Arte Programmata: Freedom, Control, and the Computer in 1960s Italy. Lindsay Caplan. Minneapolis, MN: University of Minnesota Press, 2022. 328p. Paper, \$33 ISBN: 978-1-5179-0995-6.



Arte Programmata: Freedom, Control, and the Computer in 1960s Italy, by art historian Lindsay Caplan, adds a fresh perspective to narratives about art and technology. The book also has much to offer those working in the field of library and information science. Arte Programmata takes us deep into how Italian artists of the 1960s and 1970s engaged with information theory and the idea of computers. It also expands understanding of Italian art of this period, focusing on lesser-known artists and collectives like Bruno Munari, Enzo Mari, Gruppo N, and Gruppo T. The book is not only a well-researched art history, however; it is also a meditation on the broad concepts of freedom and control as they are enacted in and

emerge from technological frameworks. In analyzing the work of Arte Programmata artists and drawing on contemporary critical theory about technology and society, Caplan makes the intriguing argument that "programming, planning, and control are not categorically antithetical to individual freedom but form the conditions that enable and encourage subjective agency" (3).

Caplan's interdisciplinary approach expands the book's appeal to readers from a variety of disciplines. She deftly blends traditional formal analysis of artworks with intellectual histories of topics like cybernetics and the Italian Left, all while eliciting the implications of politics, capitalism, and the state. The idea of the "program" underpins the book's argument, and it is worth noting that in *Arte Programmata* programming means something different from what readers might expect. The artists Caplan discusses did not program computers, but rather were inspired by concepts like algorithms and the principle that "a simple, logical structure can generate an unforeseeable number of possible forms" (35). In the book, programming refers to a wide swath of concepts from algorithm-inspired art to Italian governmental economic planning (*programmazione*).

Chapter 1 situates the 1962 exhibition *Arte programmata: Arte cinetica, opere multiplication,* opera aperta in the context of earlier pieces from the same artists and Umberto Eco's "open work," while chapter 2 charts a shift in artists' output from geometric art and kinetic sculpture to immersive environments inspired by cybernetics. Caplan outlines how Arte Programmata artists collectivize authorship, in part in reaction to other movements such as arte informale (which privileged the expression of an individual genius) and the artista impegnato (who creates art to express an external, existing political agenda). Though Umberto Eco's open work was a major interpretive key at the time, Caplan suggests that it's more complicated than that: while the works suggest infinite permutations, they also enclose and constrain. The tension between possibility and constraint is the site of collaborative creation. As Caplan writes, information theory and programming appealed to Eco and the Arte Programmata artists because "each offered a way to conceive the activity of individuals...as stemming from shared material, social conditions rather than a uniquely subjective or metaphysical state" (68). Caplan then focuses on immersive environments (ambienti). She expands on how the artists created spaces and situations that resulted in specific experiences of the world: in other words, how they went from "programming art to programming their audience" (89). The strategies of the Arte Programmata artists are interpreted as an antidote to the individualizing effects of mass media, especially television, and the imbrication of these media with capitalist consumer

culture. Looking at the approach of Arte Programmata artists to information theory and cybernetic environments is an opportunity to think with them: how might they inspire us to design interfaces or service points differently?

In chapter 3, Caplan develops earlier threads on information theory, situating the Italian artists of Arte Programmata among examples of computer art from elsewhere in Europe and the United States. Caplan argues that Arte Programmata artists reacted negatively to the political implications and understanding of information espoused by other computer artists. Arte Programmata's work--and Caplan's interpretations of it--shine light on information as system as opposed to information as meaningful message or content. This distinction makes this book a wonderful complement to writings on information from other disciplines, such as Sianne Ngai's fascinating work on the aesthetic category of the interesting, read through the lens of the material forms of bureaucracy like documents in her book Our Aesthetic Categories. For librarians and archivists, mathematical information theory can feel removed from our everyday concerns, which often understand information as content-individual, meaningful messages. As Caplan writes, Arte Programmata's focus on information theory's description of "the conditions, possibilities, and limits of communication of any signal—that is, the situation as a whole...took the Italians to a unique place politically, since to them, the 'situation' included the relationships between people, the composition of their audience, and the networks and codes that connect them" (133). Such a sociotechnical lens on interaction is a complement to ideas about media, misinformation, and other salient topics that emerge from analysis of document and evidence-interested conceptual art.

In chapter 4, we see how the work of Arte Programmata artists inspired by information theory continued as they turned to design. A main point is that the Arte Programmata artists understood their position inside of social and political environments. They thought through not just how to oppose dominating systems such as capitalism, but also how to envision alternatives from within. This view prompts a library studies question: How can systems of constraint and control such as library catalogs be sites for change? Caplan offers the politics of form, which contrasts understanding of the political nature of artworks as "external referent, subject matter, or content" (5). Through form, she contends, we can "recognize the social nature of Arte Programmata's artistic experiments and how their interest in new media is correctly understood as a commitment to understanding people as both subjected to their environment and as agents capable of shaping it" (5). Like the works of Arte Programmata artists, the forms we generate as information professionals can be (and already are) analyzed for such political implications. Within discussions of inclusive and critical cataloging, the potential harms of authority control and the rigidity of our data structures are rightly problematized and contested. Caplan's idea that control and "programmed" environments might in some ways "enable and encourage subjective agency" is worth considering. — Alexandra Provo, New York University

The Library's Guide to Sexual & Reproductive Health Information. Barbara A. Alvarez. Chicago, IL: ALA Editions, 2023. 136p.

Barbara A. Alvarez's *The Library's Guide to Sexual & Reproductive Health Information* comes at a time when libraries across the United States are, quite literally, under attack for providing to our various patrons' materials and resources related to these issues. This handy resource offers strategies for meeting these information needs. The book is divided into three parts: