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Book Review
Hannah Star Rogers, *Art, Science, and the Politics of Knowledge,* Cambridge: The MIT Press, 2022, 293 pp., ISBN: 9780262543682

Hannah Star Rogers' *Art, Science, and the Politics of Knowledge* serves as a key foundational text for the emerging subdiscipline of art, science, and technology studies (ASTS), also known as art-science. Rogers carefully and deftly argues for the importance of studying the intersections of art and science, precisely because it is at these convergence points where scholars can examine the social processes that produce the seemingly natural art/science dichotomy.

Art is more than the muse of science; science is better understood through art. Moreover, art and science are not as different from each other as they appear. As Rogers demonstrates through her case studies, science and art are categories separated not by universal attributes but rather by their respective knowledge communities. With the rise of art-science collaborations across all institutional types over the last few decades, both the study of art and of science would be incomplete without exploring the knowledge communities, practices, and products that continue to emerge from their convergence. She writes, "Categories of art and science have important implications for how knowledge is valued that correspond to the relative power of art and science in our society. Enriching understanding of these categories can recover the important contributions of artists to past scientific enterprises, contextualize current art-science movements, and anticipate their future potential" (p. 4) *Art, Science, and the Politics of Knowledge* provides an excellent example for how to explore the growing phenomenon of art-science and the way it is reshaping contemporary societies.

Rogers presents five historical and ethnographic case studies of people whose works challenge conventional understandings of art and science in the public and professional domains. Rogers' cases reveal how actors have positioned themselves and their work as either art or science or both to vie for funding, exposure, and legitimacy; to access or challenge current intellectual power structures; or to support or critique the very social institutions through which they create and share their work.

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Rogers analyzes liminal art-science interventions through the cases of the 19th century Blaschka family glass artisans; the documentary-style photography of Berenice Abbott (1898–1991); the largely internet-based tactical media art movement of the 1990s; and the contemporary bioart laboratory known as SymbioticA. Rogers pays close attention to the contexts surrounding these figures and works, adopting the science studies theory of symmetry to treat the contested categories of art and science as equally revelatory and valuable for understanding issues in science, technology, art, and society.

Take the case of SymbioticA, for example. Made up of a community of contemporary activists known as bioartists, SymbioticA is an arts *laboratory* at the University of Western Australia that has created both art and science outputs. Subjects have ranged from tissue culture to genomics to sleep research. Yet as Rogers demonstrates, the very definition of bioart and bioartists remains contested among the relevant knowledge communities surrounding the laboratory and the larger art-science movement. In a broad sense, bioart can be understood as any art that engages with contemporary biology. However, Rogers notes that "the struggle over how to define bioart involves not only choices about self-description but also the formation of networks of people and materials to support projects and decisions about where to show artwork and where to seek funding" (p. 147). Rogers teases out how bioartists contextualize, frame, and shape their goals, work, and identities. This reveals how the politics of pushing and policing the boundaries of art and science have important implications. The social critique of biotechnology, the democratization of science, and the questioning of uneven power dynamics between science and art are just some of the key themes that motivate bioartists to employ scientific methods for artistic works.

Perhaps most excitingly, Rogers' book offers a novel approach to studying the art-science phenomenon by carefully documenting the methods of the curator-as-researcher. In addition to her training in science studies, Rogers draws on her decade of experience curating art, science, and art-science exhibitions to demonstrate how curatorial practices generate intersectional knowledge about the ways that materials and rhetoric converge to position works as belonging to either art or science. Such positioning is a political act with real-world consequences that affect how these works are evaluated, accepted, or dismissed.

The chapter "Curating Art's Work in the Age of Biotechnology" shows how participant-observer and auto-ethnographic methods can be creatively and reflexively employed to develop curation-as-research protocols that are more transparent, accessible, and accountable to diverse groups of artists, scientists, scholars, and members of the public. These qualities are crucial for research that explores sensitive and far-reaching issues such as the roles of biotechnology in shaping current and future societies. This chapter documents and analyzes the steps, rationale, and results of a four-year multi-sited exhibition that challenged all involved to deeply engage with the social issues entangling emergent biotechnologies. The curatorial research practices developed by Rogers and her team over the years situate the public not as passive

pupil or subject but rather as art-science critic, meaning-maker, and research collaborator. Thus, this innovative research technique is well aligned with more egalitarian, liberating research practices (such as participatory action research, open science, and community-based design research) which are necessary for ethically addressing pressing social issues like the ones many art-science works investigate.

Finally, *Art, Science, and the Politics of Knowledge* is an especially useful work for scholars, researchers, and practitioners who have been trained in an evolving intellectual environment in which the boundaries between art and science are contested from the get-go. Thanks to Rogers' scholarship, which is pioneering art-science as a rich yet largely untapped branch of the humanities, interdisciplinary scholars are able to fill their conceptual and methodological toolboxes with tools that are better suited for studying social phenomena whose complexities transcend any one disciplinary approach.