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The Tools of the Trade: Cultures, Devices, and Valuation Practices in Urban Design

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Abstract

This article interrogates how the practice of design is shaped by the devices designers use and the cultures in which they work. Specifically, it studies a case of urban design in Gothenburg, Sweden, and explores how cultures and devices are intertwined when architects and urban planners make judgments about quality and value. This approach is adopted from the interdisciplinary field of valuation studies. The article argues that this valuation studies-inspired approach holds the prospect of transcending the divide between culturalist and materialist approaches to studying design practices. As such, the argument extends previous work on valuation practices in design processes, showing how the intertwining of culture and matter plays out in a situated context of designing. Specifically, the article develops three propositions: The valuation studies-inspired approach complements previous accounts of how power is exercised and how compromises are negotiated in design processes that feature different stakeholders. Moreover, this approach may serve as a framework for comparative studies of different design cultures.

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Figure 1
Aerial view of Brunnsparken after the 2020 redesign. © 2020 Alexander Ljungqvist, Municipality of Gothenburg.

Introduction

It is 2020, and in Gothenburg, the second largest city in Sweden, a central square has just been redesigned. The new public space is the result of the joint efforts of a renowned architectural firm and a host of partners, including the Parks and Nature municipal department, citizens, and the police. The space now looks more austere: Look down, and you find that the gravel paving has been replaced by stone. Look up, and you find that the canopy of leaves above has been pruned. Trees have been felled, but new lamp posts have been put up. Two types of streetlights have been added to the scene: A contemporary-style everyday light post and a tall, slim, CCTV form-factored lamp that floods the square with “chaos lighting” in the event of suspected criminal behavior (Figure 1).

In a newspaper review of the new park, an architecture critic charges that the redesign has been too heavy-handed: The historical heritage and the park qualities have been sacrificed at the altar of security.¹ This problem is exacerbated by using cheap, standardized architectural landscaping products that one can find in parks across the world. The politician in charge replies: Yes, the redesign is a response to the general security concerns of the citizens, but security is precisely what the citizens desire at this point in time. Moreover,

¹ Mark Isitt, “Recension: Brunnsparken [Review: Brunnsparken],” *Göteborgs-Posten*, July 11, 2020, <https://www.gp.se/kultur/recension-brunnsparken-white-arkitekter-genom-niels-de-bruin.3be-c381a-f6a7-438d-829c-f68945be1cf9>.

- 2 Cecilia Dalman Eek, "Mark Isitt har mer rätt än fel om Brunnsparken [Mark Isitt Is More Right than Wrong about Brunnsparken]," *Göteborgs-Posten*, July 27, 2020, <https://www.gp.se/kultur/kulturbatt/mark-isitt-har-mer-ratt-an-fel-om-brunnsparken.c013749d-4e84-4e88-846c-c39c8ac73436>.
- 3 See for instance Adrian Forty, *Objects of Desire: Design and Society Since 1750* (London: Thames and Hudson, 1986), 8, as well as Guy Julier, *The Culture of Design* (London: Sage, 2000) and Prasad Boradkar, *Designing Things: A Critical Introduction to the Culture of Objects* (Oxford: Berg, 2010).
- 4 As we shall see below, an early example of this orientation is that Albená Yaneva, "Making the Social Hold: Toward an Actor-Network Theory of Design," *Design and Culture* 1, no. 3 (2009): 273–88, <https://doi.org/10.1080/17547075.2009.11643291>; Another is Ignacio Fariás and Alex Wilkie, "Studio Studies: Notes for a Research Program," in *Studio Studies: Operations, Topologies and Displacements*, ed. Ignacio Fariás and Alex Wilkie (London: Routledge, 2016), chapter 1, <https://doi.org/10.4324/9781315756523>.
- 5 Claes-Fredrik Helgesson and Fabian Muniesa, "For What It's Worth: An Introduction to Valuation Studies," *Valuation Studies* 1, no. 1 (2013): 1–10, <https://doi.org/10.3384/vs.2001-5992.13111>.
- 6 Teun Zuiderent-Jerak and Stans van Egmond, "Ineffable Cultures or Material Devices: What Valuation Studies Can Learn from the Disappearance of Ensured Solidarity in a Health Care Market," *Valuation Studies* 3, no. 1 (2015): 45–73, <https://doi.org/10.3384/vs.2001-559.153145>.
- 7 Patrycja Kaszynska, "Value in Design: Neoliberalism versus Pragmatism," *She Ji: The Journal of Design, Economics, and Innovation* 9, no. 1 (2023): 21–32, <https://doi.org/10.1016/j.sheji.2023.05.001>.
- 8 Richard Whitham et al., "Understanding, Capturing, and Assessing Value in Collaborative Design Research," *CoDesign* 15, no. 1 (2019): 1–7, <https://doi.org/10.1080/15710882.2018.1563194>; Roger Whitham et al., "Realising the Value of Open Innovation in Policy Making: Equipping Entrepreneurs for Valuation Work," *Design Journal* 22, sup. 1 (2019): 189–201, <https://doi.org/10.1080/14606925.2019.1595857>; Ulises Navarro Aguiar, "What Is Design Worth? Narrating the Assetization of Design," *Valuation Studies* 10, no. 1 (2023): 32–57, <https://orcid.org/0000-0001-9704-4234>; Johannes Coughlan, "Design and the Polysemy of Value: On a Problem Within the Language of Valuation Studies,"

the politician goes on, each design feature must also be understood as outcomes of more mundane and material considerations of design practice.²

For the outside analyst or design scholar, it is tempting to read the new square as a reflection of an increasingly security-oriented public discourse and perhaps a broader culture of fear. Still, can the new design be reduced to this cultural tendency? Are designers mere "cultural dopes" in the sense that their practices are determined by the surrounding culture? Alternatively, are their practices determined by more mundane matters, such as the standard practices and the material tools?

