

Book Review

Creating Understanding: How Communicating Aligns Minds.

Jessica Gasiorek and R. Kelly Aune.

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Understanding is a two-way street.

—Eleanor Roosevelt¹

Mrs Roosevelt's observation predates the modern study of communication. Shannon had yet to publish his "mathematical theory of communication" (1948, p. 379); it would be another seven years before the field of communication began to coalesce around his ideas (Schramm, 1955), and the first Departments of Communication would form (Berlo, 1969). It is hard to understate just how influential Shannon's sender-message-receiver model has been on the field; its influence carries through to this date (Rogers, 1994; Sperber & Wilson, 1996). Excellent scholarship has investigated the sending and receiving of *coded* messages across a wide variety of contextual, epistemological, and applied domains (Barnett & Danowski, 1992; Chung et al., 2009; Doerfel & Barnett, 1999). But what if we have ignored something fundamental? What if we had overlooked how humans understand these messages, and in turn, each other? How would our scholarship change if we took up this question? This is the issue Jessica Gasiorek and

R. Kelly Aune consider in *Creating Understanding: How Communicating Aligns Minds* (2021).

The human eye has a blind-spot where the optic nerve passes through the retina. Instead of noticing something missing in our visual field, our brain *fills in* the missing information (Tong & Engel, 2001). For most individuals, this blind-spot is imperceptible in their day-to-day life. In the same way, Gasiorek and Aune argue that our field has a heretofore unnoticed blind spot. In our efforts to examine the processes and effects of message transmission, we have ignored how it is that humans actually *understand* these messages. Our theories have "filled in" how understanding works, mostly by assuming that understanding happens, all without ever investigating how it happens. In *Creating Understanding*, Gasiorek and Aune provide a sweeping review of interdisciplinary literature and propose a new model that reshapes the way we theorize about and study the processes and effects associated with communication.

Gasiorek and Aune begin their argument by giving away its conclusion. The first chapter outlines well-known problems with the *code model* of communication. The *code model* assumes that senders and receivers use the same "codebook" to interpret a message. Two Americans share such a codebook and

interpret a thumbs-up gesture as meaning “good job”. However, codebooks can and *do* vary, especially by culture. The thumbs-up gesture takes on an entirely different meaning in several Middle Eastern countries. The *code model* cannot account for how people with two different codebooks still manage to communicate. Gasiorek and Aune conclude that the *code model* of communication is not wrong, just that it is incomplete, and only capable of explaining how people understand each other when there is a common codebook.

In chapter two, Gasiorek and Aune sketch an alternative model; one based on the physical properties of how it is that humans create understanding during communication. They sketch a process model comprised of social stimuli (sensory information that elicit a cognitive/affective/behavioral response), meme states (mental representation of a specific concept), and situation models (a multidimensional mental representation of the conversation). In short, people iteratively create understanding by using stimuli to activate specific meme states and entrain situation models. The end result is that Gasiorek and Aune’s model addresses how communicators manage to understand each other, even in circumstances that the *code model* of communication cannot account for.

This alone is already quite a theoretical achievement, especially considering how fundamental the *code model* is to the field of communication. But Gasiorek and Aune do not stop there. Chapter three situates their model in three basic physical, evolutionary, and

biological assumptions: humans have a social orientation, biological, and cognitive systems tend towards efficiency (all things being equal), and human cognition is based on predictive inference (i.e., the Bayesian Brain hypothesis; Frith, 2007). Chapter four considers how these assumptions shape understanding during communication.

In chapter five, after having sketched their model, its assumptions, and its application, Gasiorek and Aune return to offer a complete description of their model. In this chapter, their earlier theoretical work begins to pay dividends. Readers can see connections between the model’s assumptions (e.g., predictive inference) and the model’s core components (e.g., prediction error guides the updating of situation models among communicators, ultimately leading to understanding). Consider again the example of an American giving a thumbs-up gesture to an Iranian. To the American, the stimuli (thumbs up) is intended to activate a meme state associated with feelings of “approval”. To the Iranian, the same stimuli activates a very different meme state, “up yours!”. As a result, the Iranian may produce stimuli (angry gestures) that indicate a different meme state (offense). The communicators might recognize the discrepancy between their situation models (prediction error), offer new stimuli in an attempt to elicit the correct meme state (approval, not offense), and ultimately bring their situation models into alignment, thereby creating understanding.

