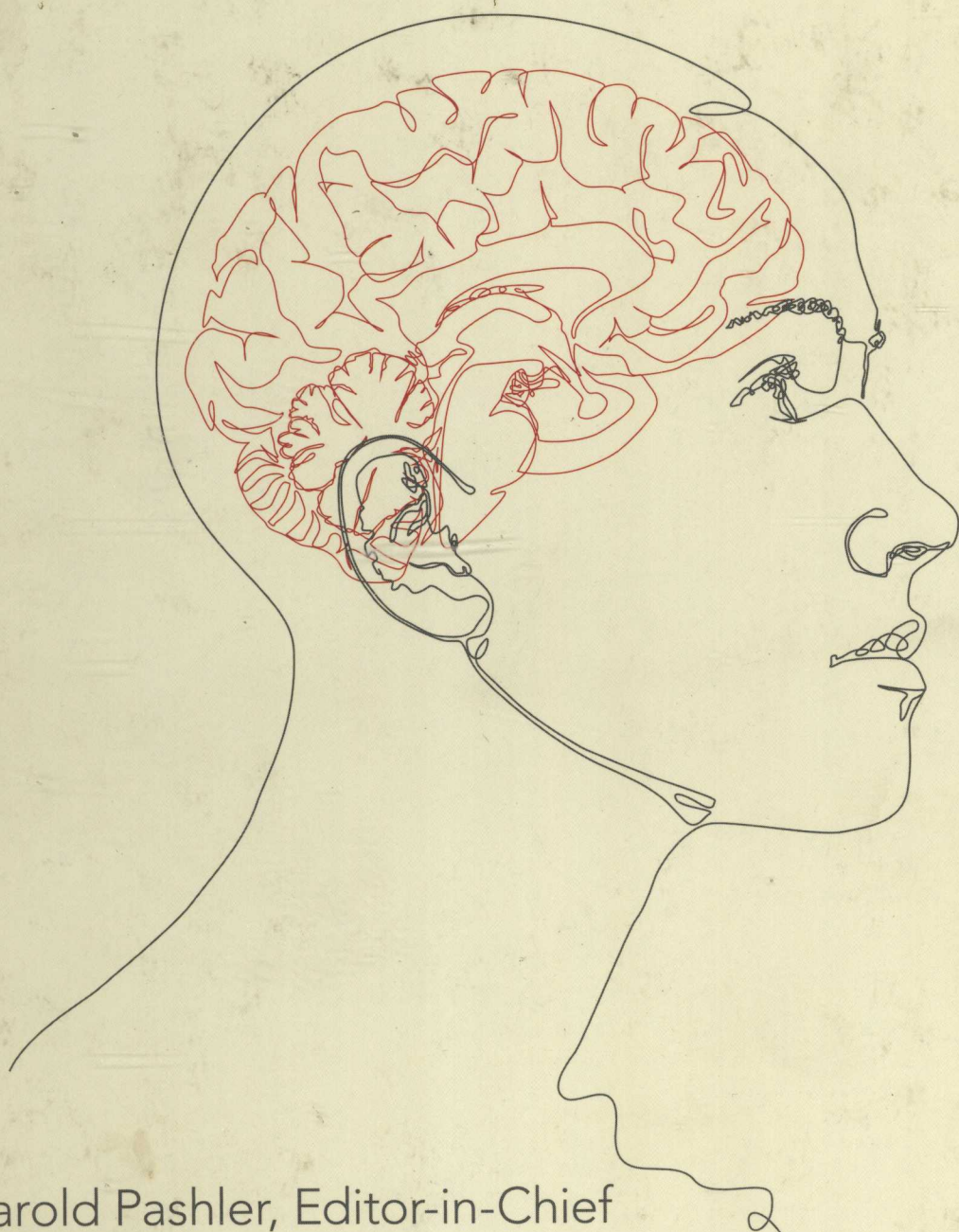




Harold Pashler, Editor-in-Chief

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Volume
ONE



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Editor-in-Chief

Harold Pashler

University of California, San Diego



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About the Editor-in-Chief

Harold Pashler is Distinguished Professor of Psychology at the University of California, San Diego, where he heads the Learning, Attention, and Perception Lab and serves on the faculty of the Cognitive Science Interdisciplinary Program. In 1999, Pashler received the Troland Award from the National Academy of Sciences. The Academy cited Pashler's "many experimental breakthroughs in the study of spatial attention and executive control, and . . . his insightful analysis of human cognitive architecture." He is also a Fellow of the Society of Experimental Psychologists (SEP) and of the Association for Psychological Science (APS).

Pashler authored and edited two highly cited classics in the field of attention (*The Psychology of Attention* and *Attention*—both published in 1998). He was also the general editor of the third edition of the four-volume, influential *Stevens Handbook of Experimental Psychology*.

Pashler's research accomplishments span many areas of cognitive psychology. In 1988 he was the first to report a phenomenon that has come to be called change blindness (an observer's inability to detect even major changes in displays that flicker off and on again while the observer is staring intently at the display). A large literature has sprung up that explores the philosophical and psychological implications of this phenomenon.

Pashler's interest in the nature of visual awareness also helped spark the development (jointly with Liqiang Huang, now at the Chinese University of Hong Kong) of the Boolean maps theory of visual attention, published in *Science* and *Psychological Review*. The theory seeks to characterize the logical limitations of human visual awareness.

Pashler's most sustained research efforts, however, have focused on a different aspect of attention. In a long series of influential papers published in the 1980s and 1990s, he and his students and collaborators developed "chronometric" (reaction-time