Design scholars have offered various accounts how design can be understood in the context of broader culture using either historical or sociological perspectives.³ In such accounts, design is construed as a reflection of broader socio-cultural forces at play. Nevertheless, there are alternative, more recent accounts of design that run counter to this culturalist tendency. This includes work that instead front-stages the role of devices used in design and co-design practice.⁴ As we shall see below, this discussion on the influence of broader cultural factors and material devices in social and organizational life has also featured within the interdisciplinary field of valuation studies.⁵ This article will build upon valuation studies to describe design practice as an "intertwinement" between the devices used by designers, on the one hand, and the cultural and institutional context of design, on the other.⁶

Approaches and ideas from valuation studies are increasingly used in the study of design. For instance, in this journal, Patrycja Kaszynska points out how design can be understood in relation to previous work on valuation,⁷ and there are other recent efforts to operationalize valuation studies in the social study of design.⁸ This article continues this discussion, and focuses specifically on learning from valuation studies when addressing the question of the influence of broader culture and material devices in design.⁹ In so doing, it seeks to reorient current perspectives on how culture shapes design practice, without lurching into a one-sided focus on devices. Thus, it will interrogate *the intertwining of cultures and devices when design professionals make judgments about quality and value*. This approach will be demonstrated by a depiction of the case mentioned above of the redesigned square.

The argument is structured as follows: The next section provides a fuller description of the above debate on cultures and devices in design and shows how valuation studies have addressed the culture versus device issue. Section three outlines the details of the case study. It begins with a brief note on the background of the project and the methods used in this study. It then goes on to highlight how specific devices used in the design process were intertwined with the broader cultural context of the project. Section four discusses the findings in the context of existing literature and lists three propositions that emerge from the case study. The text ends with concluding remarks on the contribution of the valuation studies-inspired approach.

Cultures and Devices: A Survey of the Literature

As hinted in the introduction, this article intervenes in an academic debate on how to understand design practices. Within design studies, some scholars

- Valuation Studies* 10, no. 1 (2023): 167–97, <https://doi.org/10.3384/VS.2001-5992.2023.10.1.167-197>; Kaszynska, “Value in Design”; Karl Palmås, “Design in Marketization: The Invention of Car Safety in Automobile Markets,” *She Ji: The Journal of Design, Economics, and Innovation* 9, no. 1 (2023): 5–20, <https://doi.org/10.1016/j.sheji.2023.04.001>.
- 9 As such, it may productively be placed alongside one other study focusing on such intertwinement in design: See Ulises Navarro Aguiar, “A Number Is Worth More than a Thousand Pictures: The Case of Designers’ Cynical Resistance through Quantification,” *Ephemera* 20, no. 3 (2020): 153–86, <https://ephemerajournal.org/keywords/designers>.
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 - 10 Forty, *Objects of Desire*, 8.
 - 11 Julier, *Culture of Design*, 13.
 - 12 Pierre Bourdieu, *Distinction: A Social Critique of the Judgment of Taste*, trans. Richard Nice (Boston, MA: Harvard University Press, 1984), 8, cited in Boradkar, *Designing Things*, 150.
 - 13 Nigel Cross, *Developments in Design Methodology* (Chichester: Wiley, 1984); Nigel Cross, “Forty Years of Design,” *Design Research Quarterly* 2, no. 1 (2006): 3–5, <https://dl.designresearchsociety.org/cgi/viewcontent.cgi?article=1003&context=design-research-quarterly>.
 - 14 Horst Rittel, “The State of the Art in Design Methods,” *Design Methods Group DRS Journal* 7, no. 4 (1973): 143–47, <https://dl.designresearchsociety.org/dmg-journal/6/>.
 - 15 Here, the legacy of Donald Schön looms large. See Donald A. Schön and Glenn Wiggins, “Kinds of Seeing and Their Functions in Designing,” *Design Studies* 13, no. 2 (1992): 135–56, [https://doi.org/10.1016/0142-694X\(92\)90268-F](https://doi.org/10.1016/0142-694X(92)90268-F); and Donald A. Schön, “Design as a Reflective Conversation with the Materials of a Design Situation,” *Knowledge-Based System* 5, no. 1 (1992): 131–47, [https://doi.org/10.1016/0950-7051\(92\)90020-G](https://doi.org/10.1016/0950-7051(92)90020-G); See also Annie Gentes and Giulia Marcocchia, “The Forgotten Legacy of Schön: From Materials to ‘Mediums’ in the Design Activity,” *Design Issues* 39, no. 2 (2023): 3–13, https://doi.org/10.1162/desi_a.00713.
 - 16 Richard Coyne, Hoon Park, and Dorian Wiszniewski, “Design Devices: Digital Drawing and the Pursuit of Difference,” *Design Studies* 23, no. 3 (2002): 286, [https://doi.org/10.1016/S0142-694X\(01\)00038-2](https://doi.org/10.1016/S0142-694X(01)00038-2); Alice Comi, Suha Jaradat, and Jennifer Whyte, “Constructing Shared Professional Vision in Design Work: The Role of Visual Objects and

have emphasized the influence of the cultural setting of design. However, these “culturalist” accounts have also been challenged by scholars proposing new programs for studying design. These programs highlight the role of the devices used by designers. This literature review will first briefly outline this debate within design studies. It will then introduce the field of valuation studies, showing how the same debate has emerged in that field. It will also describe how scholars in valuation studies have sought to address the question of devices and cultures.

