



ASIAN COMMUNICATION RESEARCH April 2024, Vol. 21, No. 1, pp. 10-18 e-ISSN 2765-3390, p-ISSN 1738-2084 https://doi.org/10.20879/acr.2024.21.010

### Special Issue: Hidden Gems in Media Studies

Concept Explication: At the Core of It All

S. Shyam Sundar<sup>1</sup>, Saraswathi Bellur<sup>2</sup> and Hui Min Lee<sup>1</sup>

- <sup>1</sup> Bellisario College of Communications, Pennsylvania State University
- <sup>2</sup> Department of Communication, University of Connecticut

### Corresponding to

S. Shyam Sundar

Bellisario College of Communications, Pennsylvania State University, 122, Carnegie Building, University Park, PA 16802-5101

Email: sss12@psu.edu

#### **Disclosure Statement**

No potential conflict of interest was reported by the author

#### Received

31 Mar 2024

#### Revised

4 Apr 2024

## Accepted

4 Apr 2024

#### **ABSTRACT**

The Sage volume "Explication" by Steven Chaffee is a hidden gem that has been an invaluable resource for many scholars in our discipline. This essay features reflections on the book from three generations of scholars. It begins with initial impressions of the book from the 1990s and its impact on the subsequent scholarship of the first author. This is followed by expositions of its contents and pedagogical value from two of his students, one who was exposed to it in the 2000s and the other who read it in 2023. Together, the reflections illustrate the lasting value and impact of this seminal volume.

#### **KEYWORDS**

concept explication, meaning analysis, theory-building, theory-testing, pedagogy

The 1991 volume "Explication" by Steven H. Chaffee is literally "hidden" in bookshelves given its diminutive size ( $5 \times 8.5$  inches, 9.5 ounces and 78-page length, including references), but its influence on our scholarship (and that of the field) is outsized. As the opening lines of the book state, "this book is about a way of thinking... concerned with the disciplined use of words" (p. 1). It is about drilling down layers of meaning associated with seemingly simple words, as we attempt to devise credible measures for empirical testing.

When Chaffee launched the Communication Concepts series for Sage Publications, he envisioned a roster of explications of major concepts in the field, such as information, gatekeeping, news, and public opinion. While some of them were indeed published, the real impact of the series came in the form of his initial introductory volume shaping the trajectory of the field by providing a structure for communication scholars who work in areas that are nascent and therefore in need of new concepts, new definitions, and new operationalizations. The value of explication lies in providing a common vocabulary to describe scientific phenomena so that the operationalizations of a given concept adhere to a well understood

definition that is universally accepted and followed. While this is important for any scientific endeavor and for all concepts, it is particularly valuable when studying emergent phenomena brought about by new media technologies, because they involve novel concepts such as "interactivity" and "presence." Without careful explication of their core meaning, conceptual overlaps, and operational distinctions, a reader may find themselves unable to make sense of different interpretations or even conflicting findings in the literature. This could be because different scholars use the same term to mean different things (as manifested by the differences in their measures). An example is a wideranging debate surrounding the "interactivity paradox" (Bucy, 2004), which highlighted how multiple, competing definitions of the concept were leading to seemingly "paradoxical" findings and conclusions in the early days of interactive media. Several scholars argued that interactivity is subjective and hence lies in the "eye of the beholder" (Bucy, 2004; McMillan, 2000; Newhagen et al., 1995), whereas others contended that interactivity ought to be situated in the medium (Sundar, 2004), with still others saying that it should be treated not just as a "product" but also as a "process" (Rafaeli, 1988; Stromer-Galley, 2004). As a result, we saw a proliferation of papers explicating the concept (Kiousis, 2002; Tao & Bucy, 2007; Sundar & Bellur, 2011), with each lending greater clarity and vastly improving our operationalizations of it. Similarly, the concept of "presence" has been explicated in myriad ways, ever since its seminal definition by Lombard and Ditton (1997), followed by a formal explication by Lee (2004), with a more recent one by Cummings and Wertz (2023), all three of which draw inspiration from Chaffee's text. All these instances underscore the significance of explication: because how we explicate not only informs what we comprehend, but also how we contribute and inform future scholarship by guiding the nature

of manipulations and measures that operationally capture the concepts we use in our scientific discourse

