

Book Review

David C. Evans

Bottlenecks: Aligning UX Design With User Psychology

—Reviewed by

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Index Terms—*Meme, psychology, user experience, UX design.*

Bottlenecks: Aligning UX Design with User Psychology, written by David C. Evans and technically reviewed by Dr. Peter Meyers, informs “entrepreneurs, designers, developers, publishers, and advertisers” of the relationship between user psychology and UX design, stating that “digital innovations must survive the psychological *bottlenecks of attention, perception, memory, disposition, motivation and social-influence if they are to proliferate*” (p. xiii). *Bottlenecks* aims for readers to understand the psychological considerations that one must make when instituting digital memes, which are digital ideas, inventions, or particles of culture whose diffusion through a population can be observed (p. xiv). Overall, *Bottlenecks* is an excellent resource for anyone in a marketing, research and development, or design role at a company that produces digital memes.

Bottlenecks sources its claims through the qualitative and empirical research of psychology during the last century. Although Evans himself performs no study—except perhaps some light case study work—he does reliably aggregate the field of psychology to allow the reader to understand its content. The overall argument seems to align with some of the tenets of technical communication, namely, that the audience needs to be considered when crafting a meme to maximize its chance of reaching “everyone. On planet Earth” (p. 235). *Bottlenecks* attempts to educate meme makers on considering their audience before creating—or attempting to create—digital memes.

Bottlenecks is divided into seven parts, with each of the aforementioned six bottlenecks described in detail in Parts I–VI. Part VII includes advice on how to maximize the receptivity of a digital meme. Each Part contains several chapters that define and explain the single bottleneck covered in that Part. Each Part—but not each chapter within a Part—further elaborates upon the Part before it. This layout is sensible, additionally serving as a reference for readers who are having trouble overcoming one of the defined bottlenecks. Each chapter also concludes with references to studies and phenomena to assist the reader with further reading on the topics. Finally, *Bottlenecks* is written in first-person plural to collectively and intimately communicate these psychological needs of every potential audience to the reader.

The first chapter of *Bottlenecks* is about foveal acuity (or how our eyes process what we see), starting with an explanation on the biological process of light entering the eye and ending with a technological example showcasing how our peripheral vision can be better utilized when creating digital memes for automobiles. This chapter on the first bottleneck of attention explains what a reader’s thought process should be when creating and evaluating a digital meme, citing the incorrect utilization of foveal acuity in online ads and video, and calling out examples of what not to do. The central point of the chapter is that memes must be designed to complement the way our eyes and minds work to be effective and persuasive.

Alternately, Chapter 19, Social Capital—near the end of the book—covers the importance of making a meme receptive to being easily spread throughout society. This chapter on the first bottleneck of social influence discusses the “decade of research on the NPS [Net Promoter Score]” and the factors that tend to increase a meme’s chance of being

Manuscript received April 1, 2019. Date of publication April 24, 2019; date of current version May 17, 2019.

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IEEE 10.1109/TPC.2019.2909952

Book publisher: Kenmore, WA, USA: Apress, 2017, 253 pp. plus index.

spread among social groups (p. 197). This chapter, in the second to last Part of *Bottlenecks*, builds upon prior chapters on task orientation, depth perception, working memory, and personality (to name a few). It encourages readers to align a meme's value and usefulness with its prospective audiences by crafting the meme in a way that allows those audiences to share it, which is a way for them to increase their social capital or social credibility that is gained in social networks (p. 195).

Bottlenecks shines brightest when it uses a real-world example to explain a concept or phenomenon; these real-world examples are rhetorically effective because they align the aim of the book with the needs of its real-world audience. For example, in Chapter 4, Gestalt Perception, *Bottlenecks* showcases how Microsoft's decision to sell the Microsoft Office Suite online resulted in confusion and frustration for the product's buyers (p. 38). This example helped to show readers how "the size, shape, color, and positioning of objects are extremely influential on our correct perception of it," bridging the gap between the theory of psychology and the real world of digital meme creation (p. 39). These examples are always centered around a digital meme, providing illumination and instruction for readers who are in similar situations. Because they are so appropriately aimed at the audience, the examples are an effective rhetorical tool for explaining the psychological concepts in the book.

Bottlenecks could have regularly reminded viewers that it is meant to explain the connections between user psychology and UX design. Throughout, it should have included more references to well-known usability studies and concepts to stress to viewers that the book is about psychology's relationship to usability, instead of its use as a business tactic for digital meme creation, which is indeed relevant but overly apparent. Instead of solidifying this connection to usability, it makes offhand comments to remind the reader that the book has its roots in usability—comments such as "this is the usability feedback you always dreamed of" and "follow the advice of usability guru Steve Krug" (pp. xiii and 19). There are references to studies performed by usability experts, and these are very useful in communicating the point of a chapter, such as Jakob Nielsen's finding that users tend to examine webpages in an F-shaped pattern (p. 24). More of these references would only strengthen the connections made throughout the book.

In conclusion, *Bottlenecks* successfully achieves its goal of informing digital meme creation using the connections between user psychology and UX design. It is structured to be a reference that illustrates the digital meme creation process from start to finish, showcasing a side of UX design that is seldom mentioned in the field: the side that is aimed at businesses and argues for profit.