The Debate on Cultures and Devices in Design Studies

In the study of design, some scholars construe designed objects as an integral part of broader culture. In design history, it is readily accepted that the socio-cultural context shapes the practice of design.¹⁰ Moreover, design scholars who study the place of design in *contemporary* societies tend to borrow from cultural studies or cultural sociology. In such accounts, design practices are seen as part of a broader culture tied to societal structures. Designers participate in the production and consumption of goods, which means that their cultural and creative pursuits are tied to systems of economic power.¹¹ From such a sociological perspective, the analyst may, for instance, interrogate how designers fulfill a social function of legitimizing social differences.¹²

However, there is also another orientation within design studies, which focuses on the material media used by designers. This can be traced back to the 1960s and -70s when the study of design methodologies became a formal discipline.¹³ In particular, the work emerging from the -70s and onwards¹⁴ involved a closer attention to design practices, as well as to the tools used by the designer.¹⁵ In this tradition, research has highlighted the use of material media for drawing,¹⁶ logbooks,¹⁷ or sticky notes.¹⁸ More recently, in the 2000s, the interest in the devices used by designers has been given new impetus by scholars that use Actor-Network Theory (ANT) to describe design practices.

Given that ANT is a social theory that describes social action as configured by the socio-material tools that the actor uses,¹⁹ Albená Yaneva suggests that “an ANT view of design” reveals “what extent designers are attached to non-humans.”²⁰ Indeed, designers cannot “conceive a new object or environment without being assisted and amplified by many drawings, tools, models and other devices.” Along with Yaneva’s ANT-based research program for design studies, there is also the “studio studies” research program suggested by Ignacio Farías and Alex Wilkie. Also drawing upon ANT, their program focuses on “the active and enabling role played by the materials and technologies participating in creation processes.”²¹ Similar approaches have also been applied to the study of devices in architectural design and urban planning.²²

Such ANT-influenced accounts of design are generally positioned in opposition to accounts that emphasize how design is embedded in broader cultures. Thus, Yaneva points out that an ANT account of design does not seek to disclose the hidden meaning of design or explore how design expresses or reflects social forces or institutional orders.²³ Nor does it interrogate the ideologies or interests of designers—it merely focuses on what designers actually do.²⁴ Farías and Wilkie, in turn, point out how their program challenges the

- Their Material Mediation," *Design Studies* 64 (September 2019): 91, <https://doi.org/10.1016/j.destud.2019.06.003>.
- 17 Hamish McAlpine, Philip Cash, and Ben Hicks, "The Role of Logbooks as Mediators of Engineering Design Work," *Design Studies* 48 (January 2017): 1–29, <https://doi.org/10.1016/j.destud.2016.10.003>.
 - 18 Linden J. Ball, Bo T. Christensen, and Kim Halskov, "Sticky Notes as a Kind of Design Material: How Sticky Notes Support Design Cognition and Design Collaboration," *Design Studies* 76 (September 2021): 101034, <https://doi.org/10.1016/j.destud.2021.101034>; Bo T. Christensen and Sille Julie J. Abildgaard, "Kinds of 'Moving' in Designing with Sticky Notes," *Design Studies* 76 (September 2021): 101036, p. 1, <https://doi.org/10.1016/j.destud.2021.101036>.
 - 19 In ANT, the capabilities and the interests of a social actor are determined by the networks of other human actors and non-human devices that the actor has enrolled. Thus, an actor's capabilities and interests are merely "temporarily stabilized outcomes of previous processes of enrolment." See Michel Callon and John Law, "On Interests and Their Transformation: Enrolment and Counter-Enrolment," *Social Studies of Science* 12, no. 4 (1982): 622, <https://www.jstor.org/stable/284830>.
 - 20 Yaneva, "Making the Social Hold," 283.
 - 21 Fariás and Wilkie, "Studio Studies: Notes for a Research Program," 5.
 - 22 In such studies, devices have alternatively been called "material inscriptions" and "artifacts." See Karl Palmås and Otto von Busch, "Quasi-Quisling: Co-Design and the Assembly of Collaborateurs," *CoDesign* 11, no. 3–4 (2015): 236–49, <https://doi.org/10.1080/15710882.2015.1081247>; Alice Comi and Jennifer Whyte, "Future Making and Visual Artifacts: An Ethnographic Study of a Design Project," *Organization Studies* 39, no. 8 (2018): 1055–83, <https://doi.org/10.1177/0170840617717094>; Comi et al., "Constructing Shared Professional Vision."
 - 23 Yaneva, "Making the Social Hold," 178, 180.
 - 24 Here, Yaneva is in alignment with the ethnomethodological proposition of Rachael Luck, "'Doing Designing': On the Practical Analysis of Design in Practice," *Design Studies* 33, no. 6 (2012): 521–29, <https://doi.org/10.1016/j.destud.2012.11.002>; see also Peter Lloyd, "Editorial: Designing in Context," *Design Studies* 24, no. 3 (2003): 195–97, [https://doi.org/10.1016/S0142-694X\(02\)00051-0](https://doi.org/10.1016/S0142-694X(02)00051-0).
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 - 25 Fariás and Wilkie, "Studio Studies: Notes for a Research Program," 6.

proposition that creative work—such as that of designers—is a mere product of “competitive or complementary relationships among individual producers, artistic genres, cultural intermediaries and cultural institutions.”²⁵ For them, the brand of cultural sociology²⁶ that has become influential in the study of creative work²⁷ leads the analyst astray: Instead of exploring the actual practices of designers, such perspectives only study everything going on *around* such practices—that is, “milieus, professions, institutions, markets, politics,” and so forth.²⁸

Some of Fariás’ work on the devices used in architectural design has been published in the context of valuation studies.²⁹ This field is of particular interest for the purposes of this argument: As we shall see, valuation studies scholars have also debated the relative influence of cultures and devices and sought ways of moving beyond it.

