REVIEW/COMPTE RENDU

Critiques of Knowing: Situated Textualities in Science

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Lynette Hunter Critiques of Knowing: Situated Textualities in Science, Computing and the Arts Paperback 248 pages Publication Date: June 1999 Publisher: Routledge ISBN: 0415192579

Despite the innocuousness of the book's title, Lynette Hunter's Critiques of Knowing constitutes an ambitious and groundbreaking critique of the dominant modes of knowledge and textuality in the West, specifically "in the political context of the liberal democratic social contract" (3) in Britain and North America. Hunter undertakes a comprehensive analysis of dominant (post-Cartesian) theories of language and textuality, making every effort along the way to foreground the kinds of knowledge these approaches to language leave unarticulated and to situate each approach socially, historically, and politically. Her analysis, ultimately, lays bare the messy network of connections that link knowledge and textuality to systems of ruling powers—connections that are often "obscured by institutional systems" (1) and yet whose visibility is vital to the re-assessment and potential change of those same systems.

The breadth of Hunter's scholarship is refreshing: her analysis moves across several disciplines (politics, science, computing science, AI, the arts & humanities) and her analytical approach is a fusion of several critical perspectives (contemporary social history of science, the history of rhetoric, and feminist standpoint theory). While the interdisciplinarity and kaleidoscopic ambition of her scholarship can, at times, be daunting, these same qualities make *Critiques* an essential text for anyone interested in the rhetorics and politics of communication across the disciplines. In particular, the breadth of Hunter's analysis allows her to recognize that *all disciplines* have a tendency to develop ideological "blind spots"—telling silences that mark positions excluded or denied by an institutional system of representation. Such "blind spots," Hunter argues, are necessarily present in any given representational system—textuality, she argues, is always already and *necessarily* incomplete. However, these "blind spots" should not go unexamined; rather, they should be negotiated, articulated, and as-

sessed as potentially viable alternatives or supplements to the norm (they may prove more functional or beneficial to members of the community than current systems). Too often, Hunter argues, representational systems are deployed and monumentalized as "common sense" out of nothing more than habitual agreement, and alternatives are forgotten, erased, or denied simply to protect the interests of ruling power. Hunter's scholarship not only unveils the mechanisms of such widespread "doublethink"—a term she aptly borrows from Orwell—but also calls for a much needed change in approaches to textuality, teaching, and communication, even in the oft-revered arts and humanities.

In particular, Hunter argues that communicative texts from all disciplines need to develop an increased rhetorical awareness of stance—that is, of the interaction between writer and reader "at the particular moment of history that a text is communicated" (28). Disciplines need to recognize the situatedness of their approaches to textuality as well as the situatedness of the knowledge they produce and sanction. Disciplines also need to develop strategies for recognizing those positions left out of their dominant systems of representation and develop strategies for identifying and articulating those excluded positions. Ultimately, Hunter hopes that an increased rhetorical awareness of stance across the disciplines will allow individuals to begin to work together on words to articulate and assess those situated knowledges currently excluded by institutional systems of representation. "Knowledge in all fields," Hunter argues, "has to learn how best to develop a rhetoric of enfranchisement: to recognise that a position is left out, how to articulate it, and how to hear it: how to work on articulating all the embodied but unrepresented and excluded voices" (152).

The depth of Hunter's analysis is also impressive; she is careful to emphasize and discuss the position, the *situatedness*, of every concept, theory, and approach to language under study. Ideas that other scholars might have passed over as 'given' or 'understood,' Hunter relentlessly describes in terms of the particular (historical, social, and political) contingencies that both engendered their initial development and that underwrite their contemporary forms. Discussions of 'taken-for-granted' concepts seem everywhere to blossom into extended and thoughtful histories and social commentaries. Hunter is also careful to situate her own scholarship relative to her personal experiences and history as a woman, a practicing biochemist, a teacher and user of humanities computing, and an artist and writer: her style of argumentation is acutely self-aware and interrogative. While Hunter's emphasis on the situatedness of specific textual strategies and techniques does, at times, threaten to undermine the momentum of her argument, this consciousness-raising strategy works to counteract the very corporate rhetoric she denounces as non-social, non-contextual, and dangerously amnesiac. She warns that even consensual strategies that start out as

"consciously admitted construction[s], agreed by a specific group of people to answer their particular needs" (120) can be extended past their immediate contexts and devolve into corporate systems of "taken-for-granted ground rules" (121). Even more dangerous, however, are systems of representation (like those characteristic of the natural sciences and public scientific communication) that deny outright the connections of immediate context and history to textuality and the production and valuing of knowledge. Hunter's relentless efforts to situate both herself and her argument enact exactly the kind of situated, rhetorically aware, and enfranchised textuality that she advocates throughout.

