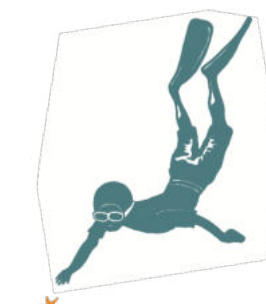


# New modes of perception

*A philosophical workshop on sensory substitution and augmentation*



THE PHILOSOPHY CLUB









A camera is  
attached to the  
nose of the  
sunglasses



The tongue-piece has  
hundreds of electrodes that  
create a tactile sensation on  
your tongue.

This translates in your  
mind's eye as vision.



# BrainPort

A sensory substitution device





Photograph by Paul Fusco/Magnum













Human  
echolocation





Video clip: Neil Harbisson



The world's first  
legally-recognised  
cyborg











**“It is important to remember that the tortoise does not live inside a shell, it *is* a shell... the sockets of [tortoises’] hip and shoulder bones are inside their shells, right at the top.”**

**– Helen Sullivan, reporter**



# Your creative response

*Choose from.....*

- Written reflection
- Drawing
- Story
- Mini-zine
- Dialogue
- Persuasive argument
- Comic
- Letter
- Poem
- ... or whatever other format you like!



**"Doors aren't open to blind kids in this society, almost any society, the doors are shut, barred, locked. You have to kick down that door because we've spent millennia being kept in the dark."**

– Daniel Kish, expert in human echolocation

**"Subjective experience isn't the whole story. Humans, unlike bees, don't normally see ultraviolet light; we can't sense Earth's magnetic field, unlike turtles, worms and wolves; are deaf to high and low pitch noises that other animals can hear; and have a relatively weak sense of smell."**

– Alison George, *New Scientist*

**A man using a sensory substitution device to identify a plaid shirt says, "It sounds a bit checkered."**

– Adapted from 'Seeing with your Tongue', *New Yorker*

**"The doorbell tastes like burnt toast."**

**"Chocolate smells pink and stripy."**

**"Thursday feels fuzzy."**

**"The letter 'A' is red."**

**Imagine a person, blind from birth, who could tell apart a cube and a sphere by touch. If her vision were restored, and she was presented with the same cube and sphere, would she be able to tell which was which by sight alone?**

– An articulation of the Molyneux problem

**These are the kinds of cross-sensory associations you might hear from people who have synaesthesia – a perceptual phenomenon in which stimulating one sense leads to involuntary experience in another sense.**



End of workshop



# Challenging traditional boundaries between the senses



Emilie Gossiaux's **BrainPort**  
merges touch and vision



Daniel Kish's **echolocation**  
mobilises hearing for  
spatial awareness



Neil Harbisson's **antenna**  
transposes colour to sound