Breaking Boundaries: How Design Transforms Social Roles and Gender Stereotypes

Luisa Chimenz, University of Genoa, Italy
Sara Iebole, University of Genoa, Italy

The Kyoto Conference on Arts, Media & Culture 2024
Official Conference Proceedings

Abstract
Considering design as a discipline capable of initiating transformative processes in society unveils a scenario rich with potential evolutions. Social norms contribute to defining identities when investigated through perspectives encompassing gender, culture and ethnicity. The constant presence of design in people's lives brings an unquestionable social mandate, and Maldonado (2019) expresses the necessity of contemplating this aspect. Never denied in Europe (Walker, 1989) this is crucially pivotal elsewhere (Ford, 2023). Identifying the responsibilities and consequences of disciplinary applications is central, within theoretical literature discussing ontological design: design itself designs and influences our lives (Willis, 2006). By engaging with a critical perspective through the lenses of gender studies, it is becoming evident that existing "norms" no longer align with evolving social models. What can design learn from its past and how re-assessing behaviours and practices can bring benefits, bridging the past towards a fluid future? The paper wishes to open a theoretical debate by participating in a mandatory will, involving expressions and statements. Speculative Design incorporating key concepts of Anticipatory Thinking imagines possible futures, particularly in backcasting (Poli, 2017): through a process that breaks the timeline, starting from past observations moving into the future, and returning to reason about the present, this evolution must resonate with society's dynamics. Not fashion, communication or product design will be the focus within this paper, but a wider discourse about behaviours and belongings that in all these realms reveal how design is unfairly gender oriented: the discipline's evolution requires a multidisciplinary imperative.

Keywords: Contemporary Design Culture, Gender Studies, Sustainability, Design History, Social Mandate

iafor
The International Academic Forum
www.iafor.org

Introduction: What Is Design and What Can It Do for Our Society?

Walter Gropius believed that the arts should address the needs of a mass demand: for this democratic design to be realized, it was essential to create a training tool capable of producing a technician who could reshape the environment using the most advanced technologies (Bonsiepe, 1975, p. 138; Maldonado, 2019, pp. 68-9). The proposal was certainly innovative, but not entirely new. Indeed, foundations had long been laid to align design education with technical innovations as well as societal shifts and structural changes. In response to the need for innovation in processes and suitable products, Henry Cole had already contributed in mid-19th century Victorian Britain by structuring Schools of Design that aimed to produce aesthetically qualified products that were also more accessible to a now-diverse public (Pasca & Pietroni, 2001, p. 140). Modern design draws from various disciplines, with objectives that range from solving practical problems to creating meaningful experiences. Nigel Cross (2001) describes design thinking as a "natural" human capability, enabling people to approach complex problems with an empathetic and creative approach. This concept was expanded by Richard Buchanan (1992), who sees design as a response to "wicked problems," that is, complex and multifaceted issues that cannot easily be solved through logic or science alone. Buchanan, eventually, argues that design provides a framework for addressing social, environmental, and cultural issues. Through activating this critical thinking, design for social innovation becomes a catalyst for positive community change, fostering interaction and cooperation among individuals and creating solutions that take into account local culture and context (Manzini, 2015). Ezio Manzini believes that design should "humanize" technology and promote sustainable and inclusive practices. Clive Dilnot (1982) argues that design possesses an ethical potential, with each act of design carrying consequences beyond the physical object. According to Dilnot, design defines what is possible, desirable, and just, and invites a responsible approach to design practice. This view is expanded by Victor Papanek, who, in his book *Design for the Real World,* published in 1971, critiques commercial design and advocates for a design approach that meets real needs, especially in disadvantaged social contexts. For Papanek, designers must consider themselves accountable for their projects and the social and ecological consequences. Tony Fry (2009) and Anne Marie Willis (2006) also emphasize the importance of ethics in design, encouraging designers to consider not only the final product but also its lifecycle and social impact. Design, a longstanding key actor within project disciplines, shapes and defines roles and opportunities: at the same time, through the inevitable process of choice - whether intentional or not - it also generates stereotypes and oppressions. The constant, pervasive, and cross-cutting presence of multiple aspects of the discipline and its applications in people's lives brings an unavoidable social mandate. Social sustainability considers the impact of design not only on the environment but also on human and cultural levels. This theme is central to the work of Alastair Fuad-Luke (2009), who promotes ecologically and socially inclusive design, encouraging designers to adopt a participatory approach, directly involving communities to respond to their specific needs. An example is the concept of "design for resilience", which proposes designing objects and systems capable of adapting to change. The responsibilities and social awareness of future designers must be fostered and stimulated during their training, and a critical retrospective evaluation that identifies biases and shortcomings observed in those who practice and disseminate the discipline can greatly assist in this direction. These responsibilities include, among other things, the ability to integrate various aspects related to the fluidity of society and its needs: aspects that interact in close interconnection and evolve symbiotically, enabling the design discipline to adapt smoothly in the face of increasingly rapid transformations. In this sense, the intersectional approach demonstrates its potential to produce excellent results for the discipline.