The Debate on Cultures and Devices in Valuation Studies

Valuation studies is an interdisciplinary field that gained traction in the 2010s. The common denominator is the study of valuation practices, defined as “any social practice where the value or values of something are established, assessed, negotiated, provoked, maintained, constructed and/or contested.”³⁰ As yet, valuation studies scholars tend to study actors in a wide range of organizations that make judgments about quality and value. As such, it does not necessarily focus on the practices of social actors engaged in aesthetic pursuits or creative industries. Nevertheless, it has been used for understanding such practices, and scholars have indeed used it in the context of design practices: Aside from Fariás’ work on architectural practice, it has also been applied in the study of design schools,³¹ industrial designers,³² urban planners,³³ as well as to economic actors’ valorization of design studios.³⁴

One major strand of valuation studies involves a close examination of the devices used in valuation practices, and this tendency can be traced back to ANT-based work on how socio-material devices shape economic action.³⁵ Here, as we have seen in the previous sub-section, scholars tend to object to sociological accounts that use culture as an explanatory factor when accounting for social or economic action. However, the field of valuation studies also incorporates another major strand that grants more explanatory power to cultural and institutional factors when exploring how valuation is practiced.³⁶ This strand emphasizes that there are more general, socially accepted “orders of worth” that social actors tend to adhere to when justifying actions and evaluating situations.³⁷ For these valuation scholars, cultural and institutional factors may explain why some modes of valuation are more likely than others and why some evaluation devices are used in the first place.³⁸

The latter position has been put forward by sociologist Marion Fourcade.³⁹ In her critique of the ANT-inspired position on valuation devices, she argues that the “mere availability” of certain devices “does not guarantee” that they will actually influence the behaviors of actors.⁴⁰ In order to do so, devices must “muster enough institutional and political support” and “resonate” with the established cultural order. Such cultural orders heave into view when making cross-cultural comparisons of valuation practices: As she shows in her study of the economic valuation of nature, France and the United States have wildly

- 26 The target of this critique is Pierre Bourdieu, for whom the role of the sociologist is to uncover the social process that creates the creator (such as a designer). See Pierre Bourdieu, *The Rules of Art: Genesis and Structure of the Literary Field*, trans. Susan Emanuel (Stanford: Stanford University Press, 1995), 167.
- 27 For some recent examples of Bourdieu's current influence on design studies, see Fangzhou Dong et al., "Design for the Speculative Future as Cultural Intermediary: Case Study on Chinese Weddings," *Design and Culture* 15, no. 1 (2023): 89–111, <https://doi.org/10.1080/17547075.2022.2131164>; Olga Touloumi, "Book Review of *Happiness by Design: Modernism and Media in the Eames Era*," *Design and Culture* 13, no. 3 (2021): 349–52, <https://doi.org/10.1080/17547075.2021.1873664>; Zhe Wang, "Re-shaping Innovations in the Contemporary Fashion Show: Emerging Aesthetics and the Rising International-Based Chinese Designer Collective," *Design and Culture* 14, no. 3 (2022): 315–40, <https://doi.org/10.1080/17547075.2022.2067942>.
- 28 Antoine Hennion, "An Intermediary between Production and Consumption: The Producer of Popular Music," *Science, Technology, & Human Values* 14, no. 4 (1989): 401, <https://www.jstor.org/stable/689684>, cited in Farias and Wilkie, "Studio Studies: Notes for a Research Program," 6.
- 29 Ignacio Farias, "Epistemic Dissonance: Reconfiguring Valuation in Architectural Practice," in *Moments of Valuation: Exploring Sites of Dissonance*, ed. Ariane A. Berthoin, Michael Hutter, and David Stark (Oxford: Oxford University Press, 2015), 271–89.
- 30 Liliana Doganova et al., "Valuation Studies and the Critique of Valuation," *Valuation Studies* 2, no. 2 (2014): 87, <https://doi.org/10.3384/vs.2001-5992.142287>.
- 31 Sara Malou Strandvad, "Contingencies of Value: Devices and Conventions at a Design School Admission Test," *Valuation Studies* 2, no. 2 (2014): 119–51, <https://doi.org/10.3384/vs.2001-5992.1422119>.
- 32 Navarro Aguiar, "Number Is Worth More."
- 33 Stefan Molnar and Karl Palmås, "Dissonance and Diplomacy: Coordination of Conflicting Values in Urban Co-design," *CoDesign* 18, no. 4 (2022): 416–30, <https://doi.org/10.1080/15710882.2021.1968441>.
- 34 Navarro Aguiar, "What Is Design Worth?"
- 35 Michel Callon, *Laws of the Markets* (London: Blackwell, 1998); See also Ken Friedman, "Editorial," *She Ji: The Journal*

different cultural settings. In other words, as Kaszynska puts it, an ANT-inspired focus on merely "mapping the actants [devices]"⁴¹ may cause scholars to miss the big picture and end up "stranded with lists and not stories."⁴²

Similarly, Amalie Martinus Hauge points out that devices never operate in an organizational vacuum but in the context of institutional practices. Thus, "the course of a valuation device is not defined only by the design of the device but also by how it is itself valued by the prevailing or coexisting modes of valuation."⁴³ However, this does not mean that cultures or institutional habits may in themselves explain valuation practices. Instead, she suggests that cultural and institutional factors should be understood through the notion of "cultural repertoires."⁴⁴ Such repertoires are like "tool kits," consisting of "symbols, stories, rituals and world-views [...] from which actors *select* differing pieces for constructing lines of action."⁴⁵ Thus, from this perspective, actors are not wholly determined by the cultural context but choose which cultural "tools" to use. As such, culture and devices are construed as tools, and neither determines the other.

In this way, valuation studies have facilitated a discussion that seeks to transcend the divide between culturally oriented accounts and materialist and device-oriented ones. Arguably, the collective scholarly endeavor to transcend this opposition between culturalist and materialist approaches is one of the key contributions emerging from valuation studies. The field has produced a compromise position in which "the familiar culturalist versus materialist opposition becomes meaningless."⁴⁶ In other words, actors that make judgments on value are neither "cultural dopes" (determined by culture) nor "technical dopes" (determined by socio-material devices).⁴⁷ Therefore, Teun Zuiderent-Jerak and Stans van Egmond suggest that the study of valuation practices must amount to a study of the "dynamic intertwinement" of particular devices and broader cultures.⁴⁸ The analyst should never start from either analyzing cultural traits or the devices used, assuming that one can explain the other. Instead, the exploration must start in actual practices and construct a story of how the cultures and devices are intertwined in a processual and dynamic manner.

