political turbulence in their first years of existence, yet they had to provide responses to material shortages in housing and basic infrastructure—or fail as states.

3. Mumford runs into this same issue in his book on CIAM—namely, that such a large, heterogeneous, dispersed, and long-lived group makes for distant protagonists and limited empathetic connection between reader and historical actors. See Mumford, *CIAM Discourse on Urbanism*.

4. In her recent doctoral dissertation, Marcela Hanáčková focuses on Helena Syrkus and examines this ideological shift through Syrkus's famous speech at CIAM VII in Bergamo, Italy, in 1949. Marcela Hanáčková, "CIAM and the Cold War: Helena Syrkus between Modernism and Socialist Realism" (PhD diss, GTA/ETH Zurich, 2019).

Beatriz Colomina
X-Ray Architecture
Zurich: Lars Müller Publishers, 2019, 200 pp., 277 illus. $40/€35 (cloth), ISBN 9783037784433

It is a joy to be in tactile contact with a book as beautifully designed and lushly illustrated as this one. Published by Lars Müller, whom author Beatriz Colomina hails as "the last book maker" (199), this volume features a cleverly designed, double-layered cover that evokes its title, *X-Ray Architecture*. The strong graphic design and the 277 illustrations, many in color, that accompany the text are appropriate for a book written by a preeminent architectural historian and theorist known for her groundbreaking and sophisticated analysis of images.

Like other books by Colomina, this one had a long gestation. The author recounts that her main idea here—the intimate connections between architecture and illness—goes back to 1980, when she first arrived in New York and was inspired by the type of interdisciplinary scholarship characterized by Susan Sontag's *Illness as Metaphor* (1978). Besides noting that she "started seeing modern architecture in terms of all the pathologies related to it, real or imagined" (8), Colomina does not elaborate on how she was inspired by Sontag's work.

If illness is the author's subject, the book's organization and multiple narratives—which provide a panoramic view of the various linkages between architecture and illness through an array of modern architects and buildings—indicate metaphor as her method. Colomina links various types of illnesses to modern architecture through different forms and workings of metaphor. These range from the ways in which modern architects repeatedly deployed "disease imagery to express concern for social order" (19) to how Colomina interprets major modern architects' works in relation to their own understandings of sick bodies: for example, Charles and Ray Eames's "orthopedic body," Le Corbusier's "tuberculoid body," and Frederick Kiesler's "emaciated body" (54). In fact, one could extend Colomina's metaphors to suggest that her descriptions of Adolf Loos's and Richard Neutra's respective works in chapter 1 hint at a preoccupation with neurological and naked bodies, respectively. These bodily metaphors are, in turn, based on Colomina's comparison of an architect to a doctor "practicing a form of preventive medicine that nurtures and rebuilds the body and the psyche" (30). In other words, Colomina uses metaphors to form chains of open-ended and, at times, loose associations between design, illnesses, and images. This might explain why, despite the book's title and its hypothesis that "modern architecture was shaped by the dominant medical obsession of its time—tuberculosis—and the technology that became associated with it—X-rays" (10), only two of the five chapters are concerned with X-rays or tuberculosis.

Chapter 1, "Health and Architecture: From Vitruvius to Sick Building Syndrome," is an overview of the relationships between ill health and architecture, mostly explored through the lives and works of the aforementioned modern architects. Strangely, however, and despite its subtitle, this chapter does not discuss sick building syndrome. Chapter 2, titled simply "Tuberculosis," examines several modern sanatoriums, both canonical and obscure. Colomina focuses on the treatment of tuberculosis before antibiotics, which relied on the provision of abundant light and air in sanatoriums, revealing how these "sanatoriums modernized architects" (65). In chapter 3, "X-Ray Intimacy," images made from electromagnetic radiation provide a metaphor for what Colomina calls the "disciplinary self-exposure" of the architectural canon (118), showing how X-ray images transformed the visual field and shaped notions of transparency in modern architecture, most notably in the work of Ludwig Mies van der Rohe.

