

Developments in J.K. O'Regan's Sensorimotor account of Consciousness

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Abstract

How the scope of J.K. O'Regan's Sensorimotor account of Consciousness has developed and the implications thereof.

≤ 1983¹ The world as outside memory.[7, 4]

Development: Vision is an interrogation of the environment, not the result of activation of an internal representation.

Implication: A metric representation of the environment is not required for rich visual perception.

Development: The richness of visual experience arises from the accessibility of specific interrogation

Implication: Change blindness is explained as a neglect to interrogate a feature.

≤ 2001¹ Sensorimotor account of Visual Consciousness.[9, 3]

Development: Sensory stimulation is characterised by changes as actions are performed.

Implication: The blind spot and retinal scotoma do not require "filling in" mechanisms.

Development: Perception of an object is associated with the continuum of potential sensorimotor interdependencies.

Implication: The temporal and spatial continuity of visual experience is explained.

≤ 2004¹ Sensorimotor account of Qualia.[8, 1, 2]

Development: All perception is an interrogation of the environment.

Implication: Location of feeling is the result of the multimodal actions that would interrogate the feeling.

Development: Feel is an intrinsic quality of an action.

Implication: Sensory modalities feel distinct because the motor actions used for environmental interrogation are distinct.

Development: All feels can be characterised by their profile of Richness, Bodiliness, Insubordinateness & Grabbiness.

Implication: Sensory experiences feel more "real" due to their higher profile of Richness, Bodiliness, Insubordinateness & Grabbiness.

≤ 2010¹ Consciously experiencing a feel.[6, 5]

Development: Agents are conscious once they have cognitive access to the fact that they have cognitive access to the environment, and a notion of self.

Implication: As these features emerge in modern robotics, there no logical reason against conscious, feeling robots.

Development: For a feel to be experienced it must be consciously attended to.

Implication: Stimuli not attended to can only effect subconscious behavioural changes.

Development: The "hurt" of pain is a social construct.

Implication: Non-socialised beings (neonates, simple robots, simple animals) cannot feel hurt.

Conclusion

J.K. O'Regan's sensorimotor account has broadened its scope from visual consciousness to qualia in general. The importance of cultural constituents of phenomenal experience is introduced, including the necessity for a notion of self for a being to experience consciousness and the emotive aspects of sensations being culturally defined.

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¹The year refers to the publication date of the earliest referenced paper that address the concepts described.