Cultivating Spheres: Agriculture, Technical Communication, and the Publics

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CULTIVATING SPHERES: AGRICULTURE, TECHNICAL COMMUNICATION, AND THE PUBLICS

Navigating a Tangled Intersection: Agricultural Communication as Public Meeting Space among the Humanities, Social Sciences, and the Digital

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The growing emphasis on interdisciplinarity within scholarly research offers several affordances, including an opportunity to initiate cross-disciplinary projects. By viewing instances of agricultural discourse in public contexts through a technical communication disciplinary framework, the collection *Cultivating Spheres: Agriculture, Technical Communication, and the Publics* demonstrates how social sciences methodologies reveal such discourse as in fact embodying the digital humanities.

Introduction

Countering an oft-heard, alleged distinction between 'theory' and 'practice' is scholarship demonstrating how the distinction typically is a false binary. Applied theory, praxis, and other scholarly hybrids offer important knowledge meant to support and benefit a variety of populations, in and beyond academe. Such scholarship has increasingly been represented by interdisciplinary partnerships. Nonetheless, such collaborative exercises in applied theory have tended to occur among certain disciplines more than others.

Increasingly, work is being done to address the absences, especially via collaboration between the digital humanities and the social sciences. For instance, HuMetricsHSS, the Humane Metrics Initiative, was established to promote a values-driven approach to assessing research method/ology in both the humanities and the social sciences (HumetricsHSS.org, 2017). *The American International Journal of Humanities and Social Science* lists one of its primary aims as 'reduc[ing] the gap between research and practice' as they exist in humanities versus social science projects (*The American International…*, n.d: n.p.). Meanwhile, Bond et al. (2017), scrutinizing the concept of 'the digital humanities', encourage a mixed methods form of reflective practice by positing that any discipline, including 'interpretive' (e.g., literary studies), can be augmented by methodologies from the social/sciences.

Similarly, the collection *Cultivating Spheres: Agriculture, Technical Communication, and the Publics* is meant to show how certain topics can be understood when positioned at these disciplinary intersections. Specifically, when agricultural topics are debated in public contexts, a social sciences examination of these topics can reveal how best practices in mediated technical agricultural communication constitute the digital humanities in action.

Making Communication Visible

Public policy/decision making is not a new subject of inquiry among the social sciences. Agriculture, big data, and the environment have long been studied across science disciplines as well. Civic participation is gathering increasing steam (and not

just as STE[A]M) within contemporary humanities fields, while interdisciplinarity has been encouraged among most scholars in higher education—particularly in the past two decades. Only recently, though, has the manner in which *communication* acts as a tool for negotiation across these disciplines and topics been subject to study. That is, communication always has been an assumed component during research investigation and the dissemination of results; but so much so that in some cases its tacit presence and impact have been rendered almost invisible, a seemingly objective 'windowpane' (Miller, 1979) through which information may be viewed.

The minimizing of communication's impact, however unintentional, is particularly problematic when research is communicated publicly. As Denise Adkins and Julie Lyon (2012: 1, cf8) state in their analysis of publicly accessible scientific poster displays: 'we rarely assess whether these public displays have an impact on the people who view them'. Their study suggests that this situation is troublesome given the ways in which significant amounts of knowledge are communicated from science specialists to public audiences. While texts in the vein of Arlene Stein and Jessie Daniels' *Going Public: A Guide for Social Scientists* (2017) can be read as an examination of the process by which specialized research knowledge is distributed beyond academic contexts, a closer look shows that these authors brainstorm a list of genres and channels as communicative conduits, more than analyse how such genres and channels shape information and its adoption by audiences. Mary Jo Reiff and Anis Bawarshi's collection *Genre and the Performance of Publics* (2016) addresses the need for an informed approach to public communication, making a plea for increased rhetorical critique of the usage and effects of genre within and among public contexts.

Ultimately, what is apparent across the literature is a shared dedication among the disciplines to communicate phenomena to various audiences; however, the forms of communication themselves also should undergo interrogation. In *Cultivating Spheres,* a technical communication framework is the common means by which the articles connect issues of methodology, interdisciplinarity, and the digital

humanities, each in different ways. That is, each article in this collection privileges either a cross-disciplinary hybridized methodology, digital humanities, or a social sciences topic of inquiry—yet the pieces consistently use technical communication's framework as a linking mechanism to demonstrate how all three of these issues cross paths within agricultural, public scenarios.

Making Technical Communication Visible

The technical communication discipline expects utilitarianism in its research methods, much like that found in the social sciences, and that it be balanced with rhetorical analysis. Other communication fields' research frameworks may not consistently expect this theory-driven pragmatism; technical communication's framework, meanwhile, is well-suited for representing the technical nature of agricultural discourse and performing on-site studies of these topics.

Also regarding technical communication's approach, its emphasis on non-traditional sources of data and content knowledge makes it a unique entity within larger communication fields. Academic research has not often inquired into discursive patterns of industrial agriculture and individual farmers, perhaps because (non-technical) communication researchers may not possess content knowledge. The result is a dearth of understanding and of studies about the communication that occurs among the producers of food (Eise & Hodde, 2017)—not just among those who supply producers, or who consume or regulate food. Examining evolving forms of digital communication can additionally enable the identification of spaces where producers discursively interact with those in overlapping communities (Dunford, 2017).