Extending the metaphors of disciplinary self-exposure and visual transparency, chapter 4, "Blurred Visions," shows how transparency tends to be ambiguous in the writings of György Kepes, Colin Rowe, and Robert Slutzky, and in the design work of figures like Philip Johnson (the Glass House, particularly) and Mies (especially his skyscraper designs and models). Colomina ends the chapter by exploring the spatial ambiguities created through the interplay of transparency and reflectivity in works by SANAA (Sejima and Nishizawa and Associates). Chapter 5, "Hyperpublic: An Afterword," is more a conclusion than a proper chapter. Colomina attempts here to connect recent medical imaging technologies with examples of contemporary architecture from the 1990s onward. Her point is to reiterate the argument she makes in chapter 3—that new medical technologies can change our conception of architecture. The distance of the final two chapters from the topic of illness and architecture is an indication of both the strengths and the weaknesses of metaphor as a method. When done well, such an approach can result in associative interpretations that are refreshingly imaginative, insightful, and far-reaching. When poorly executed, it can lead to predictable and, at times, less than convincing interpretations.

One of the great strengths of Colomina's past scholarship has been her insightful analysis of photographs. In her previous books, photographs have served not merely as illustrations but, as Adrian Forty has noted, as "primary evidence" to be carefully analyzed and dissected.[1] These images have often been printed in ways that have emphasized their autonomy as independent documents. In this book, however, the more than two hundred photographs, most printed in small sizes and intermingled with the text, appear as no more than appending illustrations, almost extraneous to the arguments in the text.

This book's approach to architectural history and theory—focusing on photographs and questions of representation—pioneered by Colomina and others, has its roots in the broader "cultural turn" that occurred in the social sciences and humanities beginning in the 1980s and 1990s. Critics of that approach have pointed out

that it was both a turn to culture and a turn away from society and politics.[2] This might account for *X-Ray Architecture*'s lack of engagement with the politics and social dimensions of health and illness, excepting a few cursory references to war and individuals suffering from illnesses. The book's focus on (sometimes tragically) heroic, mostly male architects and their iconic architectural representations, while understandable given Colomina's explicitly "intra-canonical" approach and her attention "to the unexpected within the canon itself" (9), raises two historiographical questions.

First, what does it mean to write an intra-canonical history at a time when the Eurocentric canon of modern architecture is being challenged on many fronts by global, decolonizing, and race-conscious histories?[3] Why should one retreat to the canon, particularly when the modern history of illness and architecture is a thoroughly global topic, one inextricably connected to colonialism, race, and capitalism, as medical history and other fields have shown?

Second, is the intra-canonical approach compatible with interdisciplinarity, which is not just the ambition of this book but an important trend in contemporary architectural historical scholarship? It seems to me that the intra-canonical approach is very much about preserving disciplinary norms, even if it offers a few surprises. We might understand the motivations and intentions of canonical architects, and the meanings behind canonical buildings, differently through the intra-canonical approach, but the architects and buildings we look at remain largely the same. If anything, the intra-canonical approach further intensifies our obsession with these established architects and buildings, thus deepening, rather than shaking, the foundation of the discipline. In contrast, the main objective of interdisciplinary scholarship is not just to draw from two or more disciplines to bring about theoretical, methodological, and conceptual innovations as ends in themselves; rather, it is to use these innovations to challenge disciplinary norms and understand problems, subjects, and objects previously neglected or misrepresented by more traditional disciplinary structures. On the subject of illness and the built environment, existing scholarship has already deployed interdisciplinary frameworks to broaden the geography of illnesses and diseases, types of buildings, and categories of actors beyond those canonical Euro-American examples so firmly entrenched within the discipline of architecture.[4] Scholars have also engaged with diffused and distributed groups, biopolitics, and government agencies concerning health and the built environment outside the established disciplinary frameworks of the canon.[5]

