

Discovery of Pavlov-drawing error is one for the books

By David Templeton

The Pittsburgh Press

CORRECTING WHAT he calls a 70-year error perpetuated by psychology textbooks, a Wheeling Jesuit College professor said the famous drawing of an apparatus thought to depict Pavlov's classical experiment in psychological conditioning wasn't Pavlov's after all.

C. James Goodwin, a psychology professor, said the famous drawing of a dog secured in a research apparatus actually depicted an apparatus developed by G.F. Nicolai, a German physiologist who was briefly a student of Pavlov's.

Goodwin's article on the error, "Mispportraying Pavlov's Apparatus," was published in the 1991 spring edition of the American Journal of Psychology and has prompted publishers to correct the error in upcoming psychology textbooks.

"Since the article was published, at least four textbook publishers have contacted me and made reference to the fact that they are making changes," said Goodwin in announcing his discovery last month at the college.

Goodwin said he's now publicizing his discovery because textbook writers were themselves conditioned to attributing Nicolai's apparatus to Pavlov, whose own apparatus was a simpler, less accurate device that Nicolai improved upon.

"It's important that people do this kind of research," said Paul Solomon, a Williams College professor and author of the textbook "Psychology," which is correcting the error in an upcoming edition.

"It's a nice contribution. I'm always glad when people check up on things like this,"

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Solomon said.

Goodwin said his discovery will not alter the field of psychology, nor devalue Pavlov's research, which provided a starting point for the Behaviorist school of psychology and culminated with B.F. Skinner's works. Skinner believed that behavior could be conditioned by changes in environment.

Pavlov, a Russian physiologist who won the Nobel Prize in 1904, conducted his famous experiments by presenting food to a dog along with another stimulus, such as the sound of a metronome. In that fashion, the dog could be conditioned to salivate upon hearing the metronome.

Goodwin, who specializes in the history of apparatuses used in psychological studies and their influence on theory and research creativity, came across the error during a 1988 sabbatical at the University of Kentucky.

He said he was collecting classical articles on psychology, including the first article written in English on Pavlov's works.

"It struck me that the depiction of Pavlov's apparatus was different than what was seen in textbooks," he said. "If you read carefully, you discover that it (the famous

drawing) is not the apparatus that was in Pavlov's lab."

Goodwin said the error probably originated in a 1919 textbook by Walter Hunter that became a "best seller." Hunter probably made the error because a 1914 textbook included Nicolai's drawing without a caption in an article entitled, "The Method of Pawlov (Pavlov) in Animal Psychology."

The error became universal, Goodwin said. Of 15 introductory psychology texts on Goodwin's shelf that were published between 1988 and 1990, 12 include Nicolai's drawing but described it as Pavlov's, the article states.

Because of Goodwin's discovery, textbooks have begun publishing a properly identified drawing of Nicolai's apparatus along with a separate drawing of Pavlov's original device, he said.

"Errors can occur when textbook authors, faced with an overwhelming amount of information, rely on erroneous secondary sources," Goodwin's article stated.

When authors encounter the same description repeatedly, they assume it is accurate, he said. In this case, Goodwin said, the "mis-attribution of Pavlov's apparatus is certainly not a major inaccuracy."

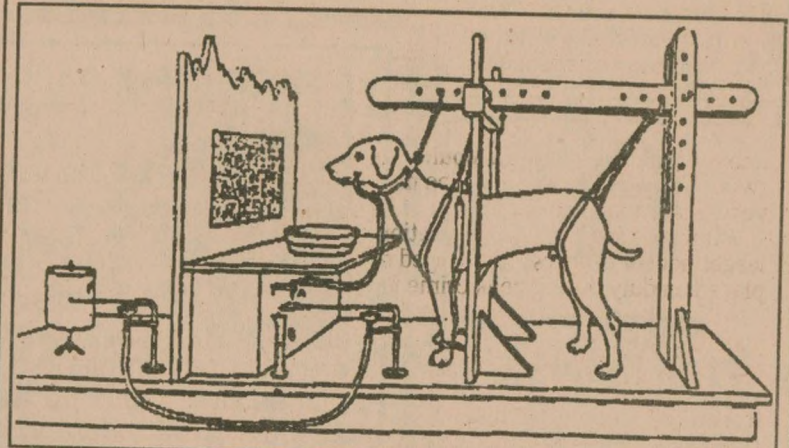
"Nonetheless, it does seem to be another example of over-reliance on secondary sources and how the need for unambiguous simplicity in the description of psychology's most famous experiments can produce and perpetuate errors."

Goodwin said he hopes his discovery will help show students that history is a contemporary discipline that needs to be revised as new information is learned.

"This gives students a real idea of the historian as detective," he said.

Pavlov's misportrayed apparatus

This drawing of a psychology experiment has been falsely attributed to Pavlov when in fact it is of the conditioning apparatus devised by Nicolai.



This is a sketch of Pavlov's early apparatus.



Source: American Journal of Psychology

Jim Conaway/The Pittsburgh Press