

A Design History of Design: Complexity, Criticality, and Cultural Competence

Wayne A. Williams and Janice Rieger

Les histoires de l'art et du design ont délaissé, au cours des quatre dernières décennies, l'étude canonique des objets, des artistes/concepteurs et des styles et se sont tournées vers des recherches plus interdisciplinaires. Nous soutenons néanmoins que les historiens et historiennes du design doivent continuer de pousser leur utilisation d'approches puisant dans la culturelle matérielle et la criticité afin de combler des lacunes dans l'histoire du design et de développer des méthodes et des approches pertinentes pour son étude. Puisant dans notre expérience d'enseignement auprès de la génération des «milléniaux», qui sont portés vers un «design militant», nous offrons des exemples pédagogiques qui ont aidé nos étudiants et étudiantes à assimiler des histoires du design responsables, engagées et réflexives et à comprendre la complexité et la criticité du design.

Wayne Williams is Assistant Professor and former Chair in Design Studies at MacEwan University.

—WilliamsW@macewan.ca

Janice Rieger is a PhD candidate in Material Culture and Design Studies at the University of Alberta.

—jlkowals@ualberta.ca

1. Adrian Forty, *Objects of Desire. Design and Society, 1750–1980* (London, 1986); Adrian Forty, “DEBATE: A Reply to Victor Margolin,” *Design Issues* 11, 1 (Spring, 1995); Clive Dilnot, “The State of Design History, Part II: Problems and Possibilities,” *Design Discourse*, ed. Victor Margolin (Chicago, 1989), 140; John A. Walker, *Design History and the History of Design* (London, 1989); Victor

The past four decades have seen the development of a significant debate concerning definitions of and approaches to teaching the history of design. Design practice is fundamentally different than that of art, despite the fact that they share many aspects; it follows that the methods and approaches to studying the history of each also differ. This shift in thinking about appropriate, discipline-specific methods and approaches was explored by Adrian Forty, Clive Dilnot, John A. Walker, Victor Margolin, and Richard Buchanan, and more recently by Meredith Davis, Grace Lees-Maffei, and Kjetil Fallan all contributing to and fuelling this debate,¹ yet there is still no general agreement about the “right” definition for design history, what constitutes “proper” learning outcomes for the field, and whether—and how—to engage its students in a critical approach to design, history, and practice.

In the context of this debate, we think that in recent years, design history has shifted from a reliance on an art historical approach to a material culture approach. A material cultural perspective transcends tight definitions and scope because it is inherently multidisciplinary and more concerned with the context of production, consumption, and mediation than with the reproduction of a canon or a narrow set of values, an approach which previously had strongly influenced design history. We also argue that a material cultural perspective provides appropriate methods and approaches to engage students in a discourse of criticality related to both design history and evolving design practice.

Designing a History of Design

In *Design History and the History of Design*, Walker explained that the difficulty in reaching a consensus on a definition of design and its histories, or on core learning outcomes for design history, arises from a re-evaluation of the nature of design practice and education.² Many have argued that design defies any clear definition.³ Maurizio Vitta explains the conundrum:

If the *culture of design* is meant to explain the *culture of the object*, it must of necessity share the object's fate. And, as the object in our system is at the same time a sign of social identification, a communication instrument, a use image, an oppressive *simulacrum*, a fetish, and a tool, design cannot help but be an instrument of social analysis, an area of intervention in everyday life, a language, a fashion, a theory of form, a show, a fetishism, a merchandise. Both its strength and its weakness lie in its being at the same time the crucial point in the social development of daily life and a marginal aspect of production, a source of culture, and a confirmation of the prevailing values.⁴

Margolin, "Design History or Design Studies: Subject Matter and Methods," *Design Issues* 11, 1 (Spring, 1995); Richard Buchanan, "Wicked Problems in Design Thinking," *Design Issues* 8, 2 (1992): 5–21; Meredith Davis, "Toto, I've Got a Feeling We're Not in Kansas Anymore...," AIGA Boston Presentation, 4 April 2008, www.aiga.org/content.cfm/designer-of-2015-next-steps; Grace Lees-Maffei and Daniel J. Huppatz, "Why Design History? A Multi-National Perspective on the State and Purpose of the Field," *Arts and Humanities in Higher Education* (2013); Kjetil Fallan, "De-Tooling Design History: To What Purpose and for Whom Do We Write?," *Design and Culture* 5, 1 (2013): 13–19.

