

Ernst mach vs. bertrand russell

Experience, Belief



The purpose of this paper is to show that while Ernst Mach and Bertrand Russell share similar views on matter and knowledge, their end conclusions differ. Mach believes humans think in an economical manner where past experiences and knowledge are systematically reorganized to fit a pattern (Mach 211). Rather than analysing each experience in detail, humans refer to similar or related experiences as groups, which allows for the “least expenditure of thought” (Mach 197). In line with this mentality springs the concept of ‘things’ and ‘bodies’. Mach states that colours, sounds, temperatures, etc. are called sensations (Mach 208-209). When certain sensations are present repeatedly, they would fit into a pattern. To allow for future reference on this knowledge within the mind, the pattern receives a label. An example would be when a person sees an orange, bouncy, sphere object which has a mildly rough texture, the label ‘basketball’ springs to mind. The ‘basketball’ would not be a physical object; it would simply be a “mental symbol” for the sensations and Mach states that “symbols do not exist outside of thought” (Mach 201). Russell believes that certain things, such as a table or a cat, consist of sense-data which are colours, sounds, smells, etc. and that the immediate awareness of such things is known as a sensation (Russell 12). Also, the existence of an object is not necessarily associated with the sense-data as different people receive different sense-data when they are under the belief that they are viewing the same object (Russell 20). In addition, a person would only know the certainty of perceived sense-data rather than of the object since sense-data depends on the perception and relation of the object to the perceiver (Russell 16).

Russell then states that although there is no proof of a physical world, the belief that there are objects corresponding to sense-data allows for the simplification people's experiences. Therefore, believing in an external world is easier than thinking otherwise. Both Mach and Russell believe in the perception of colours, sounds, etc. but they label them differently; Mach calls them sensations and Russell calls them sense-data. Also, neither doubts the existence of these perceptions as they reside within the mind.

Mach does not call into question the experience of sensations and Russell states that there is no doubt for the existence of sense-data (Russell 18). This indicates that both believe in physical causes that create such perceptions, but not necessarily believe in the existence of physical objects. In addition, both regard human knowledge to be built up from instinctive beliefs and the economic categorization of these beliefs form the basis of science and an organization of information (Mach 191; Russell 25).

The two philosophers differ in views when regarding the existence of the physical world. Mach states that the idea of substance is a "crude notion" and that "bodies or things" do not exist in the external world (Mach 201, 203). In contrast, Russell asserts that it is instinctive belief to believe in an "independent external world" and since this belief "does not lead to any difficulties", there is no reason to reject the belief (Russell 24).

Mach's overall view seems more sceptical relative to Russell since, even though he mentions that humans can easily believe that things other than sensations exist outside of thought, with no proof, he considers objects to be merely labels which only reside within the mind. This may be due to the

reasoning that solid justification should support a notion for it to be a valid belief. Mach regards science in a negative light as he states it uses “lavish extravagance” and comments that, in the form of personification that “she needs [no] justification of her aims” (Mach 189).

Russell, on the other hand, seems to believe that questioning the existence of the physical world and objects within it to be a difficult task and in turn states that believing such a simple, systematic notion of an external world would be a better solution. When he cites Descartes’ systematic method of doubt to be an attempt to deny the existence of everything but oneself, he inquires on the firmness of the theory in regards to “I think, therefore I am” (Russell 19).

By addressing a strong theory that questions the existence of everything, then indicating the flaws within the theory, Russell demonstrates the difficulty in creating a sound theory which denies the physical world. Almost similar in Descartes’ perspective in the belief of the existence of an Evil Genius, Russell takes the position that if there is no proof denying the existence of a physical world then the possibility of it allows for belief in physical objects and an external world (Russell 24-25).

In conclusion, Mach and Russell have similarities in their theories, but their overall views greatly differ. Mach and Russell’s view on perceptions such as colour, sound, etc. are similar, although each has different labels for the ideas: sensations and sense-data, respectively. In addition, both believe in the simplicity or economy of knowledge. The philosophers then differ in the

belief of an external world, where Mach denies the existence of physical objects, where Russell believes in such a notion.

Russell's acceptance of an external world seems more in line with the economical nature of knowledge as understanding the idea of an external world is easier and allows for better explanations for perceptions of colour, sound, etc. Both philosophers have sound theories but neither has evidence where anything is absolutely certain and as such the study of philosophy continues to address doubts which revolve around our reality.

Works Cited Mach, Ernst. Popular Scientific Lectures. Chicago: The Open Court Publishing Company, 1898. Russell, Bertrand. The Problems of Philosophy. London: Oxford University Press, 1912.