In what follows, the idea of "dynamic intertwinement" between culture and devices will be applied to the study of particular moments in an urban design process—situations when the process of valuation involves coordination among different stakeholders. The remainder of this article will demonstrate this approach in the context of the above-mentioned case of the redesign of a public square in Gothenburg.

Valuation Devices and Valuation Cultures in Brunnsparken

This section will review the empirics of the case and thus address the question of the role of cultural practices and devices in the design. Using the valuation studies approach, it will highlight how the dynamic intertwinement between devices and cultural factors unfolds, and how such practices of valuation shape the design process. The argument will focus on valuation practices conducted among different stakeholders⁴⁹ during three phases of the design process: The

- of Design, Economics, and Innovation 9, no. 1 (2023): 1–4, <https://doi.org/10.1016/j.sheji.2023.06.001>.
- 36 Zuiderent-Jerak and Van Egmond, "Ineffable Cultures or Material Devices," 47.
- 37 Luc Boltanski and Laurent Thévenot, *On Justification: Economies of Worth*, trans. Catherine Porter (Princeton: Princeton University Press, 2006).
- 38 Nevertheless, it is important to note that both of strands of valuation studies rests on theories that emerged as critiques of Bourdieu's cultural sociology. See Martin Guggenheim and Jörg Potthast, "Symmetrical Twins: On the Relationship Between Actor-Network Theory and the Sociology of Critical Capacities," *European Journal of Social Theory* 15, no. 2 (2012): 157–78, <https://doi.org/10.1177/1368431011423601>.
- 39 Marion Fourcade, "Cents and Sensibility: Economic Valuation and the Nature of 'Nature,'" *American Journal of Sociology* 116, no. 6 (2011): 1721–77, <https://doi.org/10.1086/659640>.
- 40 *Ibid.*, 1724–25.
- 41 Patrycja Kaszynska, "Valuation through Narrative Intelligibility," *Valuation Studies* 10, no. 1 (2023): 153, <https://doi.org/10.3384/VS.2001-5992.2023.10.1.148-166>.
- 42 *Ibid.*, 159.
- 43 Amalie Martinus Hauge, "The Organizational Valuation of Valuation Devices: Putting Lean Whiteboard Management to Work in a Hospital Department," *Valuation Studies* 4, no. 2 (2016): 145, <https://doi.org/10.3384/VS.2001-5992.1642125>.
- 44 *Ibid.*, 127.
- 45 Ann Swidler, "Culture in Action: Symbols and Strategies," *American Sociological Review* 51 (1986): 273, 277, <https://doi.org/10.2307/2095521>, italics added.
- 46 David Stark, *The Sense of Dissonance: Accounts of Worth in Economic Life* (Princeton, NJ: Princeton University Press, 2009), 13, italics in original.
- 47 Zuiderent-Jerak and Van Egmond, "Ineffable Cultures or Material Devices."
- 48 *Ibid.*, 66.
- 49 Thus, the argument explores a theme similar to that of Molnar and Palmås, "Dissonance and Diplomacy."
- 50 Gothenburg Municipality, "Förstudie avseende utveckling och upprustning av Brunnsparken [Pre-design Assessment Regarding the Development and Upgrading of Brunnsparken]" (report, published by Gothenburg Municipality, 2017).
- 51 Bent Flyvbjerg, "Five Misunderstandings about Case-Study Research," *Qualitative*

pre-design phase, the design proposal phase, and the technical design and programming phase. However, to introduce the overall project, the section will first provide some background about the site and a note on the method.

Background and Method

The public space that serves as the site of this study bears the name Brunnsparken and is situated in the historic center of Gothenburg, Sweden. The name refers to a well and adjoining spa building that was located on this site in the mid-1800s. These facilities were put in place alongside a French baroque garden built in 1822. Toward the end of the nineteenth century, the well building was demolished, but the tranquil park remained. In the 20th century, the park went through some changes, with English influences at times usurping the original French park properties. However, due to its central location, it increasingly became a central node—and a bottleneck—in the emerging transport infrastructure. Thus, the park-like qualities have gradually faded away, and for the past few decades, the site is less of a park and more of a square and transport node.

After a major renovation in the early 1990s, the site was subject to decades of piecemeal efforts to maintain the design. Nevertheless, during the mid-2010s, there were increasing calls for a new renovation. These calls came from politicians, police officers, business owners, as well as members of the public, and the main point of discussion was a perceived lack of security. Thus, after considerable public debate about the site, a new renovation process was set in motion, starting in early 2017 and ending in 2020.

More specifically, the process was set in motion when the ruling majority of the city decided to initiate a pre-design assessment for a physical redesign of the square. The objective was to make it more secure and welcoming to the public while reducing criminality and social problems.⁵⁰ During the summer of 2017, this pre-design assessment was conducted by a small team of civil servants at the Parks and Nature municipal department. The study included an inventory of the trees, a sound study, and a cultural-historical assessment. It also involved a stakeholder dialogue consisting of workshops with experts and an online citizen survey. This pre-design report was then handed over to the architectural office commissioned to conduct the design work.

The work of the architectural office ensued in 2018 and lasted throughout that year. First, the office used the material from the pre-design report to construct three design proposals, which were assessed during stakeholder meetings. Secondly, on the back of that feedback, the final design was produced, paving the way for technical design and programming in late 2018. During the fall of 2019, the new Brunnsparken was built, and in 2020, it was revealed to the public. The following is a description of this process, focusing on the work of the architectural professionals involved. Thus, the late stages of engineering and construction are outside the scope of this investigation.