## S. Shyam Sundar—From Definitions to Typologies to Measures and Models

I was privileged to be among the first to read this book, as Chaffee handed me a preprint when I visited Stanford even as a master's student before I had decided to enroll in its doctoral program. I remember reading the whole thing on my flight back to Alabama (where I was finishing up my master's program at that time) and feeling overwhelmed, with a flurry of thoughts and questions swirling in my head. It was a "lightbulb moment" for me, opening the doors for a structured way of thinking about social science research. Over the next two years, as a new doctoral student, I had the privilege of digesting this work in a more paced manner, with the author himself on call-initially as his student, tasked with explicating a concept of my own (I chose to drill down what we mean by "effects" in "media effects"), and later as his teaching assistant when we developed a formal explication assignment for a research methods class. Chaffee and I shared the common background of being former journalists. This book helped me learn from the master about how to make the transition from a writer to a thinker, from a wordsmith to a researcher, from a reporter to a scientist. By the end of my doctoral studies, I was convinced that concept explication is foundational to any training in research and is key to a successful program of research.

Explication has been integral to my forays into the psychological effects of new media and communication technologies. During my doctoral career, I convinced my advisor Clifford Nass that the tendency to treat computers as social actors lies in understanding whether individuals perceive the computer as a source or medium of communication. This led to

the development of the concept of "source orientation" (Sundar & Nass, 2000) resulting in the explication of two distinct models of human-computer interaction—computer as source (CAS) and computer as medium (CAM). For my dissertation study on the differential effects of different online news sources, I once again relied on concept explication to propose the first-ever typology of online sources in the literature (Sundar & Nass, 2001), distinguishing between journalists as sources and other users, machines, and the users themselves as sources of news. Around the turn of the century, the idea that machines could be sources of news, or that other users, i.e., peers, could forward news to us was quite alien, but conceptualizing them using the formal rubric of explication helped reviewers and readers see them as potential sources well before they were operationalized by industry practitioners in the form of tools that are common today.

Typologies lend great clarity to concepts. They help organize an area of study. In doing so, they pave the way for developing theoretical models. Considering that concepts are the building blocks of theory, it is important to explicate them well prior to proposing relationships between them. For example, the theory of interactive media effects (TIME; Sundar et al., 2015) was preceded by a decade of conceptual work involving delineation of three different types of interactivity (Sundar, 2007), not to mention the unique challenges of explicating a technological affordance compared to a more traditional communication variable (Sundar & Bellur, 2011).

New media invariably usher in new ways of creating, disseminating, and consuming content. My students and I have found that the process of concept explication can be quite useful in making sense of emerging artifacts and phenomena. To give just two examples, as the World Wide Web matured into a series of applications by the end of its first decade, we found it useful to

explicate the then-emergent concept of "portals" (Kalyanaraman & Sundar, 2008) to make sense of the dizzying array of uses and functions of the Web. More recently, when fake news reached a tipping point in the latter part of the last decade, we found it necessary to explicate it so that we could distinguish between different kinds of false information and even inform AI models that aspire to detect fake news (Molina et al., 2021).

While explications of affordances and emergent practices can yield rich definitions, typologies and even theories, explications of process and outcome constructs lend themselves to the development of measurement scales. My students and I have found great value in explicating well-worn concepts such as message credibility (Appelman & Sundar, 2016) and user engagement (Oh et al., 2018) as a precursor to developing and validating scales to measuring them in the context of interactive media. The rigor of explication has also served us well in proposing and validating measures for new concepts such as "coolness heuristic" (Sundar et al., 2014) and "machine heuristic" (Yang & Sundar, 2020). It has also come in very handy for developing measures for individual differences such as "power usage" (Marathe et al., 2007) and "AI anxiety" (Yang & Sundar, 2023).

While the Explication volume has proven quite useful in our research, I think its greatest impact has been in the teaching realm. I have used it as a textbook in my introductory research methods courses over the last 25 years, well after the book went out of print. We typically read it during the first week of the semester, in preparation for a major student assignment to explicate a concept of their choosing over the next six weeks. This has resulted in exemplary explications of dozens of concepts, ranging from user control to personalization to telepresence to public sphere to empathy to hate speech to acculturation to fandom to numeracy to privacy to digital activism, among many others. While students grapple with the explication assignment

when in class, they tend to be eternally grateful for the exercise long after they graduate. Not only have my students from academia sung its praises in helping with their research, even students who have gone on to pursue other careers have reached back to me with compliments. For example, a master's student who took the class wrote back several years later to share how she found herself explicating concepts most of the time in her career as an attorney. Interpretation of laws boils down to explicating key words in the written text, with lawyers arguing over what certain terms used in legal doctrines and contracts really mean. Court arguments can indeed be a practical lesson in "meaning analysis," which is the heart of the explication process according to Chaffee.