2. Walker, *Design History*, 68.
3. John Heskest, *Toothpicks & Logos: Design in Everyday Life* (New York, 2002), 5.
4. Maurizio Vitta, "The Meaning of Design," *Design Discourse: History, Theory, Criticism*, ed. Victor Margolin (Chicago, 1989), 35. Italics in the original.
5. Walker, *Design History*, 18.
6. Margolin, "Design History," 14.
7. Walker, *Design History*, 18.
8. Helen Charman, "Critical about Design," *Debates in Art and Design Education*, ed. Nicholas Addison and Lesley Burgess (Abingdon, UK, 2012), 122.
9. Guy Julier, "From Visual Culture to Design Culture," *Design Issues* 22, 1 (2006), 64–76, 73.
10. Buchanan defines "design thinking" as the process of applying "concrete integrations of knowledge that ... combine theory with practice for new productive purposes." For a more in-depth discussion, see Buchanan, "Wicked Problems in Design Thinking."
11. Rittel and Webber used the term "wicked" in 1973 to describe ill-defined or "tricky" problems that are not solvable in the ways that well-defined, or so-called "tame" problems can be—in C.W. Churchman's words, a "class of social system problems which are ill-formulated, where the information is confusing, where there are many clients and decision makers with conflicting values, and where the ramifications in the whole system are thoroughly confusing." C.W. Churchman, "Wicked Problems," *Management Science* 4, 14 (December 1967), 8141–42. See also Buchanan, "Wicked Problems;" Sandra Waddock, "Educating Holistic Professionals in a World of Wicked Problems," *Applied Developmental Science* 2, 1, (1998): 40–47; and Donald

As this passage makes apparent, the complexity of the field makes it difficult to agree on what an introduction to design history could or should be. Nevertheless, design is a key characteristic of material culture⁵ and it must therefore be studied from a cultural perspective.⁶

The fields of both art history and design history have seen a shift from a canonical study of objects, artists, and styles to more interdisciplinary and cultural foci—this shift toward cultural studies has benefited both.⁷ However, we believe that design studies and design history must embrace criticality more extensively. Helen Charman explored this when she wrote that, despite the extent to which our lives are infused with and shaped by design, it is not a subject accorded much critical attention, certainly not when compared to art criticism. She states, "Suffice to say, critical discourse and reflexivity about design is, at best, in its nascent stages, and certainly little more than a footnote to a design student's educational experience."⁸ For design history, this shift toward cultural studies cannot end at visual culture. As Guy Julier notes, "the openness with which material culture studies are pursued, alongside design history and design studies, provides an intellectual flexibility that is largely absent within visual culture [studies]."⁹ This "intellectual flexibility" is necessary in any study of design; "audience" and "user," for example, are pivotal analytical concepts that affect the way objects are considered in the context of design production, consumption, and mediation. Designed for a different kind of visual field, visual culture study does not have a vocabulary to address the important areas increasingly required of design practitioners, whose disciplinary parameters have seen a radical expansion and convergence of skill, knowledge, methods, and scope of work over the past three decades.

In addition to constantly changing methods, tools, technologies, and processes, competencies required of design practitioners now include behavioural design, user experience design, universal design, and process design. With this expansion comes a convergence: the practice has shifted from traditional craft- and skill-based production toward a range of more multidisciplinary, collaborative, and holistic approaches. Designers must be reflexive and critical of their practice and apply "design thinking"¹⁰ to address an increasing number of "wicked problems."¹¹ In order to meet this need within the practice, many design schools have transformed their studio classes through a re-imagined set of pedagogical shifts: see for instance, the recent contributions by Lars Lindström and by Susan Orr, Mantz Yorke, and Bernadette Blair, which signal new approaches to student-centred learning in design studies.¹²

Designing a Design History Pedagogy: Complexity, Criticality, Competence

Epistemology, pedagogy, and the structure of design history interact to form a complex, generative network of cultural activity. Design history education must embrace this complexity with criticality in order to build competence. First, it must move beyond a distanced objective mode of interpretation to an inhabitation of the problem. Tim Dant explains, "All objects are social agents in the limited sense that they extend human action and mediate meanings between humans."¹³ This inherent complexity—this double dynamic of objects—is what design history is charged with exploring, and in our view,

must now be embraced as part of design education. Additionally, it must help students understand the enculturation of design, which will enable a criticality of the values design education teaches: for example, design practice is inherently connected to the social and the cultural, and “[a]ll material goods are endowed with social significance.”¹⁴ In addition to building competency, this “increases the social responsibility of the designers ... [yet] establishes their cultural legitimacy on a more solid basis than was previously thought.”¹⁵ A different pedagogy is needed to help students understand this complexity, develop criticality, and become engaged, competent practitioners.