Interdisciplinarity as Illuminated by a Communication Framework

Cultivating Spheres' use of a technical communication framework to bridge disciplines in examination of crucial public phenomena contributes to the various disciplines represented in the collection. It examines topics of inquiry in the social sciences and digital humanities in a manner distinctive from that in current literature.

Interdisciplinary literature that involves the humanities and focuses on civic participation at times may paint in overly broad strokes, as seen in discussions of how datasets collected from previous studies are being re-used in citizen science

projects (Follett & Strezov, 2015). Another example is Wändi Bruine de Bruin and Ann Bostrom's (2013) suggestions to 'scientific experts about how to use mental models research … to inform their communication efforts' with public audiences; the suggestions, however, are predicated on the idea that these mental models should generally be applied to communicate just about anything: 'climate change mitigation, vaccinations, genetically modified food, nanotechnology, geoengineering, and so on' (14, 14062).

The rhetorical theory underpinning technical communication and by extension *Cultivating Spheres*, meanwhile, demands specificity; there is no one-size-fits-all approach to communication.

Further, within interdisciplinary literature there have been admirable attempts to bridge humanities and the sciences during examinations of public policy and agricultural science topics, such as via place-based study initiatives (Oteros-Rozas et al., 2015; Lind, 2016). Such efforts, though, can so over-personalize study participants' understanding of these topics that the bigger connections between the human and the science are minimized. It is not until the rare occasions when technical communication is used as the interdisciplinary bridgework, such as Kurt Stavenhagen's (2016) study of communications surrounding honeybee Colony Collapse Disorder (CCD), that a very human act, in this case storytelling, is employed to reveal public understanding of the science behind CCD and strategies used to address the crisis.

In This Collection

While *Cultivating Spheres* is driven by a technical communication framework, its pieces' respective foci are inclusive of a wide, interdisciplinary readership. Many of today's students, for instance, fluently participate in burgeoning forms of communication such as social media, but they also would find benefit in sustained examination of communication forms as they comprise social acts, charged with tacit values, with substantial ethical implications. *Cultivating Spheres*' approach also is meant to offer examples for scholars, instructors, and practitioners dedicated to informed, responsible communication in public situations.

In addition, the collection's exploration of emerging forms of technical communication can assist in the introduction of contemporary themes into a writing

curriculum, as a method of examining documents' impact upon audiences and by implication the responsibilities of the communicator as a public citizen. It also offers significance to current discussions of agricultural issues and concerns, and may act as a historical point of comparison to future titles about these topics. Furthermore, heterogeneous readerships would be attracted to the socio-economic/class commentary so often implicated during debates over the issues in *Cultivating Spheres*.

Specifically, the collection is comprised of case studies concerning agricultural exigencies as they publicly, discursively evolve, and accordingly feature a range of methodological approaches. Christine Denecker's '"We're Getting So Far away from the Land": Disrupting the Traditional Rural Literacy Myth through *Ohio Farm Stories*' uses a feminist understanding and digital communications to scrutinize how publics regard farm narratives as 'traditional literacy'. Her study, including video montages of farmers' stories and analysing the reciprocal relationship now conventional during research with human participants, argues how technical communication's call for shaping public communications is a prime opportunity for acting upon such traditional literacy. In '"…Darn Thing Just Kind of Fell Together by Itself after a While:" Exploring the Role of Official and Tactical Communication in Siting a Rural Wind Farm', Michael Knievel uses technical communication's utilitarian/rhetorical approach to reveal the nuanced audiences, purposes, and contexts involved in windmill sitings' digital communications (e.g., meteorological maps that digitally aggregate geographical information), showing how these communications calibrate 'networked rural development' initiatives as defined by social sciences research. Jessie Lynn Richards, Joshua Lenart, David Sumner, and Douglas Christensen's 'From Big Ag to Campus Cafeterias: Intersections of Food-Supply Networks as Technical Communication Pedagogy' describes a particular teaching of technical communication, embracing digital genres and humanities and social science topics, that increases students' awareness of food production and distribution—as well as the ways this awareness plays out in students' responsibility towards food production practices. In 'Knowing Bass: Accounting for Information Environments in Designing Online Public Outreach', Stacey Pigg and Benjamin J.

Reading explore a North Carolina digital public science literacy program focusing on food production, a demonstration of how relevant publics' situated knowledges have evolved to a state whereby 1) rhetorical analysis of these knowledges should focus on the heightened need to create and maintain attention, and 2) the associated need for a revised understanding of technical communication as user experience-focused digital design. Callie Kostelich, in 'Facebook and a Farm Crisis: FFA and Online Agricultural Advocacy', scrutinizes the humane impact of social media advocacy—illuminated by a social sciences explanation of such advocacy's impact during public discourse—suggesting that even careful use of social media to solicit public response may inadvertently confirm disconcerting value systems.

In its effort to explore a cross-section of varying but deeply interwoven issues, *Cultivating Spheres: Agriculture, Technical Communication, and the Publics* is a collection motivated by technical communication's handling of agricultural changes that even in the past five years have destabilized what once were conventional forms of expression by anyone who produces or consumes.

Competing Interests

The author has no competing interests to declare.

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