> A more correct world requires struggle and debate. Over time, the protection of some people's rights has led to the exclusion of others. Graphic designers produce representations of society and contribute to facilitating access to information and ideas. But who is represented and who can access this representation? The Eurocentric principles of modern design were conceived as egalitarian tools of the social process, but they have suppressed differences among people worldwide. However, alternative perspectives and methodologies are spreading that move beyond the framework of Western design theory. Inclusive design is now being realized by people with diverse identities, backgrounds, and abilities. (Lupton, 2021, p. 13)

How Does Design Affect Gender Identity Stereotypes?

The concepts of gender and design are the focus of a growing debate, especially regarding how design can influence and reflect social gender norms. Judith Butler, an American post-structuralist philosopher, in her 1990 text *Gender Trouble: Feminism and the Subversion of Identity*, views gender as a socially constructed "performance": this concept inevitably influences design choices. Caroline Criado Perez's 2019 work *Invisible Women* further highlights how design is often based on a "male paradigm", overlooking women's needs in areas such as health, mobility and work. Criado Perez argues that design disregarding gender risks reinforces inequalities. Design is often taught as a neutral and apolitical subject, yet it is evident - particularly in contemporary society - that this is not accurate: design inherently carries political connotations. In *The Politics of Design: A (not so) Global Manual for Visual Communication*, Ruben Pater contends that design can never be universal and objective, as designers - and also those who benefit from design projects - possess cultural biases. This reflection, considering design as a discipline capable of enacting transformative processes in society - by defining roles and opportunities, as well as stereotypes and forms of oppression - provides an inspiring perspective on the subject. Indeed, design is a leading discipline in shaping society, establishing roles and possibilities, and also stereotypes and forms of oppression. The concept of social norm can be analyzed from diverse perspectives, such as gender and identity, culture, ethnicity, and many other aspects that contribute to the definition of identities (Lorber, 2021).

Every design artifact, methodology, narrative, and meaning adopts a distinct stance, shaped by the identity and perspective of the acting subject, as well as by the social and economic context in which it is placed. Inevitably and unambiguously, the political and social positioning of the artifact/method/narrative and its cultural/economic/social significance is produced. On this topic, poet and activist Audre Lorde defines a "mythical norm" as what a given society generically intends with the term "human". To reach this conclusion, Lorde observed - from her perspective as a black lesbian woman - the norm in the United States as "white, thin, male, young, heterosexual, Christian, and financially well-off" (Lorde, 2022, p. 119). This concept, applicable in a professional context, is equally identifiable in the academic classroom environment: what is conveyed in university courses often follows a framework rooted in archaic - now obsolete - models (Walker, 1989, p. 200), dictated by a social reality far removed from what now defines the contemporary. Design, as an open and ever-evolving discipline that continuously redefines itself, must establish its foundations on the composite nature of its cultural space. Let us examine the theoretical frameworks of teaching, starting from the history (of design):

> During the formative phase of the discipline, design schools of the twentieth century excluded history from curricula; it re-emerged in the cultural debate only from the

> 1980s. Now that design has become, in addition to a discipline, also a culture, history reclaims its role. (Riccini, 2013, p. 40)