Subsequent chapters carefully lay out how contextual factors shape the model’s predictions (chapter six), how

the model offers more explanatory power relative to the *code model* (chapter seven), how the model can be applied to a variety of research traditions (chapter eight), and the new opportunities the model unlocks (chapter nine). This final chapter is quite exciting. Mrs Roosevelt's quote argues that all communicators must simultaneously be considered if we are to truly comprehend understanding. However, the *code model*, with its assumptions about encoding and decoding, has led the researchers to focus primarily on message production, processing, and/or effects on individuals, in the role of either message sender *or* receiver. The individual is the unit of analysis. Theoretically and methodologically, our field has paid insufficient attention to the simultaneous interactions between communicators. Our blindspot is once again revealed. If we are to understand how communicators understand one another, we not only need new theories, but also new methods and new paradigms. This synergy between theory and method (for an extensive treatment, see: [Greenwald, 2012](#)) represents an important call to action. We must adapt. Otherwise, we entrust other disciplines to solve one of our field's most foundational questions (e.g., [Friston & Frith, 2015a, 2015b](#); [Wheatley et al., 2019](#)).

Time will tell if Gasiorek and Aune's revolutionary ideas take hold or not. Newtonian physics (or classical mechanics) presents a model of the physical world that is sufficiently accurate to keep bridges standing, airplanes from falling from the sky, and explain planetary motion. But ultimately,

Newtonian physics offers a less accurate approximation of the world compared to general relativity. The field of Physics flourished by recognizing that general relativity unlocked new questions while also accounting for previous findings. Gasiorek and Aune's model may very well offer the same explanatory power for our field. Let us hope for the same bright future in communication science.


Notes

1. As published in [Richmond \(1947, p. 455\)](#).

References

- Barnett, G. A., & Danowski, J. A. (1992). The structure of communication: A network analysis of the International Communication Association. *Human Communication Research, 19*(2), 264–285. <https://doi.org/10.1111/j.1468-2958.1992.tb00302.x>
- Berlo, D. K. (1969). Graduate education in communication: A call for a community of scholars. *Address to Faculty and Graduate Students Department of Communication Michigan State University*.
- Chung, C. J., Lee, S., Barnett, G. A., & Kim, J. H. (2009). A comparative network analysis of the Korean Society of Journalism and Communication Studies (KSJCS) and the International Communication Association (ICA) in the era of hybridization. *Asian Journal of Communication, 19*(2), 170–191. <https://doi.org/10.1080/01292980902827003>
- Doerfel, M. L., & Barnett, G. A. (1999). A semantic network analysis of the International Communication Association. *Human Communication Research, 25*(4), 589–603. <https://doi.org/10.1111/j.1468-2958.1999.tb00463.x>

- Friston, K. J., & Frith, C. (2015a). A duet for one. *Consciousness and cognition*, 36, 390–405. <https://doi.org/10.1016/j.concog.2014.12.003>
- Friston, K. J., & Frith, C. D. (2015b). Active inference, communication and hermeneutics. *Cortex*, 68, 129–143. <https://doi.org/10.1016/j.cortex.2015.03.025>
- Frith, C. (2007). *Making up the mind: How the brain creates our mental world*. Malden, MA: Blackwell Publishing.
- Gasiorek, J., & Aune, R. K. (2021). *Creating understanding: How communicating aligns minds*. New York, NY: Peter Lang.
- Greenwald, A. G. (2012). There is nothing so theoretical as a good method. *Perspectives on Psychological Science*, 7(2), 99–108. <https://doi.org/10.1177/1745691611434210>
- Richmond, A. (1947). *Modern quotations for ready reference*. Mineola, NY: Dover Publications.
- Rogers, E. M. (1994). *A history of communication study: A biographical approach*. New York, NY: The Free Press.
- Schramm, W. (1955). Information theory and mass communication. *Journalism Quarterly*, 32(2), 131–146. <https://doi.org/10.1177/107769905503200201>
- Shannon, C. E. (1948). A mathematical theory of communication. *The Bell System Technical Journal*, 27(3), 379–423. <https://doi.org/10.1002/j.1538-7305.1948.tb01338.x>
- Sperber, D., & Wilson, D. (1996). *Relevance: Communication and cognition* (2nd ed.). Malden, MA: Wiley.
- Tong, F., & Engel, S. A. (2001). Interocular rivalry revealed in the human cortical blind-spot representation. *Nature*, 411(6834), 195–199. <https://doi.org/10.1038/35075583>
- Wheatley, T., Boncz, A., Toni, I., & Stolk, A. (2019). Beyond the isolated brain: The promise and challenge of interacting minds. *Neuron*, 103(2), 186–188. <https://doi.org/10.1016/j.neuron.2019.05.009>

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