Complexity

We agree with Margolin, Davis, and Fallan that there is a need for a more expansive and critical examination of design in relation to a more complex social and cultural context.¹⁶ Buchanan offers additional insight into this and notes, “educators have realized that design education lacks the dimension of history, theory, and criticism that can foster more sophisticated and critical responses to new situations.”¹⁷ He identifies collaboration and cross-disciplinarity as key competencies that foster “a distinct type of thinking,” required to grapple with the wicked problems facing designers today.¹⁸

Referring to the ideas of design methodologist Christopher Jones, Davis offered the astute observation that

the problems of contemporary post-industrial society reside at the levels of systems and communities, not at the level of components and products. Implicit in this declaration is recognition of complexity, of an increasingly intricate web of interactions among people, objects, and settings.¹⁹

We believe that this complex network of interactions among people, objects, and environments clearly supports the need for a material culture perspective, which represents an important epistemological shift

Design history is essential to design education because it can help sharpen the focus on complexity, community, consumption, mediation, and production, which helps design students embrace criticality. Walker argues that design history should provide more than the stories of notable designers and their creations.²⁰ For example, rather than discuss the DCW chair and its designers Charles and Ray Eames, we can discuss the material culture of chairs through the complexity of theory, agency, disability, and privilege, as we do in the following pedagogical example.

In the first part, a chair from any culture is put up on the screen (any chair—Medieval to Baroque to Modern within a Western visual field—or an African stool or throne within a global framework). The instructor then goes through one example of using a specific theoretical lens to discuss the chair and gives a brief summary of various other theoretical lenses through which the object could be analyzed. After the introduction, students speak about the different ways we can come to understand the chair: through postcolonial theory, feminist theory, and Marxist theory. They then consider the chair through production, consumption, and mediation, and write a five-minute personal reflection.

In the second part of the session, the class discusses the idea of the chair as having agency and how agency is defined. Since most design students have difficulty understanding agency, the instructor turns their attention to the desk

Ludwig, “The Era of Management Is Over,” *Ecosystems* 4, 8 (2001): 758–64.

12. Lars Lindström, “Aesthetic Learning about, in, with and through the Arts: A Curriculum Study,” *International Journal of Art & Design Education* 31, 2 (2012): 166–79, as well as Susan Orr, Mantz Yorke, and Bernadette Blair, “The Answer Is Brought about from within You”: A Student-Centred Perspective on Pedagogy in Art and Design,” *International Journal of Art and Design Education* 33, 1 (2014): 32–45.

13. Tim Dant, *Material Culture in the Social World: Values, Activities, Lifestyles* (Buckingham, 1999), 13.

14. Mary Douglas in *Anthropology of Consumption*, cited by Vitta, “Meaning of Design,” 32.

15. Vitta “Meaning of Design,” 36.

16. Margolin, “Design History,”

12. Margolin also argues in *Design Discourse* that design studies be considered a field of interdisciplinary research; see also Davis, “Toto,” and Kjetil Fallan, *Design History: Understanding Theory and Method* (Oxford, 2010).

17. Buchanan, “Wicked Problems,” 64.

18. *Ibid.*, 64.

19. Davis, “Toto,” 3.

20. Walker, *Design History and the History of Design*, 110.

chair in which they are sitting. In groups, we have them discuss their relationship to their chair—how it changes their posture and affects their learning; its design features, embodiment, and ergonomics. The students begin to think about design from a material culture perspective, recording their reflections as a group.

In the third part, students are asked to discuss how disability can inform design. The instructor speaks about the history of the wheelchair: for example, in eighteenth-century France, the wheelchair was considered stylish enough to be used by disabled and able-bodied alike.²¹ At this point, the instructor can show Eames's notable dcw chair, but it is now examined through a critical disability studies perspective. After showing numerous examples of chairs on the screen, the class explores design in relation to social inclusion and the concept of ableism. This phase allows for criticality and reflexivity, not only of their own embodiment in relation to design, but the embodiment of others.²²

Criticality

Design history can also highlight the value of being conscious about the lessons of the past. However, it must do so by moving beyond the conventional epistemological stance of creating a canon of objects, which labels exemplars of “good design” based on narrow and often extremely subjective criteria. We think design history must position itself in relation to current practice, something Fallan also expresses.²³ Design is a fundamental part of any consumption-based economy; however, it must not be limited by a consumption-only perspective or viewed solely in terms of economic value. Although, as Shove, Watson, and Ingram state, “[t]ools, materials and associated forms of competence frame the range of what people take to be possible,”²⁴ the practice of design, its role, and even its very definition are constantly evolving. Therefore, design must concern itself with the very nature of the dialogue of which it is part.

