and virtual realities', in J. Wood (ed.) *The Virtual Embodied*, London: Routledge.

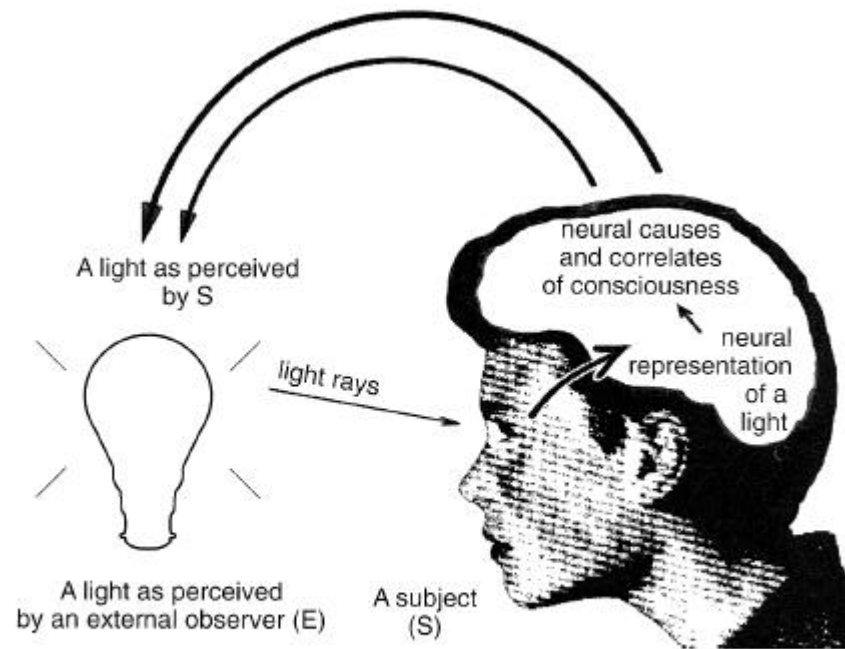


Figure 8.2 A reflexive model of perception, which suggests that in terms of their phenomenology there is no actual difference in the subjective vs. objective status of the light 'experienced' by the subject and the light 'observed' by the experimenter.

Measuring Presence

- The Perceptual Illusion Test (PIT)
 - Differentiates true from imagined presence
 - The literal from the metaphorical
 - Cf. Synaesthesia claims
 - Perceptible only when truly present
- Brain Scanning
 - Cannot distinguish real versus virtual
 - both can be presence
 - Can distinguish internal versus external worlds
 - Only the latter is presence
- Subjective reports and behaviour



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Subjective Aspects-1

- Immediate and concrete, not in need of interpretation
 - More or less strong (levels)
- Presence is irrevocable
 - a feeling, associated with perceptual processes
- Bodily, postural responses cannot be turned off
 - even if we know it's not real

Subjective Aspects-2

- The world is experienced as outside the body
 - not in the head
 - the experience is sharable with co-immersants
- Presence has effects that imagination doesn't
 - this is why we are interested in presence, now
 - and why it is powerful in psychotherapy and the arts

Definitions

- A useful definition must exclude things
 - **What is not presence?**
 - Emotional, intellectual engagement
 - Fantasy, imagination, thoughts, things in the head
 - Unattended environments
 - Attention, consciousness
 - **The importance of *absence***
- Must afford measurement, ultimately physical
 - Perceptual, conscious, attention
 - Whether virtual or Real (no fundamental difference)

Unified View of Presence?

- **No unifying theory currently possible**
 - The word is being used differently
 - We need different words....
- **Some candidate words**

.....

Some Words

- **Presence:** "The impression that something is present"
 - **The feeling of directly attending to a perceptible external world around the self.**
- **Pretence:** "An artful or simulated semblance"
 - **Reacting to a virtual environment as one would react to a (similar?) real one.**
- **Salience:** "The tendency of something to thrust itself into attention"
 - **The feeling of being in an environment, whether imagined, real or perceived.**