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St Paul's Grammar

Theory of Knowledge

2. When should we trust our senses to give us truth?

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2. *When should we trust our senses to give us truth?*

In determining when we should trust our senses to give us truth, we must first define sense, truth and related terminology. In this essay, I will refer to the senses as five of the primary and independent sensory organs that allow for vision, olfaction, gustation, tactician and audition. These physiological methods of perception present to the knower information about the external physical world within sensory range. It should be noted that the terms sensation and perception are separate but intrinsically linked. Sensation involves external stimuli entering the knower's brain through respective sensory organs. This data is then selected, organised and interpreted through the cognitive process of perception. In defining truth, there are many different viewpoints and complexities involved. I think that absolute truth for us is inconceivable such that it is "*beyond our best means of proof or verification*"¹ (Norris). Based on this assumption, I would contend that the term trust can be used interchangeably with belief. For the purpose of this discussion I will employ a broader definition of truth that has a greater relevance to sense perception and relates closer to the social aspect of truth. I will refer to truth as being a high degree of conformity to something that is presently and independently perceived or believed, within a large group of people. This is phrased similarly in realist terms as the "*present-best, communally warranted, or socially desirable belief*"¹ (Norris). There is an implication that truth has the potential to change. This was brought to my attention in a news report which stated that "*A large review of placebo-controlled trials of vitamin C for cold... concluded... largely ineffective*"². The important term here is 'review' such that the previously believed truth (by myself included) that vitamin C had substantial positive effects on colds³ had been challenged, retested and

¹ Norris, Christopher. *Epistemology: Key Concepts in Philosophy*. Continuum. 2005. London

² Bakalor, Nicholas. Resistance: Vitamin C Not Much Help Fighting Colds, Study Shows. 24/07/07.

<http://www.nytimes.com/2007/07/24/health/24resi.html? r=1&oref=slogin> 18/07/08

³ Proposed by Nobel Prize winning Linus Pauling: Linus, Pauling. *Vitamin C and the Common Cold*. WH Freeman. San Francisco. 1976.

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proven inconsistent. Therefore a new truth has been formed that Vitamin C is ineffective for this purpose. In this essay I will discuss the senses and the extent to which they provide us with truth. In considering when we should trust our senses to give us truth I will focus on the empiricist view of always trusting our senses and the rationalist view of never trusting our senses.

The empiricist view regards sense perception as fundamental in its observation based beliefs. Aristotle⁴ (empiricist) suggested that “*sense perception implants the universe*” and that our intrinsic perception of objects through our senses is not prone to error. Perception is considered one of the four ways of knowing according to the TOK guide, and is fundamentally derived from sensations. These sensations allow us to access and perceive the physical world around us, suggesting that it is a primary means for which a knower can grasp the physical truth that they exist in. I would therefore argue that we need to constantly trust our senses if we are to acknowledge our existence and interact with the dynamic physical world. Based my assumption of truth, I can relate perception (way of knowing) with the natural science of physics (area of knowledge). Recently my physics class investigated the spectrum of different substance using spectrosopes. When the teacher asked us what we saw through the instruments, the class all had very similar descriptions such that there was a high degree of agreement towards its appearance. Whether this spectrum actually exists as it appears is justified by our similar perceptions which also correspond with trials and recordings conducted in the past. By using my visual perception, I believe that it presents a greater dimension in understanding its appearance and nature. If I had only been told about its features without any visual stimulus then I would need to rely on past experiences of similar characteristics in order to form an illustration of the spectrum in my mind. Therefore

⁴ Zeyl, Donald J. *Encyclopedia of Classical Philosophy*. Fitzroy Dearborn. 1997. London

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I can grasp a general idea of its true appearance, however in that other people have different experiences, they may conceive varied illustrations despite having the same description presented to them. A counter argument exists that even within the natural sciences (particularly physics) the structure of the course acknowledges that our senses may distort the results of experiments. Of particular significance is the use of reading error to allow some flexibility for which our visual sensation may be deprived. Without the inclusion of reading error where appropriate, the experiment is deemed to be less accurate.