The empirical material presented below is designed as a single case study⁵¹ consisting of nine 2-hour thematic open interviews⁵² with public servants, consultants, and representatives of businesses and property owners who had participated in the redesign of the square. In addition, the study includes secondary sources in the form of public and internal documents related to

Inquiry 12, no. 2 (2006): 219–45, <https://doi.org/10.1177/1077800405284363>.

- 52 Patrik Aspers, *Etnografiska metoder: Att förstå och förklara samtiden* [Ethnographic Methods: Understanding and Explaining the Contemporary] (Stockholm: Liber, 2007).
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- 53 Daphne C. Watkins, "Rapid and Rigorous Qualitative Data Analysis: The 'RADaR' Technique for Applied Research," *International Journal of Qualitative Methods* 16, no. 1 (2017): 1–9, <https://doi.org/10.1177/1609406917712131>.
- 54 Peter-Paul Verbeek, *What Things Do: Philosophical Reflections on Technology, Agency, and Design* (University Park, PA: Penn State University Press, 2005).

the scheme. This includes websites, news reports, plans and designs, studies, policies, workshop documentation, and raw data from the above-mentioned citizen survey. The empirical data thus consists of 500+ A4 pages of text and images formatted in a uniformly.

This material was analyzed through four cycles of abductive coding and analysis,⁵³ eventually resulting in broader categories and themes used to write the paper. The data was analyzed through iterative cycles of manual coding. For each cycle, the raw data from the interviews were clustered into higher-order theoretical codes. The analysis was conducted by a two-researcher team: The researcher who conducted the interviews also initiated the coding, and the second researcher assisted in the analysis.

The Pre-design Phase: Assessing the Views of the Public

As mentioned above, previous research on the devices used by designers tends to focus on practices related to architectural sketches, plans, renderings, 3D simulations, and models, often within the confines of a studio. This description of the design process, however, will focus on the coordinating interactions among stakeholders in the design process. The first set of such interactions occurred during the pre-design phase when the municipal project management team created the pre-design document. In that early phase, there was one key valuation practice—that of assessing the views of the general public. How did citizens and everyday users rate the place, and what was the preferred redesign according to the average citizen-user?

These views were assessed by the use of an online survey featuring 199 responses. This was structured as an anonymous online survey, and as it involved three open-ended questions, it “invited” participants to speak their minds in an uninhibited manner.⁵⁴ Remember, Brunnsparken had previously been subject to public debate, which had revolved around issues of security, criminality, drug-pushing, and loitering. Moreover, public interest intensified around 2015, when Gothenburg became the new home for an increased number of refugees. Thus, a non-neglectable share of the responses in the survey expressed opinions on the interrelation between security, criminality, loitering, and refugees.

When reviewing these responses, the project management at the municipality deemed that some of the responses were outside the bounds of acceptable speech. Thus, project management excluded these assessments from the final pre-design report. Crucially, this means that the device did not have the last word when judging the mood of the public. Some of the responses generated by the device were devalued with reference to the cultural norms and institutional logics of the municipality. Nevertheless, the re-interpreted survey results did make it into the pre-design report, representing the public view of the site, and thus shaping the subsequent design process. This, then, is one first instance of how a design process involves valuation practices that interweave cultures and devices in a dynamic manner.

The Design Proposal Phase: Assessing Alternative Designs

Having received the pre-design report from the municipality, the architectural office proceeded to work on the actual designs. This design process was bound up with another practice of valuation—that of evaluating different design

concepts by prompting the views of the stakeholders in the project. These stakeholders included representatives from the public, private, and civil society sectors, including the police.

Following the firm's standard, institutionalized practice, the architects sketched three alternative designs and presented these in the form of a design proposal document. The three designs represented different "approaches" to the design brief, proposing a range of solutions and drawing on a multitude of references. Each design was represented by computer-based sketches and by a series of reference images with captions that outlined the meaning of the reference. Thus, the first design was presented along with images of French Baroque gardens as well as London's Leicester Square, and the third design referenced images of generous seating arrangements from London's Jubilee Gardens, as well as extensive night lighting solutions used at a previous project designed by the office. (See [Figures 2 and 3.](#))

Thus, the design proposal document acted as a conveyor of ideas, put together so that stakeholders could judge and evaluate them. As such, it acted

Figure 2

References in the first proposal included in the design proposal document. © 2018 White Arkitekter.

Figure 3

References in the third proposal included in the design proposal document. © 2018 White Arkitekter.



as another form of valuation device. Much like the online survey, the practical use of this device was bound up with cultural and institutional realities. Here, too, the responses from the stakeholders became subject to a second layer of judgment exercised by the architects and municipal project management team. For instance, the police representatives reacted negatively to the proposed expansive seating arrangements of the third design, pointing to their extensive police experience of how such designs encourage loitering.

On the other hand, the police supported the idea of the extensive lighting solutions displayed in the same proposal. So, in the evaluation of the design proposals, responses relating to the issue of security were high on the agenda. Moreover, the police representatives were seen as the legitimate evaluators of such security-related issues, even though the valuation device itself did not imply such a valuation of the evaluators. As the project manager from the Parks and Nature municipal department stated in an interview: “The security issue is paramount, and the police is the key authority on that issue.”

Following this evaluation of the design proposals, the architects went on to synthesize the feedback into one final design. This featured elements from all three of the alternative designs, including the baroque structure from the first design approach, as well as the lighting and seating arrangements displayed in the third approach. The final design featured elements that the police favored (such as strong lighting). Nevertheless, it also featured elements that the police representatives objected to (such as generous seating). So, while the design proposal document was recognizably influenced by the police input—reflecting the social standing of the police in the project—this valuation device also functioned as a vehicle for negotiating a shared settlement among several stakeholders.

Technical Design and Programming Phase: Valuing Construction Options

As the project moved onto the technical design and programming phase, another valuation-related problem emerged: How can different options for realizing the final design be assessed? Here, the economic realities of budgeting and procurement emerged as central to the process. The budget document—put together by the Parks and Nature department and approved by the political officials—specified relatively generous funding compared to that of other similar redesigns. Nevertheless, this mundane design constraint explains why the new, redesigned Brunnsparken ended up looking more austere and pared down than the old Brunnsparken.