To provide a more authentic student perspective on the volume, I invited two advisees of mine spanning two generations of students: Saras Bellur, who performed her explication in Fall 2006, and Hui Min Lee, who did hers in Fall 2023. While Saras looks at the process of explication as a bridge for theory-building, Hui Min comments on explication's ability to foster critical thinking.

## Saras Bellur - Explication as a Bridge to Theory-Building

I remember the concept explication exercise as one of the most daunting assignments in Dr. Sundar's research methods class. For first-year doctoral students at Penn State, going through COMM 506, which had the explication assignment baked into it, is considered a rite of passage! I vividly recollect going through Chaffee's text diligently, making notes, and promptly being caught up in a hundred other things as a newbie graduate student. Weeks passed and the explication exercise came and went, mostly with a whimper, and not a bang. I had survived it, barely, fervently wishing I had done better. I still beat myself up for

choosing a complex, hyphenated concept ("preattentive exposure") that made the exercise more demanding than if I had chosen a simpler term ... but, the point of it all, which I realized well after a decade, is that there is nothing like a "simple" concept! Now, as I teach the same text to incoming graduate students, I value the many hidden gems and lessons woven into that classic Chaffee text.

Let's start with two simple questions that a student may have. "What is explication?" And, "Why explicate?" Explication, as Chaffee notes, is about a highly disciplined use of words that forces us to get rid of the fluff that surrounds academic discourse. It is an exercise that encourages us to get to the "core" meaning of a concept by defining it carefully, with precision, and clarity. In trying to define a concept (and understanding its meaning), we learn to define not only what it is, but also what it is not! We learn to sift through many terms and concepts that may share conceptual overlaps with our "focal term," but in the end we learn the science of sieving through the chaff and retaining the wheat, along with its essence. No wonder then that Chaffee uses the term "meaning analysis" frequently. Even the metaphors used to describe the main goal of explication, such as drilling down the meaning, peeling away the layers, point to the main task of getting rid of the superfluous in order to clarify the core meaning of a concept. Explication is how we learn to strive for conceptual clarity and consistency (in subsequent usage of a carefully defined term) that serve as guardrails and lead us to its central meaning. While these are very important skills for scholars to hone, what makes the explication activity even more powerful, beyond just the "conceptual" part, is the "operational" part that makes the abstract, up-inthe-cloud concept more "real," and importantly, empirically testable.

The "aha!" moment for many of my students is when they realize how defining a concept well eventually leads them to propose better measures for capturing that very same concept in their research. Through explication, Chaffee (1991) offers a clear connection from the conceptual to the empirical realm. Based on this, I like to think of explication as a "validity-bridge-building" activity, where a researcher travels back and forth between defining a concept and devising ways to measure it in such a way that they retain the core meaning of the concept. The stronger those connections (between the conceptual-→operational realms), the more valid their concepts, which then enables them to build sound theories. Even as my students go through the steps of compiling conceptual definitions, followed by operational definitions, all the while comparing, contrasting, and critiquing those definitions, and in the end arriving at an operationalization (i.e., a measurement approach) that best suits their research objectives, they would have arrived at the answer to the second question of "Why explicate?" A critical insight that ensues is how concept explication is not just fundamental to theory-building and theorytesting, but, when done right, it can be a powerful tool. As Chaffee (1991) notes, "The best defense of a researcher's work is constructed in advance, through explication" (p. 14).