Materialism and material culture provide criticality for design history because of their unboundedness. As Paul Basu explains, thus conceived, material culture studies can be said to thrive “as a rather undisciplined substitute for a discipline,” unfettered by the conservatism that can blight traditional disciplines, “with their boundary-maintaining devices, institutional structures, accepted texts, methodologies, internal debates and circumscribed areas of study.”²⁵ Christopher Tilley similarly argued on behalf of expanding categories of analysis, “material-culture studies constitute a nascently developing field of inquiry that systematically refuses to remain enmeshed within established disciplinary boundaries.”²⁶

It is crucial to reflect on epistemologies and pedagogies of design history in order to consider how students come to know the history of design. Pedagogical debates have often centred on the introductory design history course, which has been criticized for being too broad and for producing a foundation that rests on culturally limiting Western notions of canonicity. Shifting the foundation of introductory survey courses to be global and inclusive of marginalized populations, as we saw in the above pedagogical example, can shape the curricular development of subsequent design history courses with important implications for wicked design thinking. Conceiving design as broadly as possible lays a stronger foundation for its study.²⁷ However, we believe

21. Graham Pullin, *Design Meets Disability* (Cambridge, MA, 1989).

22. This in-class exercise can be presented in one to three lectures and can also have several written elements incorporated. It has been delivered primarily to first-year design students.

23. Fallan, *Design History*.

24. Elizabeth Shove, Matthew Watson, and Jack Ingram, *The Design of Everyday Life: Cultures of Consumption* (London, 2007).

25. Paul Basu, “Material Culture: Ancestries and Trajectories in Material Culture Studies,” *Handbook of Sociocultural Anthropology*, ed. James Carrier and Deborah Gewertz (London, 2013), 370, quoting Daniel Miller, *Stuff* (Cambridge, 2010), 1, and Daniel Miller and Christopher Tilley, “Editorial,” *Journal of Material Culture* 1, 1 (1996): 5, respectively.

26. Christopher Tilley et al., eds., *Handbook of Material Culture* (London, 2006), vii.

27. Margolin, “Design History,” 13.

the foundation should be fluid so as to form a generative network of cultural activity that embraces a criticality of the Western canon—there is no fixed canon and no such thing as the “end of history” because the network is continuously being re-enacted.²⁸ An introductory survey course should be about embracing criticality, complexity, and questioning the canon and its certainties, and should give students the ability to understand the relational network of design history, critique its value-laden frame, and make sense of its synchronic and diachronic relationships.

As we have argued, design history has benefitted greatly from the scholarship of material culture, which has enabled and encouraged research into the relationships among production, consumption, and mediation. Since, as Miller posits, “In no domain is it as difficult as it is in the matter of function and utility to distinguish the actual place of artifacts in human practice,”²⁹ we contend that focusing on design and practice as part of a more holistic approach to history (material culture) contextualizes the aesthetic “value” of an object within a larger discussion of how the object’s production, consumption, and mediation are situated simultaneously within various contexts. This makes it more important than ever to integrate reflection and criticism into design education and practice. The following class project asks students to engage from a multidisciplinary perspective by exposing them to various “lenses” essential to framing a design agent, artefact, process, or product: social, geographical, environmental, political, philosophical, and technological.

Students are asked to examine the material culture during the period under discussion through a particular lens—for example, how notions of beauty and utility relate to the social values of the late nineteenth century and are expressed in the material culture of the period. Small groups of students are each given a specific object to analyze in relation to a specific lens. Students present their thoughts in a large class discussion and the instructor facilitates the discovery of significant relationships.

The second part of the assignment is a research project in which the students choose a decade or period between the 1850 and 2000 to research. First, they write an annotated bibliography for the period they have chosen. They consider material culture in relation to the popular aesthetic style(s) and zeitgeist of the period, seen through the social, political, environmental, technological, philosophical, and environmental lenses, while considering various examples of material culture in order to determine which seem to be the most representative of the period. Finding examples of key events provides the students with a framework to develop a generalizable thesis statement that situates various examples of material culture within a wider context.

In the next part of the assignment, students design a poster showing various examples of material culture and demonstrating a relationship or reaction to the key themes they have identified. Finally, they write a research paper focusing on one specific object and the specific lenses that influenced it in terms of its design, reflecting on production, consumption, and mediation.

