

Student Name

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Course

Date

Neurology, Perception, and Critical Thinking

Human neurology is an intricate and complex system, which evolved to ensure that the perceptive functions operate in favor of enhancing the factor of survivability. However, since the goals of objective perception of reality and precise storage of information are not always aligned with the core evolutionary force of survival, human perception, memory, and pattern recognition elements are imperfect. In other words, there are underlying mechanisms that can fail to calibrate the objective reality with the common sense of the world. For example, it is stated that “the term “halo effect” was coined by Thorndike (1920) to refer to a perceptual bias in which one salient attribute determines the overall impression of a person or an object, affecting the perception of other conceptually distinct and independent attributes” (Apaolaza et al. 2). In other words, it is a form of cognitive bias, where one positive attribute shapes one perception to view other attributes as favorable as well. Therefore, humans’ lack of computer-level accurate memory, flaws of pattern recognition, and imperfect perception make it important to avoid false assumptions, statements, and decisions, which reinforce common sense.

When it comes to acknowledging the described limitations, Donald Hoffman's Multimodal user interface (MUI) theory is a highly powerful framework for understanding human perception, which supports the previously stated misalignment between the objective reality and evolutionary goals. Human perception does not represent the real world as it is but rather uses a simplified user interface, such as icons, to ensure efficient orientation in it. Therefore, a person’s perception is skewed towards reproductive, social, and survival

elements more than factors, which have a lesser role in advancing these objectives. Plato's allegory of the cave also describes how shadows cast by real objects do not always represent the true reality. Therefore, both Donald Hoffman's Multimodal user interface theory and Plato's allegory of the cave emphasize the fact that human perception is not reliable to observe reality since it is designed for differential, evolutionary purposes. However, these two examples are different in terms of one indicating the primary purpose of perception, whereas the allegory is mostly about intelligence and wisdom. Therefore, the biggest difference is that the allegory explores the challenge experienced by an enlightened person to explain the objective reality to someone unenlightened.

In conclusion, it should be noted that since human perception is not aligned with a representation of objective reality and truth, there are a number of obstacles to critical thinking. These include egocentric thinking, groupthink, social conditioning, or drone mentality. All of them limit an individual's attention paid to the world and circumstances around him or her. The questioning of decisions and choices is not made, which prevents critical thought. Therefore, one can develop a simplistic framework of the surroundings or issues, which leads to biased perception. Critical thinking is of paramount importance to overcome these barriers because it seeks truth, questions every aspect of knowledge, and accounts for limitations of human perception. Such an approach can be used to reduce the overall bias by encouraging and facilitating its application in all regards of human life. Bias and failure to recognize truth are always harmful, which is why critical thinking is a solution to recognize these pitfalls of human neurology and systematically build knowledge reflective of reality.

Work Cited

Apaolaza, Vanessa, et al. "Organic Label's Halo Effect On Sensory and Hedonic Experience of Wine: A Pilot Study." *Journal of Sensory Studies*, vol. 32, no. 1, 2017, pp. 1-11.