Staying with the bridge metaphor, another key insight that the text offers is how the explication bridge never ends. It is a two-way bridge, where the conceptual and empirical realms are in constant conversation with one another and there is always scope to expand and re-visit. What was once a "primitive" term, may not be so anymore, with changing contexts. For example, the definition of an "opinion leader" as conceptualized in the two-step flow model (Lazarsfeld et al., 1944), is going to be vastly different from how the social media landscape defines an "opinion leader" or "influencer" (DiCairano & Bellur, 2024). Definitions change, based on research contexts and questions being explored. And scholarship demands that we revisit these terms every now and then to see if and how they have changed. Embedded in this is a subtle lesson in humility that we are continuously falling short. And there is no such thing as a finished explication. Chaffee (1991) notes that explication, and by extension, research in general, has a "make-do" quality. We do the best with what we have, what Chaffee terms as "necessary and sufficient"... with the acknowledgement that we will continue to revisit and rebuild from where we left off. I cannot think of more valuable tools a researcher can carry in their scholarly journey!

# Hui Min Lee - Explication as a Tool for Critical Thinking

On my first reading of Chaffee's (1991) work, I found it dense and confusing. As a first-year graduate student trying to settle into my classes, I simply did not have the energy or motivation to pull through a staggering 78-page essay. I realized later, however, a treasure trove of insights to be gleaned from this tiny book. Chaffee brings up several complex terms and concepts that can be overwhelming at first glance, but taking the time to delve deeper, I found that this book was teeming with information and insights.

When friends ask me what I study in Communication, I sometimes find myself struggling to explain to them. Communication concepts are often abstract in nature, making it challenging to convey the essence of our research to those who may not share the same background. Take for example the notion of machine agency, the very concept I explicated in Dr. Sundar's research methods class. What exactly is machine agency, and what distinguishes it from human agency? When do machines have agency? Explication is a process of streamlining our thinking, by identifying operational contingencies and understanding the various meanings of our focal concept. This helps us better communicate our research to a wider audience.

As Chaffee (1991) writes, "The literature

review is often a study in itself" (p. 21). Beyond providing a compelling reason for why we need explication, Chaffee offers a useful guide for conducting a thorough literature review. I remember the first time I searched for articles on Google Scholar—it was daunting, to say the least. With so many articles listed, how could I decide which ones were valuable to my research question? What should I focus on when reading these articles? Chaffee offers a roadmap by suggesting we look for key related terms, their nuances and differences, and how the concept is used in research. Is this concept manipulated or measured, and how have past studies approached it? In this process, we also start to build the bridge between conceptual and operational definitions. Ultimately, critical thinking, rather than passive acceptance, is key. This is especially so when faced with an overwhelming number of articles today that can easily lead us astray from our own research focus.

The need for critical thinking is further brought to the forefront in the delicate balance between listing and distillation. Meaning analysis requires us to identify the lower-order concepts that constitute our higher-order concepts, listing the various meanings that can be attached to a concept. But that is not all that is needed. Because lists are time-bound and context-dependent, it is essential to boil the idea down to its essential elements, thinking critically about how various meanings relate to and differ from one another. As we organize a list, we form an "implicit set of empirical rules" (Chaffee, 1991, p. 28) to guide our understanding. This is particularly important when dealing with dual-word concepts like machine agency, where I found that an understanding of "machine" and "agency" respectively is crucial to fully grasp the concept.

Similar to what Dr. Bellur points out in her reflection, a central question that arose for me was, "How do we know when we are done with the explication process?" The simple answer is: We will never truly know! Chaffee (1991)

acknowledges how concept explication is an "iterative process." Drs. Sundar and Bellur have provided several examples of how concepts require constant explication and refinement as time passes and society evolves, as well as how we sometimes have to cross back and forth between the conceptual and operational realms. Here, knowledge is a never-ending pursuit, and this is the beauty of social scientific research.

In embracing the explication process, Chaffee (1991) also reminds us of how we can build on one another's work and understanding, just as three generations of researchers are doing in this essay. Explication enhances our critical thinking skills, prompting constant self-reflection and refinement of complex, timely concepts with eloquence and precision. Chaffee provides a quick, yet comprehensive, guide on just how to do so.

#### CONCLUSION

As highlighted by all our reflections, Chaffee's "Explication" serves as a structured guide for approaching research, a timeless tool for developing and refining our theories. As new media constantly evolve, this compact volume will continue to be immensely valuable for generations of researchers, inspiring students to think critically and explicate precisely as they transition from curious students to rigorous researchers. It is our hope that as more and more people discover its lasting value, this gem will no longer be hidden.