Gender stereotypes are commonly understood as a relatively fixed set of culturally held beliefs that shape many dimensions of individuals' lives, including attributes and activities traditionally assigned to male or female identities (Eagly & Wood, 2012). Each stereotype, while defining both possibilities and restrictions, emerges through individual and collective processes that simplify or categorize social reality, embedding these dynamics into societal structures (Wagner et al., 2009). Design, in actively shaping social realities, plays a key role in reinforcing these stereotypes. Within this open discourse, we intend to examine the various factors that lead to gendered interpretations of design artifacts, focusing on the primary question of whether a gender-neutral approach in design is essential. To address this, the research will proceed on several levels, including a literature review and analysis of representative case studies. The literature component of this research is based on a multidisciplinary approach, incorporating insights from fields such as sociology, anthropology, psychology, and pedagogy. While the dialogue around design and gender studies is becoming more prominent, this intersection remains relatively unexplored in design fields beyond communication design (Almeida, et al., 2020). Nevertheless, given that design is a realm bridging technical and theoretical dimensions, integrating humanistic perspectives can certainly advance this ongoing discourse.

Speculative Design: Reflections on Ontological Design and Anticipatory Thinking

In theoretical literature, at the center of the contribution, the concept of ontological design is addressed, affirming that design shapes and influences our lives: we design our world, while our world acts back on us and designs us. Ontological design is based on the idea that design not only shapes the environment but also impacts who we are as individuals. Tony Fry (1999) developed the concept of "defuturing," describing how certain design practices, if unethical and unsustainable, can jeopardize humanity's future. For Fry, design should not merely shape objects but contribute to building a "sustainable future" that considers the impact on future generations. This idea is further explored by Anne-Marie Willis in *Ontological Design* (2006), which sees design as an ontological process influencing our way of living and perceiving reality, rendering design a practice of existential responsibility.

According to Anne Marie Willis (2006), ontological design characterizes the relationship between human beings and the lifeworld they inhabit.

As a theory, according to ontological design, design itself is far more pervasive and profound than is generally acknowledged by designers, cultural theorists, philosophers, or the lay public; moreover, design is fundamental to the human being, as we design, and, in turn, we are designed by our designing and by what we have designed (i.e., through our interactions with the structural and material specificities of our environments); besides, all of this translates into a dual movement: we design our world, while our world acts upon us and designs us.

Willis (2006) delves deeper into ontological design, describing it as a circular and dynamic process wherein we design and are simultaneously designed by our artifacts. This cycle of mutual influence suggests that design is not merely a technical activity but an act that affects collective and individual identity. Willis urges designers to reflect on the power of their projects to shape users' identities and perceptions, underscoring the importance of ethical and

critical awareness. Anthony Dunne and Fiona Raby (2013) explore speculative design as a means to interrogate the future and generate ethical discussions on what design can achieve. Their approach, which involves creating hypothetical future scenarios, anticipates potential social and ethical impacts of new technologies. This method aligns with anticipatory thinking, which explores the long-term consequences of design choices, promoting sustainability and ethics. Within the evolution of the discipline, *Speculative Design* adopts key concepts from *Anticipatory Thinking* originating from the social sciences. Imagining possible futures is certainly a functional practice within the pedagogical domain, particularly in *backcasting* (Poli, 2017, p. 76): this process involves breaking the timeline, beginning with an examination of the past and then moving into the future. Once this first step is implemented, a subsequent reflection on the present is required. Poli notes that a necessary prerequisite for activating community-based anticipatory processes is to choose a theme that all participants in the process have a basic knowledge of; otherwise, there is a risk of generating superficial reflections influenced by bias (Poli, 2023, p. 76-77).

From a completely contemporary perspective, responsive to the evolution of a constantly changing society, a review of sources through a reverse historical-chronological digression, tracing back to the origins of design history, clearly suggests the need to include neglected, multidirectional, and multidisciplinary voices in the narrative. The movements, objects, and innovations of the discipline of Design resonate according to a matrix of domination (Collins [1990], 2002, p. 23). In the design phase, the designer makes choices about the nature of their work and the resulting behaviour of the users. Thus, design is never a neutral act. To produce artifacts rooted in ethical and socially sustainable design, it is necessary to work in respect of the rights of all human experiences.