Toward the end of the project, devices that guarantee the responsible use of public money and proper economic conduct were instrumental. These effectively eliminated some features that had previously made it into the final design. For instance, the third proposed design (mentioned above) featured partial roofing of the park, as well as a tiered seating arrangement. Arguably, these were the signature features of that design proposal. Even though they were seen as improper by the influential police representatives, again with reference to security concerns, these features did make it into the final design. In the end, it was the budget document that eliminated these design elements. If there was one thing that mattered even more than security, it was the issue of staying on budget.

55 Hence the architectural critic's comment about the use of "standard products" (see introduction).

56 Hauge, "Organizational Valuation," 145.

57 Fariás, "Epistemic Dissonance," 283.

Along with budget documents, devices used for public procurement proved influential, notably an online product catalog. Thus, the evaluation of a particular design solution was highly contingent upon whether that solution met certain codified procurement standards and could be procured through suitable channels. For instance, the architectural team had originally proposed the use of a distinct form of stone flooring, but this did not meet the municipality's standards for ethical conduct and environmental friendliness. Similarly, the exact design of seating and plantations was determined by the fact that the procurement system featured one specific supplier of linear benches and edge isles. This supplier had previously been used by the architectural firm in previous landscaping projects.⁵⁵

While these devices for budgeting and procurement come across as highly consequential for the final outcome of the design process, it is also the case that the practical use of these tools was bound up with cultural factors. As we will see below, these factors become more evident when making cross-cultural comparisons with other contexts. The next section will discuss the case in the context of the previous literature.

Discussion

The literature review outlined previous accounts that suggest that valuation practices feature the intertwining of cultures and devices, and the case study has demonstrated how such intertwinement played out during the Brunnsparken redesign. During the pre-design phase, the results from the online survey device were subsequently subjected to a second layer of valuation based on cultural and institutional norms. Thus, as Hauge points out, "the course of a valuation device is not defined only by the design of the device but also by how it is itself valued by the prevailing or coexisting modes of valuation."⁵⁶ Similarly, the valuation practices conducted during the design proposal stage show how the cultural and institutional standing of the police influenced the use of the design proposal document. Even when it comes to the overbearing presence of budgeting and procurement devices in the technical design phase of the process, one may construe their very influence as indicative of broader cultural traits.

That is not to say that the devices — online citizen surveys, design proposal documents, budget documents, and procurement devices — do not matter in this story. Indeed, the project could not progress without the aid of these devices. Hence Fariás' suggestion that design projects do "not exist in an ideal space, but only through material mediators which enact the project in different ways."⁵⁷ Nevertheless, the case study corroborates the previous research that suggests that such devices do not tell the whole story. As the literature study suggests, a scholarly exploration of how design professionals make judgments about value cannot solely be a matter of listing the devices used by the professional. Cultural and institutional factors influence the actual uses of these devices, and the challenge is to describe the intertwining of cultures and devices in particular settings.

Beyond these general observations, the empirics also point toward further analytical points. These can be summed up through three propositions. First, the intertwinement of culture and devices in design processes illustrates *how*

58 Palmås and von Busch, "Quasi-Quisling," 240.

59 Ibid., 242.

60 Tomás Ariztía, "Bringing the World into the Creative Studio: The 'Reference' as an Advertising Device," in *Studio Studies: Operations, Topologies and Displacements*, ed. Ignacio Fariás and Alex Wilkie (London: Routledge, 2016), chapter 3, <https://doi.org/10.4324/9781315756523>.

inconspicuous acts of valuation and devaluation can slip into the design process. Second, valuation devices assist in the search for compromises among different stakeholders that articulate diverging values. Third, the valuation studies approach is a promising framework for comparative studies of design cultures.

The first proposition about inconspicuous acts of valuation and devaluation emerges when examining the municipal project management team's pre-design inquiry into the views of the citizens and users of Brunnsparcken. At stake here is the question of citizen participation in the "co-design" of urban spaces. ANT-influenced accounts of co-design suggest that as new participants are drawn into a participative design process, "there is a risk that one's goals are being betrayed or translated away through successive enrolments."⁵⁸ This might not be the result of deliberate attempts to exclude certain voices, as the agency that ignores a certain viewpoint is not necessarily human. It can be a device—a sticky note, PowerPoint presentation, or poster—that registers and amplifies some ideas, while failing to capture others. Thus, "the devil really is in the details."⁵⁹ Micro-level power is hardwired into the devices and not necessarily exercised by human actors.

The case study presented hints at another way of understanding the design process. Here, institutional norms of acceptable speech weighed heavily on the value placed on individual responses from the survey. So, while the "filtering" of ideas in a design process may emerge through the material media used, scholars must also pay attention to acts of filtering conducted by human actors. Granted, this filtering was relatively innocuous in the case of Brunnsparcken, but there is an additional point here: The case not only suggests that the cultural valuation of the valuation device must be considered when studying design processes. It also suggests that inconspicuous human acts of valuation or devaluation may reorient or distort the supposedly objective and accountable valuations produced by devices. While there is such a thing as a micro-level power exercised by devices, such power is also exercised through human acts of valuation. These acts of valuation and devaluation were also in play during the design proposal stage. It was clear that some valuers (police representatives) and some modes of valuation (security-related ones) were deemed more significant.

Second, the design proposal phase of the process leads us toward the second proposition, which concerns the resolving of value conflicts. Again, *valuation devices assist in the search for compromises among different stakeholders that articulate diverging values.* This is evident when studying how the design proposal document was used.