#### REFERENCES

Appelman, A., & Sundar, S. S. (2016). Measuring message credibility: Construction and validation of an exclusive scale. *Journalism & Mass Communication Quarterly*, 93(1), 59–79. https://doi.org/10.1177/107769901560 6057

- Bucy, E. P. (2004). Interactivity in society: Locating an elusive concept. *The Information Society*, 20(5), 373–383.
  - https://doi.org/10.1080/0197224049050 8063
- Chaffee, S. H. (1991). Explication. Sage Publications.
- Cummings, J. J., & Wertz, E. E. (2023). Capturing social presence: Concept explication through an empirical analysis of social presence measures. *Journal of Computer-Mediated Communication*, 28(1), zmac027.
  - https://doi.org/10.1093/jcmc/zmac027
- DiCairano, J., & Bellur, S. (2024, June). When they speak, I listen: Assessing opinion leaders from the cognitive mediation model perspective [Paper presentation]. The 74th Annual Conference of the International Communication Association, Gold Coast, Australia.
- Kalyanaraman, S., & Sundar, S. S. (2008). Portrait of the portal as a metaphor: Explicating Web portals for communication research. *Journalism & Mass Communication Quarterly*, 85(2), 239–256.
  - https://doi.org/10.1177/1077699008085 00202
- Kiousis, S. (2002). Interactivity: A concept explication. *New Media & Society*, *4*(3), 355–383. https://doi.org/10.1177/146144480200 400303
- Lazarsfeld, P. F., Berelson, B., & Gaudet, H. (1944). The people's choice: How the voter makes makes up his mind in a presidential campaign. Duell, Sloan, and Pearce.
- Lee, K. M. (2004). Presence, explicated. Communication Theory, 14(1), 27–50. https://doi.org/10.1111/j.1468-2885.2004. tb00302.x
- Lombard, M., & Ditton, T. (1997). At the heart of it all: The concept of presence. *Journal of Computer-Mediated Communication*, 3(2), JCMC321.
  - https://doi.org/10.1111/j.1083-6101.1997. tb00072.x

- Marathe, S., Sundar, S. S., Bijvank, M. N., van Vugt, H., & Veldhuis, J. (2007, May). Who are these power users anyway? Building a psychological profile [Paper presentation]. The 57th Annual Conference of the International Communication Association, San Francisco, CA.
- McMillan, S. J. (2000). Interactivity is in the eye of the beholder: Function, perception, involvement, and attitude toward the Web site. *Proceedings of the 2000 Conference of the American Academy of Advertising* (pp. 71–78). American Academy of Advertising.
- Molina, M. D., Sundar, S. S., Le, T., & Lee, D. (2021). "Fake news" is not simply false information: A concept explication and taxonomy of online content. *American Behavioral Scientist*, 65(2), 180–212.
  - https://doi.org/10.1177/000276421987 8224
- Newhagen, J. E., Cordes, J. W., & Levy, M. R. (1995). nightly@nbc.com: Audience scope and the perception of interactivity in viewer mail on the internet. *Journal of Communication*, 45(3), 164–175.
  - https://doi.org/10.1111/j.1460-2466.1995. tb00748.x
- Oh, J., Bellur, S., & Sundar, S. S. (2018). Clicking, assessing, immersing and sharing: An empirical model of user engagement with interactive media. *Communication Research*, 45(5), 737–763.
  - https://doi.org/10.1177/0093650215600 493
- Rafaeli, S. (1988). Interactivity: From new media to communication. In R. Hawkins, J. Wiemann, & S. Pingree (Eds.), Sage annual review of communication research: Advancing communication science (pp. 110–134). Sage.
- Stromer-Galley, J. (2004). Interactivity-as-product and interactivity-as-process. *The Information Society*, 20(5), 391–394.
  - https://doi.org/10.1080/0197224049050 8081