Although valid in some regards that we can always trust our senses to give us truth, perhaps an equally strong argument is that we should never do so. This corresponds to the rationalist view such that sensory perception as a means of attaining knowledge and truth is rejected. Rather, truth derives from pure reason which is deductive and intellectual. Socrates⁵ (rationalist) suggests firmly that neither existence nor truth can be derived from sense perception. Illusions challenging our sensory perception and exemplify why we cannot always trust our senses for truth. I found the Checker-shadow illusion⁶ particularly interesting. In this optical illusion, most people would perceive that square A is clearly darker than square B. In actual fact they are both the same shade which can be confirmed by covering the image and revealing only these two squares. What I find remarkable is that even through our recognition and acknowledgment of the optical illusion we cannot prevent its occurrence. Davies explains that this occurs "*because the neural processing happens below the level at which we have conscious control*"⁷. Initially I thought that my visual sensation was to blame for the illusion, however Davies reveals that the illusion affects the cognitive level of perception rather than deriving from the sense data. We may infer that the data is

⁵ Zeyl, Donald J. *Encyclopedia of Classical Philosophy*. Fitzroy Dearborn. 1997. London

⁶ By Edward H. Adelson: See appendix 1

⁷ Davies, Edward Brian. *Science in the Looking Glass: What Do Scientists Really Know?*. 2003. Oxford

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correct such that our visual sense detects the image for what it is, however our interpretation of this data leads us to perceive the optical illusion. This knowledge issue has strong links the arts (visual) where the senses are crucial in the interpretation and appreciation of the artist's expression. An artist may include illusions in their work to create meaning or to add a dimension of complexity. Perhaps a more sustained argument for not trusting our senses affects me on a personal level. I have a myopia (short sightedness) that prohibits me from viewing objects that are far away with clarity. If I were to stand two metres away from a notice board and look at piece of paper with small font, I would be unable to see the words to the extent that the paper appears blank. However, someone with 20/20 vision standing next to me would be able to see and read the text. In this case, my visual sense organ is solely responsible for my distorted perception. What is interesting is that if nobody challenged my visual perception then I would simply continue to believe that the paper is blank until look closer. I became aware of my condition after realising that I was unable to view things on the board that classmates sitting around me could. However the counter argument for not trusting our senses on this regard would be to use corrective instruments such as spectacles which serve to externally focus the image before it reaches the eye. We may imply that as long as there is a practical solution to correct the detection of sensations then we can trust our senses to give us truth.

An interesting notion may suppose that our senses have evolved for survival purposes rather than having developed to conceive truth. This is placed into perspective if we compare our senses with that of other living organisms. Humans have three cones in the eye which detect colour whilst a pigeon has six colour receptors meaning that it has a superior sensation

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to colour⁸. This demonstrates the limitations of our senses even if a person has fully function sensory organs, and questions the ability of the senses to provide us with truth given that they are deficient compared to some other mammals. This relates back to my spectrum example in which can know about the colours perceived by the pigeon, but it is difficult for us to have similar visualisations of their perception of the world based on our differing sense experiences. I would like to clarify my assumption of truth does not correspond with absolute truth. Based on my assumptions of truth I have discussed the empiricist view of always trusting our senses and the rationalist view of never trusting our senses for truth. According to Zeyl, Kant distinguishes that “*sense perception gives us knowledge of things as they appear while reason gives us knowledge of things-in-themselves*”⁹. I would contend that we need both sense perception and reason to comprehend the true nature of things. Throughout the essay I have based my examples on visual perception because the knowledge issue involved personally affects my perception of the world. In a mathematical approach, a statement is falsified if there is a single case which contradicts it. Therefore I would contend that the extremes of always and never trusting our senses to give us truth are unreasonable based on the examples. I think that our sensory perception is important in attaining truth given that we are fully aware of the capabilities and limitations of our sensory organs. However there are also circumstances for which our cognitive interpretation of sensory data is inaccurate. Although we cannot always trust our senses to give us truth, sense perception is a means for which we can conceive the true nature of things that are perceivable by us.

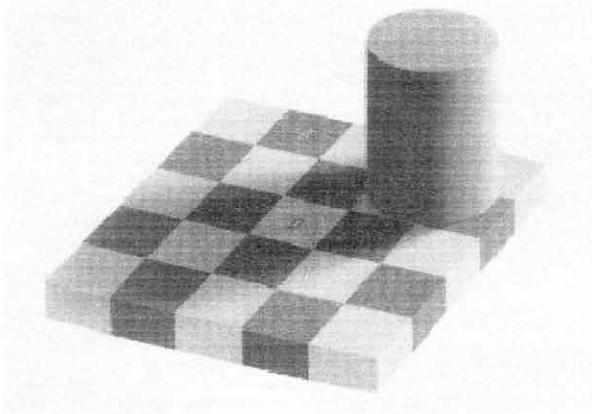
⁸ Davies, Edward Brian. *Science in the Looking Glass: What Do Scientists Really Know?*. 2003. Oxford

⁹ Zeyl, Donald J. *Encyclopedia of Classical Philosophy*. Fitzroy Dearborn. 1997. London

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Appendix 1



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By Edward H. Adelson: *Science in the Looking Glass: What Do Scientists Really Know?*

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