Research on the use of devices within advertising agencies shows how reference objects (such as clippings from earlier campaigns) may assist in the development of new creative concepts. Thus, references guide the emergence of the idea of a new campaign, give it a material form, and make the concept easier to comprehend for clients.⁶⁰ In the case of the redesign of Brunnsparcken, the design proposal (and the references it assembled) also served one further purpose: It constituted a basis for finding negotiated settlements among converging perspectives on what constitutes value. Previous studies of valuation practices in urban design suggest that value conflicts can be resolved in several ways. Sometimes, actors simply agree; other times, an outside actor must be

- 61 Molnar and Palmås, "Dissonance and Diplomacy," 420. See also Karl Palmås and Stefan Molnar, "Peace Piece: On the Machiavellian Moment in Organizational Innovation," in *Debating Innovation: Perspectives and Paradoxes of an Idealized Concept*, ed. Alf Rehn and Anders Örtengren (Cham: Palgrave Macmillan, 2023), 339–55, https://doi.org/10.1007/978-3-031-16666-2_17.
- 62 Kristina Grange, *Arkitekterna och byggbranschen: Om vikten av att upprätta ett kollektivt självförtroende* [The Architects and the Construction Industry: On the Importance of Establishing a Collective Self-Confidence] (Gothenburg: Chalmers University of Technology, 2005); Kristina Grange, *Att förtjäna sin roll? [To Deserve His Role?]* (Stockholm: Arkus, 2013).
- 63 Clifford Geertz, *The Interpretation of Cultures* (London: Hutchinson, 1973), 448, 452.
- 64 Fourcade, "Cents and Sensibility."
- 65 Zuiderent-Jerak and Van Egmond, "Ineffable Cultures or Material Devices," 66.
- 66 Here, "design culture" denotes an object of study focusing on design practices enacted in "agglomerations of interconnected things, people, institutions and interests, as well as material and immaterial infrastructures that connect them." See Guy Julier, "Design Culture as Critical Practice," in *Critical by Design?: Genealogies, Practices, Positions*, ed. Claudia Mareis, Moritz Greiner-Petter, and Michael Renner (Bielefeld: Transcript Verlag, 2022), 213, <https://doi.org/10.1515/9783839461044-013>.

brought in to settle the dispute. Sometimes compromises follow from acts of persuasion; other times, resolutions are simply postponed into the future.⁶¹ While these acts tend to be construed as human-to-human interactions, the case of Brunnsparken shows how such practices are intertwined with valuation devices.

Finally, there is the third proposition, regarding the suitability of this approach for comparative studies of design cultures. The case study above showed that as the project moved toward technical design and programming, devices related to budgets and procurement became increasingly paramount. These devices emerged as the primary tools with which judgments were made regarding the realized design. Again, note that even though some design features—the roofing and tiered seating arrangement—made it into the final design against the will of the influential police representatives, they were subsequently scrapped when budget and procurement devices entered the story.

Here, it is worth bearing in mind that the influence granted to such devices is culturally contingent. While budgeting and procurement are likely to matter in any cultural setting, it is, nevertheless, tempting to situate the case in the context of Swedish building culture, in which construction engineering rationality holds significant influence. In this setting, staying on budget and following proper procurement procedures will likely trump architects' intentions. Indeed, previous research suggests that during the past few decades, the clout of architects has gradually been undermined by a building culture dominated by the concerns of construction companies.⁶² Given that culture can be understood as the ensemble of stories we tell ourselves about ourselves,⁶³ it is also important to recognize that the Swedish building culture is partly maintained by architects and other professionals who re-tell this very story of dominant engineering rationality.

This mode of analysis chimes with Fourcade's observations of how different cultures can place different amounts of value on the use of a certain valuation device.⁶⁴ Cross-cultural comparisons tend to spotlight the importance of culture-based modes of explanation.⁶⁵ Yet, the valuation studies approach to study the intertwining of culture and devices does so in a manner that starts from practice. Asking the simple question of "what matters?" in a particular situation does not rely on pre-existing categories of what is at stake in design processes. Rather than assuming that design processes can be understood through broad cultural-sociological categories (such as "class" or "cultural capital"), the analyst can trace the influence of culture through the cultural repertoires (such as stories or world-views) drawn upon when actors account for how an act of valuation was performed. Again, this suggests that a valuation studies-inspired approach may serve as a framework for comparative studies of design cultures.⁶⁶

Concluding Remarks

In the introduction, this article asked the question of the extent to which designers are determined by the surrounding culture. This final section will return to that question, and discuss it in the context of the redesign of Brunnsparken. It will then discuss how the valuation studies-inspired approach introduced in this article contributes to the study of design practices.

So, to what extent is the design of the new Brunnsparken a reflection of a public sphere—perhaps a cultural condition—increasingly concerned with security? If so, how does broader culture matter? As demonstrated by valuation studies scholars, professionals in contemporary organizations can be studied by paying close attention to the ways in which they make judgments regarding value. This article describes design practices in similar terms. In doing so, it has been shown that security concerns did indeed play a crucial role in the redesign of Brunnsparken. However, the empirics also highlight that the final, more austere-looking design was the outcome of more mundane judgments relating to budgeting and procurement.

The idea of a dynamic intertwinement between devices and culture, borrowed from valuation studies, provides the analyst with a way of negotiating previous debates on the relative influence of devices and cultural factors. Thus, in response to recent ANT-inspired approaches that front-stage the role of devices, this approach shows that cultural factors matter—though in contingent ways that can only be discovered by close examination of the practical work of the architects. So, while the surrounding culture may have an impact on design processes, that impact is never given in advance. Something is at stake in the creative practice of design—designers are not merely cultural dupes.

Thus, the broader point made in this article is that a valuation studies-inspired approach holds the prospect of transcending the divide between culturalist and materialist approaches to design practices. As such, it may also—as suggested in the previous section—provide a framework for comparative studies of different design cultures. Further, the study of the intertwinement of devices and cultures also complements previous accounts of power and negotiated settlements in design processes that feature different stakeholders.

Declaration of Interest

There are no conflicts of interest involved in this article.

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