

Book review: *Houston, We Have a Narrative*

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In the September 2015 SACEMA Quarterly, we published an editorial on the importance of interactive storytelling in epidemiology as well as a short item on narratives and paradigms. When we came across a review of the book *Houston, We Have a Narrative* by Randy Olson, we thought that this would be interesting to share with you as well. The reviewer Rafael E. Luna is the author of *The Art of Scientific Storytelling: Transform Your Research Manuscript with a Step-By-Step Formula*.

In Randy Olson's new book, *Houston, We Have a Narrative*, he boldly states that the single biggest problem facing science today is "narrative deficiency." "Science is a narrative process," he argues, "...therefore science needs story." I agree that narratives have not been universally adopted in scientific communications, yet that tide appears to be turning. *Houston, We Have a Narrative* fits into a growing list of publications, scientific conferences, and academic institutions encouraging scientists to integrate narrative elements into research and public communications.

A former tenured professor, Olson left academia for Hollywood in 1994. This book offers his insights gained from over 20 years of experience as a writer and director. In the book, Olson presents a series of anecdotes and useful tools that provide a strong justification for incorporating storytelling into science.

Olson begins by showing the reader how the "Introduction-Methods-Results-And-Discussion" or "IMRAD" approach for publishing research manuscripts is basically a narrative structure. "It is simple in form and essentially identical to the three-act structure that is at the heart of virtually every movie or play written today," he argues. "It is the

structure of a story, which has a beginning (I), middle (M&R), and end (D)."

In an effort to pre-empt boisterous critics who fear that narratives will overrun and dilute scientific data, Olson spends a considerable portion of the book describing why a lack of narrative in science is a problem and why better narratives could mean better scientific communication. He outlines how bad storytelling and exaggerated claims negatively affect the scientific enterprise and describes the difficulty that scientists often experience as they struggle to effectively communicate their data. He then sets the stage for Hollywood to aid scientists in the development of their narratives.

Among the communication strategies that he discusses is the "And, But, Therefore" or "ABT" method, which Olson argues is a concise and compelling way to describe one's research. "A scientist could say, for example, 'I can tell you that in my laboratory we study physiology AND biochemistry, BUT in recent years we've realized the important questions are at the molecular level, THEREFORE we are now investigating the following molecular questions....'" He contrasts the ABT method with the "And, And, And" or "AAA" structure ("People are walking AND some have dogs AND some are alone..."), which Olson suggests is a tedious continuum of data.

Olson also describes a method for identifying the central theme of your scientific message via a technique he dubs "The Dobzhansky Template" in reference to the famous quote from the geneticist Theodosius Dobzhansky, "Nothing in biology makes sense except in the light of evolution." Olson argues that if you can effectively tell a granting agency that nothing in [insert your field here] makes sense except in light of [insert your work here], "you're probably going to get their attention." I

would counter that if a scientist were to use this type of language in a grant application, he or she may be criticized for making statements that are a bit far-reaching. However, this approach would be appropriate in settings such as at a dinner party or a community outreach event.

Do scientists need to improve their scientific communication? The answer is a resounding “yes.” However, when crafting a scientific narrative, it is important to proceed with the same caution and precision as one would approach a scientific experiment and to remember that a narrative is only as good as the data on which it is based.

As a minor point of clarification, the book could have done a better job of describing which tools would work best for which audiences. Nonetheless, Olson presents useful narrative techniques that scientists at various career stages could easily implement. The speed with which scientists can hope to achieve narrative proficiency using the tools in the book is one of its remarkable strengths and a testament to Olson's straightforward advice.

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