

Review of: "Occupation from a perspective of complementarity - Part 2 - Proposals for situating a complementarity perspective in occupational science"

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Potential competing interests: No potential competing interests to declare.

1. I support the first thesis of the honorable Mr. Howdyshell: complementarity has applications in areas of knowledge outside the discipline of physics! Although many famous researchers oppose such a thesis.

Argument 1: It is not the first time in the history of world science that attempts to apply the concepts of other sciences in related (and often unrelated) sciences have been observed. Consider psychiatric Freudianism, which still has an influence on other behavioral sciences, philosophy, sociology, physiology, etc. However, I do not want to equate the discoveries of Bohr and Geisinger, on the one hand, with the discoveries of psychoanalysis by Freud and Jung, on the other.

1. Starting from the definition of complementarity as "the idea that there can be different ways of describing a system, each useful and internally consistent, but mutually incompatible" (Frank Wilczek (2023). Complementarity. <https://zbruc.eu/node/74373>), we are forced to agree that complementarity is inherent in most modern sciences. For example, any text analyzed in psycholinguistics has at least two aspects: the first is purely linguistic, and the second is psychological. In other words, psycholinguistic analysis involves a "vision" of the text as a two-sided phenomenon (process). Linguists deny the direct interaction of language signs with mental processes, and psychologists deny the "isolation" of linguists and assert the immediate relevance of speech (not language) to mental processes. For a psycholinguist, speech is a process, and language accompanies a mental process. This example clearly demonstrates complementarity: linguists and psychologists complement each other but are also in constant opposition and incompatibility.

The conclusion from argument 1: The main idea of N. Bohr's principle of quantum complementarity does not contradict the idea of complementarity in psycholinguistics as a behavioral (and more broadly, social) science.