This premise inevitably leads to a recognition of the need to revise the educational models inherent to design disciplines, particularly regarding the theoretical and critical assumptions: the tangible outcome of these reflections is inseparably linked to the cultural context in which it is situated. Therefore, a critical recovery of the literature is required, as well as a reconstruction of the historical narrative that can support decolonization, along with a deeper consideration of gender and intersectional issues as a *real* problem applied to design. This contributes to structuring a more equitable account to be offered to future generations of designers. Gui Bonsiepe introduces the concept of decolonization as early as 1975, offering interesting perspectives in his text that historically connects the Bauhaus school to Ulm, and finally reflect on the role of design in non-central countries (Bonsiepe, 1975, p. 65).

Actually, as design is a discipline based on project and at the same time the creation of meaning, it has too often become a vehicle for imaginaries that have led to the perpetuation of dominant forms of power and privilege, consolidating the most diverse structures of oppression that in gender studies are conceived as intersected, under the term “intersectionality”. The theme, not new - evidently - but of absolute topicality, has recently been the object, in certain and circumscribed aspects, of observation and criticism by Alice Rawsthorn, Londa Schiebinge, Sasha Costanza-Chock. According to the latter, in fact, «design is the key to our collective liberation, but many of the design processes today reproduce structured inequalities [...]. Intersectional inequalities are evident at all levels of the design process»; therefore, the need for principles of justice in design, also as:

> A growing social movement that aims to ensure a more equitable distribution of the benefits and burdens of design; equal and meaningful participation in design

> decisions; and recognition of community-based design traditions, knowledge, and practices. (Costanza-Chock, 2018, p. 1)

Conclusions

It is clear that the discipline of design, today, has reached a turning point, increasingly directed towards critical reflection from a design point of view but also with respect to the teaching of the subject: in the contexts of theory, methodology and pedagogy of design, we are questioning how the introduction of critical thinking can foster the evolution of an idea and a design development that goes beyond the simple provision of services parameterized on the existing.

We all think about design as a discipline capable of universally dialoguing in the same way, a shared and comprehensive language: this is unreal and utopian. It would mean aspiring to a flattened reality, devoid of cultural diversity and nuances. The educational context is a place that, using the words of the feminist educator and writer Bell Hooks, can lead to freedom.

The objectives of theoretical courses, therefore - even that of the design history, although this may seem like an oxymoron - is the *enviosioning* of future developments, the acquisition and enhancement of critical and analytical tools, pivotal to understand - and reshape - the complexity of an evolving design culture, in which the discipline has always played a primary role as director and collaborated with different other disciplines.

Observing design through this perspective, it appears to be a privileged context of action in which the dichotomies between different realms and arenas can find moments of fruitful encounter and exchange, activating new contemporary visions.

> Through design we can experiment with the possibility, if not of resolving, at least of making the intertwining between knowledge and know-how, between specialism and generalism, between theory and practice, between pure and applied, between concreteness and abstraction, which are some of the peculiar traits in contemporary sciences, act positively. (Riccini, 2013, p. 41)

Focusing on the dimension of social and environmental sustainability, design is called to take action for the conservation, implementation and improvement of the living conditions of all of us. All this, in 1850 or so as today, comes from a thought: this thought must have a free cultural space in the classrooms, where it can be stimulated, developed and take shape.

All the theoretical and cultural activities within the training phase, alongside the necessary design activities, are unparalleled and irreplaceable opportunities for comparison, aimed at stimulating discussions but also research skills, and activating the critical views of students, future designers and professionals of tomorrow: aware, informed, critical, sustainable, social.

The design discipline has never lost its inescapable social role and indeed it is constantly and increasingly called upon to give form and meaning, material and immaterial, to the aforementioned freedoms and the invoked desirability. In this sense, gender studies reveal in contemporaneity together with the concept of intersectionality the urgency, first of all intellectual, to decolonize, democratize, truly deconstruct the intellectual panorama of design, highlighting any oppressions and possible inequalities perpetuated.

Acknowledgements

The authors wish to thank all those who, with discussion and contributions, inspired the thoughts expressed in this work. This works s part of a general framework that interests the authors: within a comprehensive attribution which sees the agreement on meanings and ideas, in the present paper *Introduction* and *Conclusion* have to be attributed to Luisa Chimenz, whilst the two main paragraphs, *How does design affect gender identity stereotypes?* and *Speculative design: reflections on ontological design and anticipatory thinking*, have to be attributed to Sara Iebole.

References

Bonsiepe, G. (1975). *Teoria e pratica del disegno industriale. Elementi di una manualistica critica*. Milano: Feltrinelli.