- Sundar, S. S. (2004). Theorizing interactivity's effects. *The Information Society*, 20(5), 385–389.
  - https://doi.org/10.1080/0197224049050 8072
- Sundar, S. S. (2007). Social psychology of interactivity in human-website interaction. In A. N. Joinson, K. Y. A. McKenna, T. Postmes, & U.-D. Reips (Eds.), *The Oxford handbook* of *Internet psychology* (pp. 89–104). Oxford University Press.
- Sundar, S. S., & Bellur, S. (2011). Concept explication in the internet age: The case of interactivity. In E. P. Bucy & R. L. Holbert (Eds.), Sourcebook for political communication research: Methods, measures, and analytical techniques (pp. 485–500). Routledge.
- Sundar, S. S., & Nass, C. (2000). Source orientation in human-computer interaction: Programmer, networker, or independent social actor? *Communication Research*, 27(6), 683–703.
  - https://doi.org/10.1177/00936500002700 6001
- Sundar, S. S., & Nass, C. (2001). Conceptualizing sources in online news. *Journal of Communication*, 51(1), 52–72.
  - https://doi.org/10.1111/j.1460-2466.2001. tb02872.x
- Sundar, S. S., Jia, H., Waddell, T. F., & Huang, Y. (2015). Toward a theory of interactive media effects (TIME): Four models for explaining how interface features affect user psychology. In S. S. Sundar (Ed.), The handbook of the psychology of communication technology (pp. 47–86). Wiley Blackwell.
  - https://doi.org/10.1002/9781118426456. ch3
- Sundar, S. S., Tamul, D., & Wu, M. (2014). Capturing "cool": Measures for assessing coolness of technological products. *International Journal of Human-Computer Studies*, 72(2), 169–180.
  - https://doi.org/10.1016/j.ijhcs.2013.09.008

- Tao, C. C., & Bucy, E. P. (2007). Conceptualizing media stimuli in experimental research: Psychological versus attribute-based definitions. *Human Communication Research*, 33(4), 397–426.
  - https://doi.org/10.1111/j.1468-2958.2007. 00305.x
- Yang, H., & Sundar, S. S. (2020, May). Machine heuristic: A concept explication and development of a scale [Paper presentation]. The 70th Annual Conference of the International Communication Association, Gold Coast, Australia (converted to virtual due to COVID-19).
- Yang, H., & Sundar, S. S. (2023, August). AI anxiety: Explication and exploration of effect on state anxiety when interacting with AI doctors [Paper presentation]. The 106th Annual Conference of the Association for Education in Journalism and Mass Communication, Washington, D.C.

#### **About the Authors**

S. Shyam Sundar (Ph.D., Stanford University) is James P. Jimirro Professor of Media Effects, co-director of the Media Effects Research Laboratory, and Director of the Center for Socially Responsible Artificial Intelligence at Penn State. Prof. Sundar is a theorist as well as an experimentalist. His theoretical contributions include several original models on the social and psychological consequences of communication technology such as Modality-Agency-Interactivity-Navigability (MAIN) Model, and the Theory of Interactive Media Effects (TIME), along with its extension to Human-AI Interaction (HAII-TIME). His research portfolio includes extensive examination of user responses to online sources, including machine sources such as chatbots, smart speakers, and other forms of artificial intelligence (AI). His research is supported by the National Science Foundation (NSF), Korea Science and Engineering Foundation, MacArthur Foundation, Facebook, Inc., and Lockheed Martin Information Systems and Global Services, among others. He is editor of the first-ever Handbook of the Psychology of Communication Technology, published by Blackwell Wiley in 2015. He served as editor-in-chief of the Journal of Computer-Mediated Communication, 2013-2017. He is a Fellow of the International Communication Association (ICA), and has served as chair of its Communication & Technology division, 2008-2010. He is a recipient of the Frederick Williams Prize awarded by the division for contribution to the study of communication technology. He is also winner of the Paul J. Deutschmann award for excellence in research from the Association for Education in Journalism and Mass Communication (AEJMC).

Saraswathi (Saras) Bellur (Ph.D., Penn State University, 2012) is an Associate Professor in the Department of Communication, University of Connecticut. Her research focuses on understanding the psychological effects of interactive media on key communication processes and outcomes. With several publications in flagship journals, Dr. Bellur's work has contributed to both theoretical and empirical body of knowledge surrounding interactivity, cognitive heuristics, and user engagement. Her works include co-developing a new theoretical framework called the motivational technology model and examining the effects of media multitasking on learning and enjoyment.

Hui Min Lee (MA, Nanyang Technological University) is a PhD student in Communications at Penn State University, USA. She studies the psychological effects of new media technologies, with a particular focus on how immersive and interactive media impact cognitive and emotional processing.