The relationship between illness and the built environment is undoubtedly an important topic, and the suffering and anxieties caused by the coronavirus pandemic ongoing at the time of this writing further accentuate the significance of this topic. The effects of the medical and social pathologies caused by such viral outbreaks and other forms of illness, however, tend to be diffused in everyday lives and the attendant built environment rather than encapsulated in a few exemplary buildings. One could argue that these pathologies create human suffering, foreground complex politics of prevention and healing, and highlight social injustices and cultural responses that first and foremost show—as suggested in the title of a moving essay written by Sontag's son David Rieff following her death from blood cancer—"illness as more than metaphor."[6]

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Notes

1. Adrian Forty, review of *Domesticity at War*, by Beatriz Colomina, *Journal of Architecture* 13, no. 4 (2008), 523.
2. See, for example, Tahl Kaminer, "Framing Colomina," *Footprint*, no. 4 (Spring 2009), 129–38. In the scholarship on colonial architecture and urbanism, the cultural turn has, in fact, contributed to greater attentiveness to the cultural politics of imperialism and colonialism. See Anthony D. King, *Writing the Global City: Globalisation, Postcolonialism and the Urban* (London: Routledge, 2016).
3. See, for example, Felicity D. Scott, *Outlaw Territories: Environments of Insecurity/Architectures of Counterinsurgency* (New York: Zone Books, 2016); Irene Cheng, Charles L. Davis, and Mabel O. Wilson, eds., *Race and Modern Architecture: A Critical History from the Enlightenment to the Present* (Pittsburgh: University of Pittsburgh Press, 2020); Łukasz Stanek, *Architecture in Global Socialism: Eastern Europe, West Africa, and the Middle East in the Cold War* (Princeton, N.J.: Princeton University Press, 2020).

4. See, for example, Anthony D. King, *The Bungalow: The Production of a Global Culture*, 2nd ed. (New York: Oxford University Press, 1995); Robert K. Home, *Of Planting and Planning: The Making of British Colonial Cities* (London: Spon, 1997); Brenda S. A. Yeoh, *Contesting Space: Power Relations and the Urban Built Environment in Colonial Singapore* (Kuala Lumpur: Oxford University Press, 1996); Lenore Manderson, *Sickness and the State: Health and Illness in Colonial Malaya, 1870–1940* (Cambridge: Cambridge University Press, 1996); Jiat-Hwee Chang, *A Genealogy of Tropical Architecture: Colonial Networks, Nature and Technoscience* (London: Routledge, 2016).
5. To be fair, Colomina does indicate the "biologization of politics" (18–19), but she does not develop the point. See, for example, Michelle Murphy, *Sick Building Syndrome and the Problem of Uncertainty: Environmental Politics, Technoscience, and Women Workers* (Durham, N.C.: Duke University Press, 2006); Warwick Anderson, *Colonial Pathologies: American Tropical Medicine, Race, and Hygiene in the Philippines* (Durham, N.C.: Duke University Press, 2006); Gregg Mitman, *Breathing Space: How Allergies Shape Our Lives and Landscapes* (New Haven, Conn.: Yale University Press, 2007).
6. David Rieff, "Illness as More Than Metaphor," *New York Times Magazine*, 4 Dec. 2005, https://www.nytimes.com/2005/12/04/magazine/illness-as-more-than-metaphor.html (accessed 23 Apr. 2020).

Martino Stierli and David B. Brownlee, eds.
Complexity and Contradiction at Fifty: On Robert Venturi's "Gentle Manifesto"

In his introduction to Robert Venturi's *Complexity and Contradiction in Architecture* (1966), Vincent Scully declared, "This is probably the most important writing on the making of architecture since Le Corbusier's *Vers une Architecture*, of 1923"—a statement that has become a truism in architectural history. But what can be made of this pronouncement more than half a century after it was written? Moreover, how are readers to revisit a book that is already so canonical?

In 2016, numerous exhibitions, symposia, and publications marked the fiftieth anniversary of *Complexity and Contradiction*'s first appearance, including a three-day event at the MAXXI in Rome, features in *JSAH* and *Architectural Design*, and, most