The chapters of Critiques are arranged according to discipline and move in a steady trajectory through western nation state politics, to the sciences (in particular, the natural sciences, computing, and AI), and finally through to the arts, humanities, and western aesthetics. Hunter begins with a foray into the political rhetorics of the capitalist nation state and examines the rhetoric of the ideology-subject axis as well as available constructions of individuality and agency. This discussion then carries over into a comparison of the rhetorical strategies used by nation state politics (to stabilize representations of power and agency) with those strategies used by modern science (to stabilize representations of experiment and scientific practice). Hunter undertakes a lengthy critique of the communicative conventions of the natural sciences and condemns them as, by and large, non-social, non-contextual, and unable to engage the public. She highlights, as well, the extent to which these 'scientific' communicative strategies are currently mimicked by other disciplines and, in particular, the rhetoric of computing science and AI. AI and computing science, Hunter urges, insofar as both disciplines claim to display the representation of the natural sciences and have the potential to effect a metacritique of the techniques and methods of scientific communication, need to develop an increased rhetorical awareness of ethos, pathos, and stance as well as develop more engaged and participatory approaches to textuality.

Hunter then suggests that hypertext methodology (as it is currently being developed in humanities computing) can offer a helpful case study for analyzing the development of more situated—i.e. more rhetorically aware—textualities. Hunter is careful to warn, however, that even the emergent hypertext methodologies of humanities computing are far from perfect—they, too, can slip into corporate systems of 'takenfor-granted ground rules' if applied uncritically beyond their original contexts of use and they, too, need to develop strategies for the re-assessment and re-negotiation of tacit ground rules in order to maintain representational systems that best fit the needs of members of the community. Hunter then shifts gears in order to better analyze this potential for ideological "blind spots" and corporate rhetoric in not only the

sciences, but the arts and humanities as well. After a brief recapitulation, she delves into two extended feminist standpoint critiques: one of the sciences; the other of the arts, humanities, and contemporary western aesthetics. The momentum of *Critiques* really carries Hunter into this final critique of western aesthetics, and it is a triumphant and surprising note on which to end the book: a critique of western aesthetics, Hunter asserts, is not only long overdue, but seems to be demanded by the intercommentaries that "arise when we allow the strategies of the arts, the sciences and computing to filter the light on each other" (161).

Of particular interest to those studying scientific or technical communication, however, is Hunter's insistence on the common, stabilizing effects of technology and modern industry on the communicative techniques of both modern science and nation state politics. Approaches to public communication in both of these domains, Hunter argues, have developed similar rhetorics structured around the standardization of representation (effected through continual repetition). Modern science—in answer to the demands of technology and industry—has developed a system of public communication designed to "shut out anything that would weaken or question its hold on duplication, and hence its successful evidence for control over nature. This structure lies at the centre of the rhetoric of technology and modern industry, which capitalise on that dependable repeatability" (30). Likewise, the nation state—in answer to the demands of governing large areas and diversified voices, and the "needs of capitalism to stabilise or contain the conflictual powerful and to stabilise and maintain popular demand" (12)—has developed a system of public communication that "stabilis[es] the reception of the representation of the group in power, giving it its veil of authority, and [...] stabilis[es] the description or definition of the individual within the nation" (11). Both modern science and nation state politics have thus developed communicative techniques and strategies that answer to the demands of technology and modern industry, rather than to the social and material needs of an enfranchised society. Both disciplines have developed rhetorics of (public) communication designed to ensure dependable (and profitable) repeatability rather than an engaged and participatory textuality that democratizes access and accessibility.

Hunter's emphasis on the development of a rhetoric of enfranchisement and on the democratization of access and accessibility comes to a head in her discussion of agency, individuality, and subjectivity. Hunter's scholarship is refreshing insofar as she resists the traditional lure of discourse studies to critique dominant representational systems from positions along the ideology-subject axis. Instead, Hunter privileges a standpoint critique of dominant representational systems, which "argues that knowledge articulated from the standpoint of those excluded from ruling relations of power is particularly important" (2). Individuals critiquing the system from without

the ideology-subject axis, Hunter stresses, do so from a "special position outside the systematic; hence they can be more engaged and engage with different things [...] can more sharply expose its assumptions because they are not part of the prior agreements, hence they can be more objective" (163). Hunter's emphasis on the importance and agency of individuals positioned outside relations of ruling power is a welcome change from conventional analyses that focus on the constraints of dominant representational systems and that tend to write off those positioned outside the system as 'abject' or 'subaltern.'