based) techniques for analyzing the attentional bottlenecks that arise when people try to perform different tasks at the same time. Pashler showed that different bottleneck models make distinctive and precise predictions for the effects of experimental manipulations targeted at different stages of multiple tasks being performed concurrently. The results indicated that the brain's key processing bottleneck is in decision making and the selection of responses (whereas other mental operations like perception and actually executing motor actions are not subject to the bottleneck). He also conducted research using driving simulators to show that these findings generalize to cases where drivers engage in unrelated tasks while following another car that slows from time to time (here the bottleneck resulted in delays in the application of the brakes).

In the past few years, Pashler has embarked on a vigorous analysis of the factors that affect the efficiency of human learning, seeking to find concrete methods of instruction and training that enhance the efficiency and durability of learning. The U.S. Department of Education commissioned Pashler to chair an expert panel that produced a practice guide for educators, textbook authors, and educational software developers (*Organizing Instruction and Study to Improve Student Learning*, published in 2007). The practice guide and an accompanying website have been consulted by many thousands of educators. In 2009, Pashler also chaired a review commissioned by *Psychological Science in the Public Interest* that drew considerable press attention for its highly critical conclusions about some commonly accepted ideas about learning styles.

In recent years, Pashler has collaborated with researchers from machine learning (chiefly Michael Mozer from the University of Colorado Department of Computer Science) to explore the neuro-computational basis of learning enhancement. Finally, in collaboration with Edward Vul, Pashler uncovered

what has come to be called the *wisdom of inner crowds effect* in the field of judgment and decision making—helping trigger research efforts in multiple centers to develop new strategies for enhancing real-world skills in estimation and other tasks requiring accurate judgment.

Pashler has also served as an associate editor of *Psychonomic Bulletin & Review* and is on the editorial board of the *Journal of Experimental Psychology*, the *American Journal of Psychology*,

Visual Cognition, and other major journals in the field. Together with several colleagues, in 2012 he co-founded the website PsychFileDrawer.org to promote replication attempts in psychology and to combat the “file drawer problem” that has drawn increasing concern in recent years.

Pashler received undergraduate degrees in psychology and in logic and philosophy of science with honors from Brown University and a PhD in psychology from the University of Pennsylvania (1985).