Brandes, U. (2008). Gender design. In M. Erlhoff & T. Marshall (Eds.), *Design Dictionary: Perspectives on Design Terminology* (pp. 189–190). Berlin-Boston: Birkhäuser.

Buchanan, R. (1992). Wicked problems in design thinking. *Design Issues*, 8(2), 5-21. https://doi.org/10.2307/1511637

Collins, P. H. (2002). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment* (2nd ed.). London: Routledge.

Costanza-Chock, S. (2018). Design justice: Towards an intersectional feminist framework for design theory and practice. In *Proceedings of the Design Research Society 2018*. https://ssrn.com/abstract=3189696

Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, 43(6), 1241-1299. https://doi.org/10.2307/1229039

Cross, N. (2001). *Design thinking: Understanding how designers think and work*. Oxford: Berg Publishers.

Cross, N. (2011). Understanding design thinking: Notes on doctoral research in design. In *Contributions from the Politecnico di Milano* (pp. 19–37). Milano: Franco Angeli.

Dilnot, C. (1982). The science of uncertainty: A cultural history of design and ethics. *Design Issues*, 3(2), 60-73.

Dunne, A., & Raby, F. (2013). *Speculative everything: Design, fiction, and social dreaming*. Cambridge: MIT Press.

Fuad-Luke, A. (2009). *Design activism: Beautiful strangeness for a sustainable world*. London: Earthscan.

Fry, T. (1999). *A new design philosophy: An introduction to defuturing*. Randwick: UNSW Press.

Fry, T. (2009). *Design futuring: Sustainability, ethics, and new practice*. Oxford: Berg Publishers.

Gobbo, F. (2002). *Pedagogia interculturale: Il progetto educativo nelle società complesse*. Carocci.

hooks, b. (2023). *Insegnare il pensiero critico*. Milano: Meltemi Editore.

Iebole, S., Chimenz, L., et al. (2023). “Trouble #1 - Design history. A new sight on design through gender studies and intersectionality”. In N. Ceccarelli, M. Sironi. *DesignIntorno. Atti della Conferenza annuale SID Società Italiana di Design*, pp. 542-550. Venezia: SID Società Italiana di Design.

Lorde, A. (2022). *Sorella outsider: Scritti politici*. Sesto San Giovanni: Meltemi Editore.

Lupton, E. (2021). *Extra bold: A feminist, inclusive, anti-racist, non-binary field guide for graphic designers*. Princeton: Princeton Architectural Press.

Maldonado, T. (2019). *Bauhaus*. Milano: Feltrinelli.

Manzini, E. (2015). *Design, when everybody designs: An introduction to design for social innovation*. Cambridge: MIT Press.

Manzini, E., & Coad, R. (2006). *Design, when everybody designs*. Cambridge: MIT Press.

Moss, G. (2016). *Gender, design and marketing: How gender drives our perception of design and marketing*. London: Routledge.

Pasca, V., & Pietroni, L. (2001). *Christopher Dresser: Il primo industrial designer*. Milano: Lupetti.

Pasca, V. (2013). La storia del design oggi: Compiti e prospettive. In *Il design e la sua storia. Atti del I convegno AIS/Design* (pp. 21–31). Milano: Lupetti.

Papanek, V. (1971). *Design for the real world: Human ecology and social change*. New York: Pantheon Books.

Rawsthorn, A. (2016). Can design be genderless? *Eye on Design*. https://eyeondesign.aiga.org/can-design-be-genderless/

Riccini, R. (2013a). Costellazioni. *AIS/Design. Storia e Ricerche, 1*(1), 4–5.

Riccini, R. (2013b). Culture per l’insegnamento del design. *AIS/Design. Storia e Ricerche, 1*(1), 40–46.

Sanders, E. B.-N., & Stappers, P. J. (2008). Co-creation and the new landscapes of design. *CoDesign*, 4(1), 5–18. https://doi.org/10.1080/15710880701875068

Walker, J. A. (1989). *Design history and the history of design*. London: Pluto Press.

Willis, A.M. (2006). Ontological designing. *Design Philosophy Papers*, 4(2), 69–92. https://doi.org/10.2752/144871306X13966268131514

Contact emails: sara.iebole@edu.unige.it
luisa.chimenz@unige.it