This assignment exposes the relational networks and materialism of design and shows how the bonds that link people in social forms make an object invariably historical and deeply embedded in its original context.³⁰ Discussion, structured analysis, and research assignments encourage students to consider

28. Nicolas Bourriaud, *Relational Aesthetics*, trans. Simon Pleasance, Fronza Woods, and Mathieu Copeland (Paris, 2002), 18.

29. Daniel Miller, *Material Culture and Mass Consumption* (Oxford, 1987), 116.

30. Bourriaud, *Relational Aesthetics*, 18.

how design can respond to, question, or engage social values, and how it can suggest alternatives to dominant cultural practices. It can also assist in a richer, more critical understanding of the role of design as a mediator between ourselves and the world.

Competence

Millennials, Generation Y, Echo Boomers: regardless of label, the current cohort of postsecondary students is radically different from those that came before.³¹ Some may argue that every generation is different from its predecessors based on particular social, political, cultural, and economic contexts. Research has shown that millennials are significantly different from their predecessors in how they learn and behave, how they access information, their relations with their peers and parents, and their overall attitudes and worldview, owing to their unprecedented access to information and technology, the influence of social media, and economic conditions.³² As Jeff Feiertag and Zane Berge argue, what also makes these students different from their predecessors is that “they want to have a say in their education, contribute toward the discussion of how they will learn, participate in hands-on activities and collaborate with their colleagues.”³³

Helping these millennials become critical thinkers requires encouraging metacognition; that is, they must become conscious not only of what they are thinking but also how they are thinking. Shifting the focus from memorization of styles, objects, and designers to the context in which design activity occurs will not only help students make stronger and longer lasting connections, but also better prepare them to be practitioners in the complex activity of design today. Millennials are predisposed to learn and succeed at “design activism,” what Fuad-Luke defines as “design thinking, imagination, and practice applied knowingly or unknowingly to create a counter-narrative aimed at generating and balancing positive social, institutional, environmental and/or economic change.”³⁴ Our pedagogical examples discussed above have helped our students both internalize “accountable, engaged, and reflexive design histories,”³⁵ and understand the complexity and criticality of design.

Conclusion

Little consensus exists on what design history is or should be. We have experienced this firsthand as design historians for more than a decade in Canada, teaching courses that range widely in specialization and focus: for example, offerings in architectural history, history of interior design, history of graphic design, and more general histories of design. We recognize how our pedagogical and epistemological perspectives have been shaped by or have moved toward a material culture perspective. We understand that the affiliation of design history to material culture is nothing new, nor is the shift unique to our discipline. However, we believe it has not been fully explored within design studies in Canada, which has focused primarily on the material qualities of material culture rather than allowing it to frame our ways of knowing in relation to design and in turn design history studies.

The inherent complexity of material culture as a domain of study renders impossible any reductionist attempt at unifying all the relevant knowledge

31. Linda B. Nilson, *Teaching at its Best: A Research-Based Resource for College Instructors* (San Francisco, 2010), 11–15, for a succinct overview of new types of learners in higher education.

32. Angela Provitara McGlynn, “Teaching Millennials, Our Newest Cultural Cohort,” *The Education Digest* 71, 4 (2005): 13–22.

33. Jeff Feiertag and Zane L. Berge, “Training Generation N: How Educators Should Approach the Net Generation,” *Education + Training* 50, 6 (2008): 457–64.

34. Alistar Fuad-Luke and Grace Lees-Maffei, “Reflections on *Design Activism and Social Change*,” Design History Society Annual Conference, 2011, Barcelona, <http://uhra.herts.ac.uk/bitstream/handle/2299/9829/904731.pdf>, 1.

35. *Ibid.*, 3.

or at approaching design history from a fixed epistemological position. As John Visvader reminds us, “a more realistic approach to the idea of the unity of knowledge is to think of constructing a series of maps covering a common terrain but displaying different levels of relationships between concepts and objects of different kinds.”³⁶ We believe that a material culture approach to design history pedagogy offers the ability to engage critically with the canon, embrace complexity and criticality, and shape the competencies necessary for a changing practice and a changing student: one who can go beyond the material, can excel at design process, design thinking, and design activism, and can look at design more holistically, while also continuing to design the history of design. ¶

36. John Visvader, “Philosophy and Human Ecology,” *Human Ecology: A Gathering of Perspectives*, First International Conference of SNE, College Park, MD: Society for Human Ecology (1986), 131.